

## Requirements Detailed Scope of Work: Early Childhood Assessment and K-2 Interim Assessments

In this section, information on the Indiana Early Childhood Assessment program, K-2 Interim Assessments, and requirements of the scope of work for the Request for Proposal (RFP) are provided. The following parts are addressed in this section: (1) Background Information, (2) Elements of Test Design, and (3) Technical Requirements.

### **(1) Background Information**

The State requests a combined proposal for two assessment components. First, the State will administer mandatory summative assessments for early childhood, beginning at age three. The assessments must align to the Indiana Early Learning Development Framework and Foundations aligned to the Indiana Academic Standards. Details on the Indiana Early Learning Development Framework and Foundations Tools can be found at: <https://www.doe.in.gov/earlylearning>.

Secondly, both technical and cost proposals related to Kindergarten (K) through Grade Two (2) assessments aligned to Indiana Academic Standards in English/ Language Arts and Mathematics must be included in the Respondent's submission. Information on the Standards can be found at: <https://www.doe.in.gov/standards>.

As Indiana builds a systematic approach to assessment, we desire a system of assessments for early childhood and K-2 that provides data related to and informed by the Indiana Learning Evaluation Assessment Readiness Network (ILEARN) and Indiana's Alternate Measure (I AM) assessments which begin at grade 3. Indiana currently administers early childhood assessments to students ages 3-5. Required assessment enrollment is estimated at 15,000 students across this age range based on requirements of federal reporting. Funding for the portion of the project specifically for those students who are eligible for Special Education services is through Part B of the *Individuals with Disabilities Education Act*. (20 U.S.C. 1411-1419; 34 CFR §§300.100-300.174) The State wishes to negotiate costs for optional assessments for an additional estimated count of 300,000 students across early childhood assessments and K-2 enrollment estimated at 210,000 students.

The early childhood assessment outlined below assesses students enrolled in a variety of early education settings including accredited early childhood centers and corporations in pre-school, as well as home providers and ministries. This assessment creates a basis as the State further defines and remediates students for success in grades 3-8 and high school as part of ILEARN and I AM. Ultimately, the entire program from pre-K and K-2 is designed to support College and Career Readiness aligned to the

Indiana Academic Standards across grades 3-8 and high school.

Currently, Indiana has the capability to administer the Indiana Standards Tool for Alternate Reporting of Kindergarten Readiness (ISTAR-KR) to children age birth to five. The State's Pre-K program for students receiving special education services (ages three to five) requires an entrance and exit assessment, then an analysis of student growth. The State's Pre-K program On My Way Pre-K (OMW) requires an entrance and exit assessment from the one year program. Other programs using the tool assess children birth to five according to their own internal schedule. The State desires to have assessment data annually for students participating in the assessment. The tool is also used as an interim assessment for progress monitoring. ISTAR-KR is aligned to the Indiana Academic Standards for kindergarten in the areas of English/Language Arts and Mathematics and includes three functional areas: A. Positive social-emotional skills (including social relationships); B. Acquisition and use of knowledge and skills (including early language/communication and early literacy); and C. Use of appropriate behaviors to meet their needs. Data from ISTAR-KR assessments are used for state reporting to the U.S. Department of Education (USED) for Pre-Kindergarten (PK) students receiving special education services. The assessment can be used for local purposes for grades PK through entry into kindergarten. Information about the current assessment can be found at <https://www.doe.in.gov/assessment/kindergarten-readiness-assessment>. Data compilation and analysis is due to the Indiana Department of Education (IDOE, State, or Department) at the end of August for the prior school year to meet federal reporting requirements. See Attachment A for more details.

The technical proposal submitted by the Respondent must address the early childhood assessment including K-2 interim assessments, both deployment and reporting as required by 511 IAC 7-36-10, and associated links to the ILEARN program over time. The two components in this assessment system are described below.

## **(2) Elements**

### Overview:

**Component One:** The early childhood assessments aligned to the Indiana Early Learning Foundations and Academic Standards will measure proficiency in the areas of English/Language Arts and Mathematics and will also include measuring three functional areas: A. Positive social-emotional skills (including social relationships); B. Acquisition and use of knowledge and skills (including early language/communication and early literacy); and C. Use of appropriate behaviors to meet their needs prior to Kindergarten. For the early childhood assessment, a combination of direct assessment and observation is the expected mode of assessment.

**Component Two:** The K-2 interim assessments will measure proficiency for

English/Language Arts and Mathematics. For the K-2 assessment, the anticipated delivery will be direct assessment.

The intent of both of these components is for the assessment (i.e., data collection) to occur via an online tool ideally leveraging efficiencies with national best practices for test design and item content. The Respondent shall propose an appropriate test design for use in assessing young children, including the best mix of items and approaches for measuring their knowledge and skills. In addition, issues related to the cognitive demand of the assessments, language, and use of developmentally appropriate approaches toward testing in early childhood must be addressed in the proposal. For each of the measures, content may be supplemented for specific Indiana Early Learning Foundations and Academic Standards to ensure depth and breadth of the assessment. The assessment results must include a data reporting platform available for use by early childhood providers, corporations, and state users to access results in a timely manner such as one week following delivery of the assessment. Assessment results from the early childhood assessments should also be available for use by Kindergarten teachers for incoming students. Parent access to reporting is also desirable and should be included as a cost option to the state (if available).

The Department acknowledges that the system or assessment may vary between early childhood and K-2. If this necessitates the need for the Respondent to use the assistance of a subcontractor, the primary contractor is responsible for delivering and overseeing both components even if a subcontractor supports a single component.

Proposals may be submitted from a single Respondent or a Respondent working in collaboration with subcontractors or partners. This RFP outlines specific services and tasks IDOE is seeking. Indiana is very interested in achieving efficiencies and controlling costs. The State is open to new ideas and suggestions regarding services that will lead to quality assessments that are technically sound and retain adherence to the values and priorities of the State. **Respondents are encouraged to propose innovative solutions throughout this scope of work.** Proposals that provide a high quality and cost-effective solution that will enable IDOE to meet all the requirements in the RFP are especially welcome.

#### Test Window and Test Timing:

Component One: The early childhood assessment is required for 511 IAC Article 7 and Individuals with Disabilities Education Act (IDEA) reporting (i.e., U.S. Department of Education, Office of Special Education Programs). As such, the required delivery of the assessment by accredited provider is expected. The assessment will be administered at three different points in time and is to occur at the 1) student entrance into the program, 2) annually (interim), and 3) at the student exit from the program. The

assessment will be delivered online and should take 60 minutes or less. Note that most students are in a preschool program for 1 – 3 years. The State’s Pre-K program On My Way Pre-K (OMW) requires an entrance and exit assessment each year of the program. Specific test windows generally utilized for item parameters should be clarified as part of the submission.

Component Two: The K-2 interim assessment is designed to offer corporations and schools assessment data more formally than typical formative strategies used in classrooms, but connected through data systems to both summative assessments for Pre-K and grades 3-8 summative assessment programs. Ideally, the State would develop a link across the programs to support remediation and support an extension of growth for students over time. The K-2 assessment should be given throughout the school year as an indicator of progress and growth aligned to Indiana Academic Standards. The expectation for delivery of this assessment is online with a total duration for each session of 60 minutes or less. Screeners for additional assessment needs such as high ability or dyslexia may be noted in the proposal as an additional optional cost. The proposal must delineate the assessment type and associated interpretations for educators based on this classification.

### **(3) Technical Requirements**

#### **(3a) Technical Requirements Overview**

Respondents must acknowledge their understanding and acceptance of the listed technical requirements. Respondents must also provide a narrative for each requirement in the below sections that demonstrates their ability to meet the stated requirement.

The state assessments, as well as the administration, scoring, analysis, and reporting procedures, must be technically sound as defined by the Standards for Educational and Psychological Testing [American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurement in Education (NCME), 2014]. Likewise, development and implementation of the assessments must adhere to the established guidelines and requirements for the U.S. Department of Education’s (USED) reporting requirements (20 U.S.C. 1416 (a)(3)(A)); CFR 300.601; OMB NO: 1820-0624 as well as USED peer review requirements for state standards, assessments, and accountability (<https://www2.ed.gov/admins/lead/account/saa.html>).

The Early Childhood Assessment and the K-2 Interim Assessment will be administered operationally in 2019-2020. Newly developed items will be field tested in 2019-2020, and may contribute as an operational field test. In the first year of the contract (2018-2019), work will begin on the assessment frameworks, item and test specifications,

audit of existing items in the Respondent's item bank, and other activities as described below.

The IDOE seeks proposals for an assessment that compares achievement of Indiana students to achievement of students on a national basis if feasible. This comparison should report performance data that supports diagnostic evaluation of student readiness for subsequent grade level content which link to ILEARN and I AM ultimately supporting post-secondary education and careers.

