

HAWAII STATE DEPARTMENT OF EDUCATION
PROCUREMENT AND CONTRACTS BRANCH

August 23, 2023

REQUEST FOR PROPOSALS

RFP D24-023

SEALED PROPOSALS

TO PROVIDE ARTIFICIAL INTELLIGENCE STAKEHOLDER DEVELOPMENT
FOR CLASSROOM-BASED ASSESSMENTS
FOR THE HAWAII STATE DEPARTMENT OF EDUCATION

**will be received through the State of Hawaii eProcurement System (HlePRO) at
<https://hiepro.ehawaii.gov> until 4:30 p.m., Hawaii Standard Time (HST)**

on

October 13, 2023,
or such later date as may be established by an addendum to this Request for Proposals (RFP)

Offerors interested in responding to this electronic solicitation must be registered on the HlePRO (<https://hiepro.ehawaii.gov>) in order to participate in this procurement. Registration is free. Once registered, Offerors can login to view and respond to the HlePRO solicitation.

A Pre-Proposal Conference will be held on August 31, 2023, at 9:00 a.m. (HST). Attendance is optional but highly recommended. Refer to RFP Section 1.11, Pre-Proposal Conference for more information.

Questions relating to this solicitation may be directed to Nicole Agena, Procurement and Contracts Support Specialist, at telephone (808) 675-0130, via facsimile (808) 675-0133, or via email at nicole.agena@k12.hi.us.

1. OVERVIEW OF PROCUREMENT PROCESS

1.1 Definitions and Acronyms

The following definitions apply to this solicitation.

- 1.1.1 **Contract** means the combination of the signed contract, solicitation, including the scope of work, the special conditions, the general conditions, and any addenda to the solicitation; the offer and any best and final offer(s); and any amendments to the contract; and any terms implied by law.
- 1.1.2 **CONTRACTOR** means an individual, partnership, firm, organization, corporation, joint venture or other legal entity having a contract with the Hawaii State Department of Education and undertaking the execution of work under the terms of the contract and acting directly or through its agents, employees or sub-contractors.
- 1.1.3 **Department** or **STATE** means the Hawaii State Department of Education.
- 1.1.4 **General Conditions** means the General Conditions issued by the Department of the Attorney General of the State of Hawaii, referred to as Form AG-008, as revised, and included herein by reference. The applicable Form AG-008, as revised, included by reference, is the form in effect at the date the solicitation is issued.
- 1.1.5 **HAR** means **Hawaii Administrative Rules**.
- 1.1.6 **HRS** means **Hawaii Revised Statutes**.
- 1.1.7 **Offer** means a proposal submitted in response to this solicitation.
- 1.1.8 **Offeror** means any individual, partnership, firm, organization, corporation, joint venture, or other legal entity, submitting an offer in response to this solicitation.
- 1.1.9 **Project** means this RFP to provide virtual stakeholder development for classroom based assessments for the Hawaii State Department of Education.
- 1.1.10 **Proposal** means the document submitted by an offeror in response to this solicitation.
- 1.1.11 **RFP** means **Request for Proposals**, the entire solicitation document, including all parts, sections, exhibits, attachments, and Addenda, whether attached or incorporated by reference.
- 1.1.12 **STATE** or **Department** means the Hawaii State Department of Education.

1.2 RFP Organization

This RFP is organized as follows:

- Section 1. Overview of Procurement Process. Provides Offerors with a general overview of the RFP process.
- Section 2. Purpose and Overview. Provides Offerors with general information about the objectives of this project and RFP, and critical success factors.

- Section 3. Scope of Work and Requirements. Provides Offerors with a general description of the tasks to be performed, delineates Hawaii State Department of Education and CONTRACTOR's responsibilities, stipulates Offeror qualifications, and defines deliverables.
- Section 4. Proposal. Describes the required format and content for the Offeror's submittal, and establishes requirements for the Price Proposal.
- Section 5. Proposal Evaluation. Describes how proposals will be evaluated by the Hawaii State Department of Education.
- Appendix A. Proposal Identification and Information Form
Appendix B. Offeror Reference Form
Appendix C. Price Proposal
Appendix D. Contract Minimum and Special Conditions
Appendix E. State of Hawaii's General Conditions
- Exhibit A. Certificate of Eligibility to Claim Preference as a Hawaii Software Development Business (DOE Form 9)

1.3 Procurement Authority

This procurement is being conducted as a competitive sealed proposals procurement in accordance with the procedures set forth in §103D-303, HRS and Title 3, Subtitle 11, Chapter 122, Subchapter 6, HAR. The relevant provisions of §103D, HRS, and their associated HAR, are incorporated by reference and made