### **(3b) Test Administration**

The format of the early childhood and K-2 assessments must enable electronic administration and scoring which may include mobile applications. The Respondent must provide a comparable form for a paper-and-pencil administration for a small population of students that cannot be assessed online (e.g., students with disabilities or if local online capacity and connectivity prevent successful online testing). Any details or assumptions about educator scoring and evaluation must be defined in the proposal.

The Respondent must provide web-based training for all state providers to successfully deliver the assessment. This is required as part of the negotiated cost, support and tools for the installation and testing of the online technology platform and a comprehensive plan for the timely support of schools and districts who encounter issues with the testing solution must also be described. Onsite training may be negotiated locally with the Respondent by each provider. Test delivery platforms must allow for content to be delivered in secure test administration modes. Any plans for delivery of practice tests must also be described within the proposal. Test delivery must allow for seamless test sessions for students during periods of interruptions.

Respondent must describe the process for capturing and saving student responses whether entered by educators for Pre-K or by students for K-2 during successful test sessions and during sessions where respondents have experienced a delay or an outage. Respondent must clearly delineate the mode and means of administration. Sample scenarios for administration for early childhood and K-2 must be delineated in the proposal (e.g., the educator sits next to the student and prompts them to respond to the first item with a script).

Detailed documentation must be provided by the Respondent about system capacity, number of outages, duration, and students impacted that were experienced by clients in the previous 10 school year test administration cycles. A complete list of all problems that occurred, along with any Liquidated Damages (LDs), or services in lieu of payments, that were assessed to the Respondent, must be included in the response.

### **(3c) Program Manager and Project Management Team**

The Respondent must have at least five years demonstrated experience in managing and delivering early childhood and/or K-2 assessments. Specifically, the Respondent must have experience in:

- Serving as prime contractor for a statewide assessment program
- Content development for large scale state assessment programs
- Providing psychometric support for state assessment programs with specific experience in use of two- and three-parameter IRT scaling methods
- Technology-based (online) test administration
- Fairly assessing diverse student populations
- Timely, accurate reporting of test results
- Developing and implementing research studies to demonstrate the reliability and validity of a large-scale assessment program
- Conducting standard setting based on assessment content
- Working with a variety of stakeholders including state agency personnel, local educators, and policymakers

The Respondent shall assign a Program Manager (PM), with Program Management Professional (PMP) certification and no fewer than three years managing assessment programs, dedicated full-time to this project, and assemble a project management team to oversee and coordinate the efforts of the respondent and all related subcontractors. A single Program Manager shall serve as the primary liaison with the IDOE for all components of the project. The Program Manager must have demonstrated previous experience with managing a large, customized high-stakes assessment project similar in scope and nature to the delivery of Pre-K or K-2 statewide assessments.

A cohesive, dedicated, and skilled core team is critical to the early childhood assessment project. At a minimum, this core team of key personnel shall be listed in the Respondent's proposal. Identifying core team key personnel (i.e., more than 20% FTE) as specific individuals is a mandatory requirement for the work to be performed under this contract and subject to approval by the IDOE Office of Student Assessment. The Respondent shall provide an organizational chart showing all key staff and offices assigned to work on the various aspects of the assessments along with each member's defined FTE for the duration of the contract specified by contract year. Roles and responsibilities for all key staff shall be identified. Resumes of key staff must be included in the respondent proposal. Examples of key staff include, but are not limited to:

- Content Specialists – Duties shall include, but not be limited to, consultation for scoring, oversight of any necessary test selection, blueprint development, item

development training and oversight, rubric development and review, facilitation of rubric validation activities, and facilitation of achievement level descriptor writing and standard setting activities. Experience in early childhood should be referenced as part of the resume submitted.

- Psychometrician – Duties shall include, but not be limited to, assisting with technical aspects such as item analysis, test form selection, equating and scaling, conducting validity studies, performing QC, provision of data for alignment studies and other research efforts, and developing technical reports.
- Accommodations/Accessibility Specialist - Duties shall include, but not be limited to, collaborating with appropriate state personnel to ensure availability and appropriate implementation of universal design features, designated features, EL issues and accommodations.
- Information Technology Specialist – Duties shall include, but not be limited to, oversight of the Respondent's test delivery platform, set-up and delivery of the general research file, set-up and delivery of the enrollment and test management system, troubleshooting system "bugs" and providing necessary solutions to providers and/or corporations requiring Tier 2 and 3 customer support.
- Customer Service Supervisor – Duties shall include, but not be limited to, oversight of the Respondent's customer support network relative to the IDOE; providing timely responses to state staff and local personnel regarding all processes and procedures related to IDOE; ensuring necessary resource allocation to customer support for IDOE; providing and documenting accurate responses to questions from program staff, state personnel, and local districts.

Except in the case of illness, death, or leave of absence and so long as the personnel remain partners, principals, or employees of Respondent, no re-deployment of any member of the core team as required by the work plan may be made without prior written approval from the IDOE Office of Student Assessment, which shall not be withheld without good cause. Replacement of such personnel, if approved, shall be with personnel of equal or greater ability and qualifications.

#### Subcontractors

The Respondent may complete a portion of the required services and deliverables using subcontractors. If the Respondent elects to use a subcontractor for any part of the required scope of work, the Respondent shall provide an effective supervisory structure for overseeing the quality of the subcontractor's work and shall ensure that all deliverables are completed in accordance with the requirements of the contract. All subcontractors must be approved by the Department. The Respondent will serve as the

sole point of contact for all Contractual matters, including those that may impact or involve a subcontractor.

The Respondent must identify all subcontractors proposed to be involved in the contract, and the specific deliverables and/or services they will provide. Additionally, if a subcontractor will provide services related to key elements of test development, administration, scoring, reporting, or standard setting, the Respondent must clearly identify those services, and must provide one-page resumes indicating relevant educational background and professional experience for subcontractor staff in primary roles. The Respondent must also provide an organizational chart illustrating the supervisory relationships between the Respondent's key project staff and subcontractor staff.

### **(3d) Project Plans and Schedules**

Respondents must submit a Preliminary Project Plan as an appendix with their bid response for evaluation purposes, including necessary timeframes and deliverables for the various stages of the project and the responsibilities and obligations of the contractor and any subcontractors or partners, as well as requests of the State. The Respondent will review, revise in consultation with the IDOE Project Manager and resubmit their Preliminary Plan within 2 weeks of Contract start as a deliverable.

1. Respondents must provide a Critical Key Activities Table for each fiscal year, including:
  - a. High level project schedule
  - b. Critical dates with the field (ordering of materials, receipt of materials, test dates, return of materials, demographic clean-up window, release of individual student scores, final individual student, school and district score file release, and receipt of paper reports).
  - c. Key transfer dates between the Respondent and IDOE related to development, production, shipping and receipt, administration (of paper-based and online assessments, if applicable), scanning, scoring, data processing, reporting and psychometric activities.
2. Project Approach/Statement of Work
  - a. Scope Statement with a description of the deliverables to be provided under this Contract
  - b. Key activities related to the field (ordering of materials, receipt of materials, test dates, return of materials, demographic clean-up window, release of individual student scores, final individual student, school and district score file release, and receipt of paper reports) with critical paths identified

- c. Assumptions and exclusions
- d. Critical success factors
- e. Initial resource plan with anticipated resources by organization, role, and responsibility
- f. Initial risk plan
- g. Initial communication plan
- h. Anticipated hardware, materials, and supplies to be provided by the State in meeting the target dates established in the Preliminary Project Plan

The Respondent shall continuously monitor the ongoing operations of the assessments using a detailed project plan and schedule. The Respondent shall provide an annual updated project plan and schedule for joint use by the IDOE and the Respondent in monitoring all program activities by May 1 of each year beginning in 2019-2020. As noted above, a preliminary project plan is needed for Year One (2018-2019). The Department desires appropriate direct real time access to the project schedule. In addition, weekly updates showing all deliverables for a current week and the subsequent six weeks must be provided to the Department on Monday of each week. All schedule adjustments made to the overall schedule must be noted both in the master project plan schedule and in the weekly updates. In addition, a master project schedule detailing all milestones of the project and their due dates must be provided and updated monthly. The master schedule must be delivered to the Department by the first of each month in an agreed upon format electronically for import. This schedule must delineate agreed upon durations, associated tasks and responsible party for completing the process step. Changes to key milestones in the master schedule will require a contract amendment. The Respondent must provide a master schedule highlighting the key milestones on the critical path for 2018-2019, 2019-2020, and 2020-2021 within the proposal.

The Respondent must provide documentation regarding any missed deadlines, litigation or breaches of contract due to missed deadlines resulting in compromises of an assessment program.

### **(3e) Status and Planning Meetings**

Ongoing communication between the Respondent and IDOE personnel is essential. Telephone calls, telephone conference calls, SKYPE Business or equivalent, e-mails, overnight courier service, facsimile correspondence, webinars, and other communication procedures will be at the Respondent's expense. Toll-free numbers shall be provided by the Respondent for telephone communication including conference calls and webinars.

The Program Manager shall return calls from IDOE staff and respond to e-mail

messages within 24 hours, preferably within the same day. If the Program Manager is not available to take calls and return messages, IDOE shall be notified in advance. In the event that the Program Manager is not available, the Respondent shall notify IDOE as to whom to contact in his or her absence and shall provide contact information for such individual. The Respondent shall confirm its agreement to meet this requirement.

The Respondent shall make all written communication or summaries of communications with any subcontractor(s) or partners identified in this proposal available to IDOE at its request. In addition, IDOE expects to be able to participate during all appropriate and applicable meetings and trainings between the Respondent and any subcontractor(s) and partners identified in this proposal. The Respondent shall confirm its agreement to meet this requirement.

The Respondent shall participate in weekly status meetings with the Department to address all aspects of the program. These meetings will be conducted by web conferencing or other communication technology as proposed by the Respondent. The Respondent shall be responsible for providing written notes and other applicable documentation from the weekly status meetings within 24 hours of each meeting. An agenda of proposed topics must be delivered to the Department 24 hours in advance of the scheduled call for review. The Respondent shall also provide weekly written status reports that shall include, but not be limited to, reports on the status of ongoing activities, decisions made, decisions pending, activities completed, activities that are behind schedule, and timelines for scheduled activities. Weekly status reports shall be in a format that is approved by the IDOE Office of Student Assessment. The respondent will also maintain a decision and action log to track any outcomes from meetings held with the Department. The decision log must note any decisions that require a contract amendment.

The Respondent shall participate in and support all associated respondent costs for a minimum of two planning meetings of the IDOE and Respondent project management teams during fiscal year one in 2018-2019, from contract execution. The first planning meeting must be scheduled within one month of contract execution. Respondent is responsible for costs associated with two meetings during subsequent years including other Respondent management staff responsible for services provided to the Department, and representatives of the Respondent's senior management team, as necessary. All meetings except the program kickoff will be held in Indiana at a site convenient to the Department staff (a total of 4 meeting days for the first two years) unless the cost is determined to be less expensive at a location defined by the Respondent (as long as the location is agreeable to the Department). The Respondent shall be responsible for all costs associated with these meetings. During the initial start-up phase of this project there may be a need for additional meetings; these will be at the Respondent's expense with dates, times and locations to be mutually agreed upon by the Project Manager and the IDOE. The Respondent shall submit the meeting notes to

the IDOE within five (5) working days of each meeting for final review and approval.

### **(3f) Educator Involvement**

The development of the early childhood assessments and K-2 interim assessments may leverage existing items or test content, such as use of an item bank. However, Indiana educators must participate in an item acceptance review to confirm alignment to the focal aspects of Indiana's standards in advance of operational delivery. Additional committees may be required to align any new item development with the Indiana Academic Standards and to ensure the assessments measure performance against the Indiana Foundations and Academic Standards for grade level and content area.

The Respondent shall propose a process whereby the Department conducts an audit of licensed items with Indiana educators for potential use on the assessments. Through the audit process, the items are reviewed and approved by educators and ultimately IDOE. The audit must include criteria for selecting high-quality items. The details of this process shall be finalized in collaboration between the successful Respondent and the IDOE. All items developed for Indiana's independent use must be approved by IDOE and through educator meetings held and facilitated by the respondent. A proposal will include details for all meetings anticipated for 2019-2020 preparation including but not limited to blueprint and item reviews and subsequent meetings as noted below. The anticipated meetings are noted in Table 1 below:

**Table 1. Proposed Meetings and Dates**

<b>2018-2019</b>	
<b>Spring 2019</b>	Blueprint confirmation review
<b>Spring 2019</b>	Audit of licensed bank
<b>July 2019 (or later)</b>	Item review for field test items needed in Spring 2020
<b>2019-2020</b>	
<b>Mar. 2020</b>	Passage and/or Item review for field test items needed in Spring 2021
<b>Apr. 2020</b>	K-2 Linking Analysis between Early Childhood and ILEARN and I AM
<b>June 2020</b>	Standard Setting
<b>July 2020</b>	Item analysis and data review for items field tested in Spring 2020

Items must represent the Indiana Early Learning Foundations and Academic Standards

(in depth and breadth) and be fully aligned. Additionally, all items must be reviewed for adequate depth of knowledge (DOK) and coverage of the full range of DOK. The items must also be reviewed for bias/sensitivity and accessibility to ensure that the assessments provide equitable measures for students with alternative cultural and ethnic backgrounds and diverse learning styles. Items must meet the principles of Universal Design. The proposal must define a plan for this process to occur no later than March 2019 to ensure that the items are representative of the depth and breadth of the Indiana Early Learning Foundations and Indiana Academic Standards and be approved by IDOE. The proposal must define a plan for an independent alignment study following the first operational administration.

Educator Committees are critical to Indiana's assessment development work, and their membership will be maintained or modified only under the direction of the IDOE. Committees are defined by cell representation according to student population in the state, race and ethnicity, and subpopulations of students including students with disabilities and English learners. Committees consist of 8-10 educators per age, grade, or grade span. Committees review for content, bias and sensitivity and accessibility perspectives utilizing a quality development checklist.

The Respondent shall be responsible for the management and costs associated with all committee meetings, as applicable, including but not limited to invitations, registration, participant and data tracking, communications, confidentiality, recordkeeping, results reporting, hotel accommodations, travel and substitute teacher reimbursements, provision of meals and snacks, and honorariums to be paid to participants. Reimbursements for educators should include \$100 honoraria for half-day and \$150 for full day participation.

### **(3g) Test Content and Item Format**

Test content must align to the Indiana Early Learning Foundations and Indiana Academic Standards, and the test may consist of an appropriate distribution of observation (rubric-based) and multiple-choice items. The proposal must delineate item types and counts currently available in the item pool maintained by the Respondent. The Department expects use of a hybrid of observation (rubric-based) and direct assessment for component one. The Department expects a classroom-administered interim assessment system for component two. An essential feature of all items included on the assessments is the measurement of performance relative to the Indiana Early Learning Foundations and Academic Standards.

Only those items and item specifications that are confirmed to align to Indiana Early Learning Foundations and Indiana Academic Standards may be used for the operational assessment.

### Development of Blueprint and Specifications:

The Respondent shall work with IDOE staff to provide the test blueprints and item and test specifications for the proposed early childhood and K-2 interim assessments. The Respondent will work with IDOE to confirm or develop these based on educator feedback in the state.

The Respondent must submit a plan for review of test blueprints and specifications during on-site meetings to ensure the depth and breadth of the Indiana Early Learning Foundations and Indiana Academic Standards are defined appropriately. The Department will be responsible for the nomination and recruitment to the point of invitation dissemination. The Respondent will manage the invitation process through the meeting facilitation and documentation. Blueprint meetings shall occur by Spring 2019.

### **(3h) Item Ownership**

The IDOE may license test content or items from existing organizations or platforms that are delivered beginning with the 2019-2020 administration of the assessments in early childhood and K-2. Items developed as a supplement to the licensed items to ensure alignment to the Indiana Early Learning Foundations and Academic Standards will be owned by the Department. IDOE requests a one-year license of items following the contract term to ensure successful delivery of annual assessments in the long-term.

Indiana requests the release of a representative sample of five (5) items each year per grade and content area. These items should be deployed in a system to allow interaction mimicking the live testing environment and posted publicly for providers, corporations, and parents.

### Item Bank

The Respondent will secure or provide a bank of items to fulfill the final approved test blueprints for all applicable grade levels in both content areas. The Respondent shall ensure that sufficient items are available to support administration for all applicable ages/grades and content areas. The State shall be responsible for any fees associated with leasing and/or licensing items from a source other than the Respondent's item bank; however, the Respondent shall be responsible for negotiating lease or licensure terms with the applicable entity and communicating such terms to the state. The Respondent shall include any applicable lease/licensure fees in the State's invoice as

specified herein. The Respondent shall obtain and manage permissions for any and all copyrighted materials in the Respondent's item bank, or in leased or licensed content, for distribution and use of content in print or electronic format for the duration of the contract and all subsequent renewal periods. Additionally, the Respondent shall obtain and manage permissions for any copyrighted materials included in new content development as described herein.

The proposal must clearly describe all anticipated sources of content for the IDEOE. For all item sources, the proposal must address the following questions:

- What are the characteristics of the item bank? (How many, and what types of items are available for each age/grade level and content area as described herein? What is the range of cognitive complexity reflected in the item bank?)
- How, when, and by whom were the items developed? (Who were the item writers? How were they identified? What were their qualifications? How were they trained?)
- What item metadata is maintained within the item bank?
- To what standards are the items within the item bank aligned?
- How, where, and when were items field tested?
- For what specific purposes are the items being used operationally by customers?
- What are the item reuse policies?
- What are the item release policies for states that use the items?
- To what specific customers have the items in the proposed item bank been sold?

The Respondent must describe how the proposed item bank is kept secure and under what conditions items are sold to customers. The Respondent must also provide a copy of the most recent technical report for all potential sources of item content in the form of a web link. If the Respondent is proposing use of licensed or leased items, the Respondent's response must include all applicable terms (and associated costs) of the lease or license.

### **(3i) Item Development and Content Review**

Annually, the existing item pool counts and distributions will be reviewed and the Respondent and the Department will agree to the proposed item development and piloting plan for the next testing year. The Department expects to receive high-quality items with little need for revision and reserves the right to reject (at no cost) any and all items that it deems as poor quality or not aligned to the Indiana Early Learning Foundations and Indiana Academic Standards while maintaining the test blueprint.

Respondent must develop an overage to account for this risk (i.e., rejected items). Furthermore, scoring rubrics that are of poor quality will also be rejected. The

Respondent is responsible for ensuring that all items are carefully written, edited, and proofed before being submitted to the IDOE for review. The project schedule must allow for three IDOE review rounds, with significant edits occurring during round one, and diminishing with further review rounds.

The Respondent must submit, with a response to this RFP, a chart indicating the number of items currently developed by Standard for each subject, including early childhood domains (A. Positive social-emotional skills [including social relationships]; B. Acquisition and use of knowledge and skills [including early language/communication and early literacy]; and C. Use of appropriate behaviors to meet their needs), D. Specific academic content in English/language arts and mathematics, based on the current standard alignment.

Using the item pool designated for the assessments, the Respondent shall provide a technically sound process for constructing test forms according to the approved blueprints. The Respondent shall provide the state an opportunity to review and approve all proposed test forms before making final determinations for operational administration. The Respondent's proposal must specify the timeline for test form construction, who is responsible for each aspect of test construction, and how they will provide the state opportunities to review and approve test forms.

### **(3j) Accessibility**

The K-2 interim assessments will be available to all students in grades K-2. Students with disabilities and English Learners will take the assessments with appropriate accommodations. Respondents must provide a full list of all accessibility features, tools, and supports and accommodations currently provided within the test delivery platform and those anticipated with a defined timeline for availability.

A description of text-to-speech used as a tool or accommodation must be provided if applicable. A description of the voice pack is required within the proposal. A graphic or demo of the text-to-speech must be provided as a part of the proposal.

Accommodated versions of the assessments (large print, braille, and paper-and-pencil) must be provided to support full access for eligible students with disabilities as an exception to participating in the online assessment. Any transcription of student responses must be done by the Respondent. A detailed description of this process is required as part of the proposal. A description of quality assurance steps for braille production is also required in the proposal.

Respondents must describe the process for collaborating with the Department on which tools, supports, and accommodations will be utilized in the online platform. A brief description of the Respondent's experience related to ensuring alignment to other

client's Individual Education Plan (IEP) systems is also requested. Any dependencies between the proposed assessment platform and the Department's electronic IEP system (Indiana IEP Resource Center/IIEP System <https://www.indianaieprc.org/index.php/iep-system>) must be delineated in the proposal.

Respondents must describe development of item specifications and items that align to best practices for accessibility including linguistic complexity. Examples of item specifications and items must be provided with the proposal with annotations that delineate the extent to which components of the items are made accessible to diverse student populations based on subpopulations defined by USED.

Respondents must provide a description of how non-embedded assistive technology devices that students utilize on a regular basis can be used during secure testing. Respondent must provide the functionality to track and capture a student's use of tool and accessibility features by item.

The Respondent's system must allow for meaningful participation of English Learners (ELs) in assessments. ELs, as well as other students with a demonstrated language need, must be provided with translation supports as stacked translations or alternate forms in Spanish. Languages offered must be defined in the Respondent's proposal. When available, the Respondent's system will also provide translation supports, as relevant and appropriate to the constructs being measured in the assessment. In addition, the Respondent's system should provide customer facing communication such as access to parent letters, and score reports in Spanish, English, and the other IDOE requested languages. Respondents should describe their plan on to accomplish this requirement, if deficient.

Assessment items must be associated with metadata that describe any changes that will be made to the content, display, or input method necessary to provide appropriate accommodations to the student. Metadata must also include alignment, associated parameters, and accessibility information for each item. In addition, the overall approach must leverage the use of computer-based accessibility tools, supported by an item-tagging system that will control and ensure appropriate application of the tools.

Respondents should explain how their systems are or will be compliant with, have applied, or will apply as many of the following principles as possible:

- APIP standards compliance. See <http://www.imsglobal.org/apip/index.html>.
- PNP standards compliance. See [http://www.imsglobal.org/accessibility/accpnpv2p0/spec/ISO\\_ACCPNInfoModel\\_v2p0.html](http://www.imsglobal.org/accessibility/accpnpv2p0/spec/ISO_ACCPNInfoModel_v2p0.html).
- US Rehabilitation Act Section 508, which requires that all website content be equally accessible to people with disabilities.

- Web Content Accessibility Guidelines 2.0, which will make content accessible to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, intellectual limitations, limited movement, speech disabilities, photosensitivity, and combinations of these.

Respondents must provide a full list of all accessibility features, tools, supports and accommodations currently provided within the test delivery platform and those anticipated with a defined timeline for availability.

### Universal Design

The Respondent must describe the process used to ensure that items were created that permit students with disabilities and English learners to fully participate in the assessments and receive valid scores, while minimizing the need for accommodations. The Respondent shall explain how the needs of students with disabilities, especially sensory, physical and language disabilities, as well as English learners, were taken into consideration during item writing. The Respondent must describe to what extent individuals with expertise in working with students with disabilities and with English learners were included in the development and review of the test items and the assessments. In addition, the Respondent must explain how language load will be addressed.

### **(3k) Development of Rubrics for Constructed-Response and Extended-Response Items**

Respondent is responsible for the development of rubrics for hand scored or automated scored items for newly developed items aligning to the Indiana Foundations and Academic Standards. Rubrics must be reviewed and confirmed by IDOE if part of the current item bank. Rubrics used for Indiana-specific use require Department and educator approval.

The Respondent shall propose a strategy for incorporating educator expertise into the rubric development process for new items and shall propose a professional development strategy for using the rubrics in scoring of constructed-response and extended-response items to inform the emphasis for Indiana educators to be engaged in the scoring process.

Proposal must delineate if these items and associated rubrics are not available in the current system or item banks.

### **(3l) Operational Administration of the Early Childhood Assessment and K-2 Interim Assessments**

## General

The assessments administered by the Respondent must be available to all students, and the format of the assessments must enable both an online and paper-and-pencil mode. Large print and braille versions of the assessments must also be made available. Specific accommodations and accessibility features that are part of the online administration must be delineated and discussed in the Respondent's proposal including refreshable braille functionality.

Schools will be required to assess online as a primary mode for the assessments. Paper-and-pencil exceptions will be managed by the Department. The Department will provide the list of exceptions to the Respondent on an agreed date that follows an online technology capacity readiness assessment of the schools. Respondent must provide technical details to support the development of a comparable paper form. The Department wishes to keep any paper-online mode differences to a minimum and the Respondent must address how this can be best achieved in its technical proposal.

All newly developed items are to be formally field tested before they are used operationally. The Respondent shall provide details of the process used for field testing all items including the process for including accommodations in field testing. IDOE is open to use of either an embedded field-testing approach or a separate stand-alone administration and Respondents should address the best approach to use in the state. The field tests must be done online.

## Test Security

IDOE places great importance on test confidentiality, integrity, and security. Test security violations and other breaches of test security can impact the fairness of testing. To ensure fairness of the administration of statewide assessments, the Respondent must describe in detail and demonstrate the process to secure items during test development and assist the state and its test security staff in responding to and conducting investigations of material breaches of test security.

The Respondent must propose specific security measures considered appropriate for operational administration of the Early Childhood Assessment and K-2 Interim Assessments.

The Respondent should include a description of the following processes it employs related to test security:

- The Respondent's procedures for reducing security threats and risks and protecting test materials and related data during item development, test construction, materials production, distribution, test administration and scoring;

- The Respondent's security features for storage of test materials and related data (i.e., items, tests, student responses, and results);
- The Respondent's rules and procedures for secure transfer of student-level assessment data in and out of the State's data management and reporting systems between authorized users (e.g. State, schools, and respondent);
- The Respondent's plan to adapt to individual corporations' technology environment while maintaining testing security and integrity.

The Respondent must describe in detail the steps that it will take to monitor the fidelity with which the test administration and security procedures are being applied.

A material test security breach is anything that may compromise the integrity or validity of the test and/or its results. Security Breaches have external implications for the State and may result in a decision by the State to remove the affected test item(s) from the available secure item bank and/or to invalidate test scores materially impacted by the breach. Although a Security Breach can be caused by a violation of state test security and/or test administration rules, it may also result from a breach that occurred in another state's assessment program, whereby a secure test item used in Indiana assessments was compromised as a result of a Security Breach in another state that used the same secure test item. The Successful Respondent must agree to report all Security Breaches to the state within 24 hours of receiving information about them.

In addition, the Respondent must have a comprehensive plan to help ensure the security of all state intellectual property (e.g., software, passages, items, test forms, other materials, data, electronic information, and assessment results). To accomplish this the Respondent must:

- a. Establish and document rules for storage of secure materials.
- b. Provide security of materials during test construction, production, and processing. Some of the places and times this shall happen are:
  - At materials check-in and check-out.
  - Password access to electronic files.
  - Item review meetings, standard setting activities, and other instances where access to operational items is necessary.
- c. Respondents who use third parties must adopt a comprehensive security plan that covers maintenance of security at subcontracted or vended sites. The plan must include:
  - Training and sharing of training materials.
  - Rules for securing materials during the transfer between the Respondent, third parties and IDOE.
  - Rules for the disposal of secure materials at vended sites.
  - Security at the third-party sites.

- Nondisclosure agreements.

The Respondent is responsible for establishing a method for secure electronic transfer of information between the Respondent, approved third party sites and IDOE. Available methodologies may include:

- a. Encrypted data exchange.
- b. Secure FTP sites.

### Test Delivery Platform

The test delivery platform must provide a low-bandwidth solution and must have capacity to handle limited or intermittent internet connections during testing. Recovery from any interruption to student testing must occur without loss of any student responses and provide quick, simple and secure reentry to the test at the last point of interaction. Errors must be reported in plain English with clear directions for next steps to both students and test administrators. The Respondent must demonstrate in writing in the proposal, and through specific evidence, the capacity to support at least 150% of the maximum number (all students) of concurrent Indiana students testing.

Respondent must demonstrate experience with computer delivery including any required algorithms and simulations. Respondent should articulate the steps taken to ensure comparability across test forms if multiple test forms are constructed.

### Online Administration

The Respondent must be responsible for all operational and support tasks associated with administering the online assessments, including:

- a. Design and development of the annual test administration cycle and schedule;
- b. Development and publication of web and print instructions, manuals, and other communications to schools and early childhood providers, including web trainings and online tutorials;
- c. Publication of tests and scoring guides;
- d. Development of online readiness test for completion by schools and corporations no less than three months prior to the administration window;
- e. Development of an online scheduling system for schools to select delivery formats that will include both testing formats accessible by state-, corporation-, and school-level administration.
- f. Development of practice tests and general test preparation materials
- g. Development of public-facing interactive website with released or sample items beginning in May 2019;

- h. Scoring of completed online tests, including hand scoring of open-ended items and essays;
- i. Maintenance or development of anchor sets and training materials for hand scoring of the open-ended items and essays from the online and paper-and-pencil administrations;
- j. Development of plans for providing accommodations;
- k. Provide appropriate security arrangements for test content and test administration;
- l. Preparation and distribution of online reports for both testing formats to teachers, schools, corporations, other administrative reports as identified by IDOE, and the IDOE, with appropriate security arrangements to safeguard access to reports; the Respondent will need to incorporate the cut scores into these reports;
- m. Distribution of electronic communication necessary for registration, testing, reporting, and general dissemination of assessment information;
- n. Provision of a technical report that includes information regarding online and paper test administration, psychometrics, and summary data

Students participating in the online assessment must achieve response times meeting current industry standards.

All functions of the online system must be platform, operating system, and browser independent (device agnostic) for the administration of the assessments. The online system should be written in HTML 5, must be capable of running completely within the browser or application window, not requiring third-party add-ons such as Flash, etc., and must correctly render and function on any 9.5" display or larger. Respondent must support the latest 3 operating systems from Android, Chrome, iOS, Linux, MAC OS, and Windows.

Any proposed solution must address the currently supported technology platforms and operating systems as a starting point, and describe how the bandwidth, adopted devices and operating systems in schools and districts will be used to inform decisions around continued and expanded support for technology. Respondent must define maximum simultaneous load capacity during successfully delivered operational test administrations and anticipated load capacity that may be untested. Support for virtual machines must also be addressed.

Specific hardware requirements are noted in Table 2.

**Table 2: Current Hardware Requirements**

Specifications	Windows	OS X, macOS	Linux	iOS	Android	Chrome OS
<b>Supported devices</b>	Desktops Laptops Tablets	Desktops Laptops	Desktops Laptops	iPads	Tablets	Chromebooks Chromeboxes
<b>Processor</b>	x86/x32 and x64	Intel-based™	x86/x32 and x64	any	any	any
<b>Memory</b>	Recommended 1 GB RAM Minimum 512 MB RAM	Recommended 2 GB RAM Minimum 1 GB RAM	Recommended 2 GB RAM Minimum 1 GB RAM	Recommended 1 GB RAM (iPad 3rd gen +) Minimum 512 MB RAM	Recommended 2 GB RAM Minimum 1 GB RAM	Recommend 4 GB RAM Minimum 2 GB RAM
<b>Minimum screen size</b>	9.5-in	9.5-in	9.5-in	9.5-in	9.5-in	9.5-in
<b>Minimum screen resolution</b>	1024 x 768	1024 x 768	1024 x 768	1024 x 768	1024 x 768	1024 x 768



## Paper-and-Pencil Administration

The Respondent shall propose a plan for producing paper-based test forms as an exception to online forms for the assessments.

The Respondent will be responsible for all costs and management of operational and support tasks associated with administering the paper-and-pencil Early Childhood Assessment and K-2 Interim Assessments test, including the following requirements (note that some of the following items overlap with those for the online assessments):

- a. Design and development of the annual test administration cycle and schedule which may include a set of forms with a defined reuse policy;
- b. Development and publication of web and print instructions, manuals, and other communications to schools, including web trainings and online tutorials;
- c. Publication of tests and scoring guides;
- d. Development of an online scheduling system for schools to select delivery formats;
- e. Development and execution of a plan for delivery of paper-and-pencil tests and materials to corporations, schools, or providers which may include a downloadable version to print locally. The assumption is that printed versions would be transcribed (by corporations, schools, or providers) into the online version for scoring;
- f. Development and publication of practice tests and general test preparation tools;
- g. Maintenance of or development of anchor sets and training materials for any proposed handscoring open-ended items and essays from the online and paper-and-pencil administrations;
- h. Development of plans for providing accommodations;
- i. Provide appropriate security arrangements for test content and test administration;
- j. Preparation and distribution of online reports to teachers, schools, corporations, other administrative reports as identified by IDOE, and the IDOE, with appropriate security arrangements to safeguard access to reports; the Respondent will need to incorporate the cut scores into these reports;
- k. Distribution of electronic communication necessary for registration, testing, reporting, and general dissemination of information;
- l. Development of a plan for rescoring handscored items in cases where school administrators and/or parents and the Respondent disagree;
- m. Provision of a technical report that includes information regarding administration, psychometrics, and summary data for the Early Childhood Assessment and K-2 Interim Assessments
- n. The technical report should address both paper and online administrations.

## Operational Performance Standards for Acceptable Test Administration

### All Testing

- Data compilation is due within one week to providers and to the IDOE at the end of August for the prior school year to meet federal reporting requirements
- Assessment results for each student available immediately following submission.

### **(3m) Respondent Online System for Scheduling and Registration, Communication, and Reporting**

The Respondent must provide an online system for the early childhood and K-2 interim assessments that:

- a. allows corporations, schools, and preschool providers to complete an online registration for all assessments;
- b. allows the IDOE to deliver necessary electronic and paper communications to corporations and schools and school officials for purposes of online and paper-and-pencil tests, separately and combined;
- c. provides an online reporting system for student, classroom, school, corporation, other administrative reports as identified by IDOE, and state-level data, corporation and/or provider as described previously in this RFP. This system must be available to schools, corporations and the State; and,
- d. includes a consolidated help desk to assist corporations, schools, and all types of preschool providers with all facets of technology issues related to online testing, registration, and reporting. The help desk must also be prepared to assist with paper-and-pencil logistical issues. The help desk must also assist state users throughout the life of the contract that results from this RFP. The help desk must be accessible by LEA users and preschool providers Monday-Friday between the hours of 8 a.m. to 5 p.m. ET during the entirety of the calendar year. Specific training procedures and protocols utilized by the help desk will be communicated to the IDOE.
- e. Allows filtering of student accommodations within a designed report to ensure fidelity of the test administration to subpopulations of students.

### Customer Service

Respondents should respond to the requirements below with the understanding that it is IDOE's expectation that technical and logistical support will be provided in a responsive manner that minimizes school personnel and student burden, disruption, and inconvenience. Respondents must provide a variety of communication processes during testing, including call centers with trained staff, test monitors for targeted monitoring visits, and information about possible test administration irregularities according to pre-

established timelines.

The Respondent shall provide accurate, efficient Tier 1, Tier 2, and Tier 3 customer service in support of IDOE with tiers structured as follows:

Tier 1 – Basic support including, but not necessarily limited to, general inquiries, non-technical questions, password recovery, website navigation assistance, and basic procedural questions;

Tier 2 – Mid-level support including, but not necessarily limited to, local technology set-up, data formatting, and technical questions with common resolution methods;

Tier 3 – High-level technical support for resolution of new or unique issues that must be addressed by systems engineers or other technical experts.

The Respondent shall work with IDOE to establish mutually agreeable protocols and business rules for routing inquiries through the customer support network, including protocols for elevating issues by priority and extending resolution times for complex issues. The Respondent must train all customer service personnel on protocols, procedures, and response scripts to be approved by IDOE. The Respondent's customer service system will allow for administrative monitoring and auditing by IDOE in real-time and recorded user interactions with customer service personnel for purposes of quality assurance. Likewise, the Respondent shall maintain a log of questions/issues addressed by the customer service system, the customer, date, time, and resolution. Such logs must be made available to IDOE for review monthly.

### **(3n) Scoring and Reporting**

#### Scoring

The Respondent shall describe in detail its plan for the scanning and scoring of the tests. This plan must describe each step in the scanning and scoring process and must be reflective of the schedule presented earlier in this scope of work for all scanning and scoring activities from start to finish for each assessment year. The Respondent shall also describe any differences in the procedures used for paper and online test administrations. The State assumes transcription for early childhood, but the proposal must clarify the process that will be used for the K-2 component.

For all aspects of the assessments, Respondents should identify their method of scoring the assessment and how it will produce relevant, timely, valid, reliable, and cost-effective results. The assessments must be scored uniformly across the state, with

scoring that expects rigor. Respondent should submit a plan for scoring and training to include details about the items included in automated scoring and hand scored items. Quality assurance process steps used in scoring must be defined. Training developed for scoring the content of the assessment should be developed as non-secure to be made available to all educators in Indiana for transparency of the scoring process. Training is required for all Indiana educators and must be evaluated through reliability studies as indicated below.

The Respondent must design and implement a Scoring Reliability (auditing) system for the hand scoring of items and budget for a reliability system that includes a representative sample of student responses. Proposals using automated scoring must be detailed related to the proposed item types and process used.

### Reporting

Reporting fully, accurately, and in a timely manner is critical for any assessment program. The Respondent shall produce a full range of traditional electronic reports at the state, student, classroom, provider and/or school and corporation levels as well as other administrative reports as identified by IDOE, available by PDF and/or bulk PDF export, and Respondent delivery of student reports. The Respondent shall supply each provider and/or corporation (and each charter and nonpublic school) with an electronic copy of their data.

Reports must also include a link across early childhood, K-2, and ILEARN and I AM as a trajectory of success or potential areas for collection of evidence to support remediation. The establishment of a separate indicator through a linking analysis must be discussed as part of the proposal.

Each student's assessment score should be reported as a separate result focused on the student's proficiency of the Indiana Academic Standards and Early Learning Foundations.

The assessments must have the validity, reliability and other attributes adequate for use in federal reporting. The assessments must produce data, including student achievement data required for federal and state reporting as noted above in Background.

The results must be tracked by individual student's test number (STN), so that the results are both portable over geography (as the student moves from school to school or corporation to corporation) and available over time (as the student rises through Pre-K, grades K-12 to graduation, and ultimately into post-secondary education).

The Respondent shall address turn-around time for reporting of results, including:

- QA/cleanup process for demographic data associated with assessment scores
- Delivery of student, class, school, corporation, and state results
- Timeline for required rescore process
- Delivery of final electronic data to State to facilitate accountability determinations and federal reporting

The Respondent shall indicate how missing data will be handled.

The Respondent shall provide scale scores for all age and grade levels and content areas that are reported. The Respondent shall delineate the psychometric “plan” for scoring and reporting, including any anticipated “special” technical reports and issues, including, but not limited to, the following:

- Defining an Indiana scale
- Possibly linking to other scales
- Reporting scores that can be compared to those from other states
- Anomalous student results: Will they be identified or flagged?

The Respondent shall provide results of the assessments in order to display performance level categorical improvement. This information will be displayed by teacher to assist in monitoring student progress.

A robust reporting system that meets the needs of all stakeholders and most importantly fosters the communication between parents, educators and students as well as contributes to improved instructional decisions is highly valued by Indiana. Preference will be given to respondents that provide a reporting system that goes beyond minimal requirements and provides innovative solutions to reporting needs and functions for parents and educators utilizing an online portal. Proposals shall describe the following reporting system requirements:

- Data review and correction, prior to, during, and following test administration
- Report security and control of access
- Transfer of return files
- Immediate electronic accessibility of reports for students, parents, and educators that may include mobile apps
- Provide translations or student supports in Spanish.

The Respondent must deliver to the IDOE aggregate score reports and incorporate the cut scores into student, classroom, school, corporation and state-level reports of operational test results. The Respondent must deliver a system in which all score reports, both online and paper-and-pencil, are delivered in common formats to schools,

such that scores are compiled and shared with schools in the same manner, regardless of the testing format selected. The IDOE requires an online system that generates printer-friendly reports (i.e., section or page breaks) at the student, classroom, school, corporation, and state levels. In addition, the Department requests the ability to quickly filter data online for other subgroups within the state, for example Pre-K students participating in the pilot Pre-K program across the state. If Respondent has a reporting suite, proposal should articulate options the Department may consider.

Proposals must include details and samples of innovative reporting meeting the needs of parents and educators, which should include, at a minimum, proficiency, and sub-score information:

- State summary
- Progress category reporting
- Corporation and/or provider summary
- School summary
- Class summary
- Individual student results including actionable instructional next steps, reporting category information with references to depth of knowledge to demonstrate alignment; and
- Other administrative reports as identified by IDOE

Proposals must explain the features and capabilities of the reporting system, including but not limited to the following:

- Data in an exportable format for LEA use (e.g., upload to Corporation's SIS)
- Customizability (e.g., headers, external data sets, format, analytics)
- Drill downs
- Aggregation and disaggregation
- Ability for Corporations (or other administrative entities as identified by IDOE) to export PDF copies of customizable reports for distribution to stakeholders (e.g., policy makers, educators, parents, and students)
- Users guides/interpretation information to assist report recipients in appropriately using and interpreting the report information
- Ability to store and report multi-year student-level data.
- Successful proposals may include the ability for LEAs to import unique data sets and create customizable reports.

### **(3o) Pilot Testing**

Due to licensing, some items will be used without being piloted in Indiana. A plan must be documented for equating to ensure that the results during the first two administration cycles align to Indiana students. All pilot samples for new development must be statistically representative of Indiana students. Respondents must describe in detail the processes and procedures they recommend for pilot-testing items developed for Indiana-specific alignment. Respondents are invited to make their best proposal for administering pilot items in a manner that assures the reliability and validity of all items to be used in assessments, while minimizing to the extent possible the time and costs required to pilot-test items. The Respondent shall identify any necessary piloting that would need to take place in Spring 2020 and delineate a plan for any piloting of items that may be necessary subsequent to Spring 2020.

### **(3p) Item and Test Analysis**

The Respondent shall be responsible for providing appropriate item statistics and item analyses once an item has been piloted. Respondents are encouraged to propose analyses based on their experience and emerging statistical theory. The IDOE reserves the right to require the Respondent to remove and replace any item with poor data and provide updated reports to the corporation or school.

The Respondent shall engage in annual psychometric analysis of all assessment data. This analysis may include: data cleaning, classical test theory and item analyses (e.g., p-values, point biserials, reliability analyses, classification analyses, raw score to scaled scores frequency distributions, etc.), Item Response Theory (IRT) analyses for calibrating and scaling the assessment data, analyses to support the use of a unidimensional IRT model, form equating across years, analysis of cross-year scale drift, fairness analyses and DIF, and establishing a new scale. Other analyses may include subgroup analysis, and comparisons to results from other states or national norms.

Data review meetings must be held annually with Indiana educators to review flagged items and ensure that the items can be used operationally with Indiana students. A design for these meetings may be established with the Department based on item licensure.

### **(3q) Technical and Psychometric Analysis**

Respondents must ensure the reliability and validity of individual student scores. The technical analyses conducted by the Respondent for the Early Childhood Assessment and K-2 Interim Assessments must meet nationally recognized professional and technical standards as noted earlier in the RFP (AERA/APA/NCME) as well as the

requirements of the USED. All technical analyses and reports provided by the Respondent shall include appropriate cross-references to the relevant joint standards and requirements.

The Respondent shall include a section in the proposal showing evidence of experience identifying technical issues/problems and the subsequent solutions. This may include such things as scaling, equating, test construction, scoring drift, etc.

Following each test administration, the respondent will conduct appropriate psychometric analyses using a combination of classical test theory and item response theory (IRT) to generate initial parameters for the field test items and updated parameters for the core (scored) items. The secure item bank will be updated, and an item bank inventory will be provided to the state on an annual basis.

Item data from the operational assessment must include appropriate IRT item and task parameters (the 3PL model has been used in IN) model fit, distractor analysis, bias/sensitivity analysis, and differential item functioning (DIF) statistics. For the test bias/sensitivity review, either an IRT model, or Mantel-Haenszel and other similar statistics, depending on sample size, can be used. The Respondent shall describe its plan for providing each of these item data components and the method to be used for calculations. The proposal shall also describe its approach to item calibration, including its approach to parameter estimation. The Respondent should not employ any proprietary or third-party software for this but use commercially available analysis software or open source code used to conduct the analysis so that the estimates can be replicated by others.

The Respondent must provide the state with all appropriate test statistics and information including test information functions, differential test function information, and validity and reliability measures from the field test. Examination of performance task data from the pilot tests and operational assessment must include reliability information, percentages of students in categories, materials used during review, and any other relevant information.

The Respondent will need to establish model fit and individual score reliability for the selected scaling procedure. The Respondent shall identify advantages and potential disadvantages of its proposed scaling procedure within its description. Proposals shall indicate which statistics will be used to establish model fit, student-level score reliability, and the success of various item type score combination methods in maintaining the desired score results across years. If the Respondent deems a different methodology is available that is more suitable for use with the data, they will provide a comparability

study to the state before being allowed to make any changes to the analytics.

The respondent will use appropriate statistical procedures to accurately equate the tests and produce raw score to scale score conversion tables. These tables and supporting documentation must be provided to the state for review and approval.

The Respondent will conduct bias, reliability, validity, usefulness studies and include the data from those studies in the technical reports submitted to the state. Validity studies and supporting psychometric analyses should be conducted annually and ongoing. Issues that IN may need to address include the validity of test scores, linking to previous assessment results, and alignment studies.

The Respondent shall provide its plan for conducting the studies necessary to meet all technical requirements of the U.S. Department of Education's (ED's) *Standards and Assessment Peer Review Guidance*, especially Sections 3 (Validity) and 4, (Technical Quality). The Respondent must describe its plan for providing the best and most cost-effective studies for meeting this requirement. Included in these studies, the Respondent shall describe in detail how it will conduct studies to verify and support the validity of interpretations drawn from test scores. The Respondent shall also propose its strategy for developing studies that investigate the intended and unintended consequences of the state assessment components. The Respondent shall indicate how the studies will support the IDOE's response to each element of the Peer Review Guidance.

### **(3r) Standards Setting (Cut Scores)**

Under the supervision of the IDOE, the Respondent shall design and conduct standard setting studies, as appropriate and necessary. Performance (achievement) standards will need to be confirmed or set for early childhood and K-2. The Respondent shall describe the standards settings that are needed and provide details regarding rationale, methodology, and timing. The Respondent shall be responsible for all costs of materials and staff support necessary to conduct the studies, complete appropriate analyses, and document the results in a comprehensive report. The IDOE will recruit panelists to serve on the Standards Setting committees.

Indiana-specific cut scores are required to be confirmed regardless of the proposed item bank. The proposal shall include a detailed description of the process to be used to establish standards and performance level descriptors. The plan should include but not be limited to the following:

- Details for all proposed meetings and workshops, including timelines, participants, and psychometric services assuming nominations and initial recruitment is completed by IDOE
- Proposed methodologies and justification for selection
- Formalization of performance level descriptors collaboratively with the Department
- Details and examples of proposed standards structure and reporting

If a standard setting is proposed, the following considerations should be addressed in the proposal. The Respondent shall work collaboratively with the state to develop preliminary threshold achievement level descriptors (ALDs). The preliminary threshold ALDs will inform the remaining standard setting activities by describing the specific knowledge, skills, and processes that students just entering each achievement level will demonstrate.

The Respondent will design and implement a standard setting workshop with Indiana educators. The state prefers an item-mapping procedure; however, other technically sound standard setting methodologies will be considered. The Respondent's standard setting process must be framed around the threshold achievement level descriptors. The standard setting design must consider the vertical articulation of recommended cut points across grade levels. The Respondent will present plans for a full standard setting and for a cut score review, including the potential advantages and disadvantages of each. The Respondent's plan must allow for the revision of the threshold ALDs given the final recommended cut points.

Following standard setting, the Respondent will present IDOE with recommended cut points and impact data, along with suggested revisions to threshold achievement level descriptors. Additionally, the Respondent will develop a technical report of the standard setting that describes the implementation of the standard setting workshop. The Respondent will provide IDOE with an initial draft of the technical report within 30 days of the workshop. The Respondent will provide IDOE with a final technical report within 10 calendar days of receiving state feedback on the initial technical report. The Respondent's standard setting technical report must meet the recommendations of the current APA/AERA/NCME Standards, as well as U.S. Department of Education Peer Review Guidelines. The standard setting workshop technical report must be provided to IDOE as a standalone document in Adobe PDF format.

#### Technical Advisory Committee (TAC)

The Respondent must support and attend three TAC meetings virtually annually, as requested, on behalf of the Department. The respondent will assume all costs associated with attendance of appropriate representatives from their organization to these annual meetings and have representatives available for phone conferences with

the TAC upon request from the IDOE. The Respondent will only be responsible for travel costs for their own staff's participation in the meetings.

The Successful Respondent shall work with IDOE to plan and participate in Technical Advisory Committee (TAC) meetings. The Successful Respondent is expected to provide clearly stated questions and supporting background materials three weeks prior for review by IDOE prior to the meetings. All psychometric processes, including test design, scaling, equating, standard setting, and validation procedures must go before the TAC for review and must receive IDOE approval.

### **(3s) Scaling and Equating**

For all elements the Early Childhood Assessment and K-2 Interim Assessments, the Respondent shall be responsible for proposing psychometric methods for equating and linking test forms. Total test scores shall be equated and raw scores converted to scale scores. The Respondent must provide test results based on pattern scoring.

The Respondent shall propose a detailed plan for building the necessary links for equating from form to form (within and across years), specify procedures for estimating equating error across years, and propose a system for checking on scale drift. The proposed equating methodology shall be clearly described in the Respondent's proposal. The Respondent is encouraged to propose alternative equating designs and timelines for establishing equated test forms. For each equating design proposed, the Respondent will provide advantages and disadvantages and make a recommendation for the use of one equating design over the other(s).

The Department expects pre-equating to ensure the quick delivery of student reports. Any exceptions to this design must be fully discussed in the proposal.

### **(3t) Validity**

The Respondent shall be responsible for establishing and documenting evidence of the validity of test scores from the assessments. Evidence of validity shall include, but not necessarily be limited to, the following:

- a. Evidence that subject matter experts have determined that items and test forms represent an adequate sample of the content frameworks;
- b. Documentation of the rationale for the relative emphasis assigned to particular standards;
- c. Evidence that test item formats measure the intended content rather than some other construct;
- d. Evidence of the interrelationship among "standard" scores;

- e. Evidence that items were chosen on the basis of the test blueprint; and
- f. Evidence that alternate forms of each test cover the same content.

### **(3u) Reliability**

The Respondent will be responsible for establishing and documenting evidence of the reliability of test scores for the assessments. Evidence of test score reliability shall include, but not necessarily be limited to, internal consistency of total scores and sub-scores and standard error of measurement. A summary of inter-scorer reliability should also be addressed in the documentation.

The Respondent shall propose a detailed plan for how it expects to complete all work associated with this task, including descriptions of designs of reliability studies, plans for conducting proposed studies, timelines, analyses to be conducted, statistics and reports to be provided, and the supporting rationale for the proposed design(s). This plan and associated work will be subject to negotiation and approval by the IDOE.

### **(3v) Technical Reports**

The Respondent shall prepare a technical report after each year's administration. The report should include statistical characteristics of assessment instruments (e.g., validity, reliability); design and results of equating and scaling; linking studies (if done); standard setting; interpretations of assessment results (including analytics that provide student performance data based on variables, including, but not limited to all ESSA subgroups and other information as requested. The final report will be subject to approval by the IDOE and the Technical Advisory Committee.

Specifically, the Respondent will provide a Technical Report that addresses each testing component (early childhood and K-2 interim). The Technical Report will include all relevant psychometric information for each test, and should include, but is not limited to, technical details on the following:

1. purpose,
2. test blueprint,
3. test development,
4. validity,
5. reliability,
6. accommodations and testing of students with special needs,
7. test security,
8. administration,
9. scoring,
10. equating,
11. scaling,

12. standard setting (if done),
13. reporting,
14. validity studies, and
15. appropriate use and interpretation of test data.

The technical report is to be completed by November 15 following the end of the operational program. Appendices must include related materials such as administrative regulations, state standards, work samples, frequency/percentile distributions, summary tables providing data from technical analyses, state and district performance summaries by racial-ethnic group, and other pertinent information.

### **(3w) Quality Control**

The Respondent is responsible for maintaining a high level of quality control over all test items and forms, data entry, and processing. Key personnel must be assigned for quality assurance practices. Current quality control and assurance methodologies utilized by the respondent must be defined. Key processes include item development, production, scoring and reporting, data analysis, and test delivery.

The fundamental purpose of IDOE is to provide accurate information on student achievement. The respondent will utilize every means required to ensure that information created by the project is correct. The Respondent is responsible for correcting any errors arising from activities that are the responsibility of the Respondent at the Respondent's expense. This may involve activities such as conducting analyses to identify the cause and extent of errors; reprinting or reproducing products or other materials; replacing files; reproducing reports; shipping replacement products or reports to state or districts using expedited shipping services; and communicating directly with school districts as to the nature and extent of the error, upon approval from the state.

IDOE expects that all products developed and used under this contract will be defect-free. Errors in materials or quality assurance, failures in development, administration, scoring or reporting for any assessment component will not be tolerated. The term "defect" includes, but is not limited to, inaccuracies in grammar, content, format, or directions in any printed or online material or posted materials. The standard for the error rate on all test-related information provided by the respondent is zero (0.0%).

### **Risk Management and Quality Assurance**

Respondents shall specifically address timeline issues, risks, and mitigation and contingency plans for all aspects of the project. These plans should refer to more than just "communication." Additional details may be provided in the response to relevant requirements and specifications.

The Respondent should highlight its proposed subcontractors proven ability to document and enact risk management strategies – especially as they relate to the development, production, shipping and receipt, administration (online assessments), scoring, data processing, reporting, and psychometric activities for high-stakes assessments.

In its proposal, the Respondent should submit sample Risk Assessment documentation used in an existing program to demonstrate the comprehensiveness of its ability to conduct contingency planning for a variety of conditions. This Risk Assessment documentation may be submitted as an attachment to the proposal. This documentation should also highlight internal procedures and protocols for quality assurance in all aspects of delivering large-scale, statewide assessments – including test development, production, shipping and receipt, administration (of paper-based and online assessments), scanning, scoring, data processing, and reporting.

The Respondent will ensure that all data operations are subject to multiple Quality Assurance (QA) checks for accuracy before results are released. The Respondent should include in the proposal a full and complete description of its Quality Control (QC) procedures for IDOE review. The Respondent will develop and implement QC procedures for checking the accuracy of all test item information, all student scores and identification, and all summary data.

The Respondent will create detailed logs that trace the application of QC procedures to the state score reports after each administration. Respondent is responsible for maintaining quality products and services in all aspects of both assessment programs from initial development of items to the production of electronic data files and score reports.

The Successful Respondent must plan and prepare QA schedules that will allow work to flow in a timely, effective manner while maintaining high quality deliverables. IDOE must review and approve the QA schedules annually. The Respondent shall indicate how it proposes to do this.

The respondent will provide the state with a report that summarizes any problems noted in the completed and returned scorable data files. The report will detail any errors, problems, and/or discrepancies by district and by school. This report will allow the state to detect any patterns in the errors, problems, and/or discrepancies noted in the report, to use that information to clarify instructions in the district/school test coordinator guides, and to focus and improve the training provided at district test coordinator training sessions.

The Respondent will retain student response files documents for possible re-scoring for a designated period agreed upon by the respondent and the IDOE.

The Respondent will immediately notify the State when an item error, scoring error, or reporting error is discovered. The Respondent and IDOE will develop a plan for correcting the error. The plan will include a description of how timely and forthright information will be communicated to all affected stakeholders. The Respondent shall indicate how it proposes to do this.

### **(3x) Professional Development (PD)**

IDOE conducts a variety of PD and training activities for schools, corporations, and early childhood providers across the State and develops and manages the details of the plans. The Respondent will support IDOE with the creation and implementation of these activities, including the following:

- Training for Test Coordinators and Test Administrators to support the use of the online system and test administration, as well as training regarding the use of paper and pencil version as needed
- Training and materials for all early childhood program educators and administrators to support the navigation and use of the online system, including step by step demonstrations and easy to follow directions
- Training for early childhood program educators to support incorporation of their observations into the assessment tool, including use of the rubric describing number of times observed and independence in completion
- Additional training needed by the field as noted by either IDOE or the Respondent throughout the course of the contract
- Training for educators regarding the interpretation and analysis of data provided by the assessment, including how to use the data to improve instruction, as well as how to explain results to families
- Training for parents/families regarding the interpretation of test scores

As a cost savings measure and as a separate cost option, IDOE is interested in having the Respondent implement a system to accommodate both face-to-face and online trainings of teachers. Respondent should plan on providing 9 regional face-to-face trainings in Year 1 (each with a maximum of 100 participants). In its proposal, the Respondent should identify how it will provide support to IDOE and training for corporation and school personnel, as well as early childhood providers on a variety of activities, such as how to use assessment results, the scoring process and any scoring rubrics, interpretation of score reports, and how to make any needed adjustments to instruction. The Respondent will need to collaborate with IDOE staff who will oversee the PD that is delivered to corporations, schools, and early childhood providers.

## **ATTACHMENT A: Federal Reporting Requirements**

**FEDERAL INDICATOR: Percent of preschool children aged 3 through 5 with IEPs who demonstrate improved:**

- A. Positive social-emotional skills (including social relationships);**
- B. Acquisition and use of knowledge and skills (including early language/communication and early literacy); and**
- C. Use of appropriate behaviors to meet their needs.**

**(20 U.S.C. 1416 (a)(3)(A))**

## **REPORTING REQUIREMENTS**

**Progress categories for A, B and C:**

- a. Percent of preschool children who did not improve functioning = [(# of preschool children who did not improve functioning) divided by (# of preschool children with IEPs assessed)] times 100.**
- b. Percent of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers = [(# of preschool children who improved functioning but not sufficient to move nearer to functioning comparable to same-aged peers) divided by (# of preschool children with IEPs assessed)] times 100.**
- c. Percent of preschool children who improved functioning to a level nearer to same-aged peers but did not reach it = [(# of preschool children who improved functioning to a level nearer to same-aged peers but did not reach it) divided by (# of preschool children with IEPs assessed)] times 100.**
- d. Percent of preschool children who improved functioning to reach a level comparable to same-aged peers = [(# of preschool children who improved functioning to reach a level comparable to same-aged peers) divided by (# of preschool children with IEPs assessed)] times 100.**
- e. Percent of preschool children who maintained functioning at a level comparable to same-aged peers = [(# of preschool children who maintained functioning at a level comparable to same-aged peers) divided by (# of preschool children with IEPs assessed)] times 100.**

**Summary Statements for Each of the Three Outcomes:**

**Summary Statement 1:** Of those preschool children who entered the preschool

program below age expectations in each Outcome, the percent who substantially increased their rate of growth by the time they turned 6 years of age or exited the program.

**Measurement for Summary Statement 1:**

Percent = [(# of preschool children reported in progress category (c) plus # of preschool children reported in category (d)) divided by (# of preschool children reported in progress category (a) plus # of preschool children reported in progress category (b) plus # of preschool children reported in progress category (c) plus # of preschool children reported in progress category (d))] times 100.

**Summary Statement 2:** The percent of preschool children who were functioning within age expectations in each Outcome by the time they turned 6 years of age or exited the program.

**Measurement for Summary Statement 2:**

Percent = [(# of preschool children reported in progress category (d) plus # of preschool children reported in progress category (e)) divided by (the total # of preschool children reported in progress categories (a) + (b) + (c) + (d) + (e))] times 100.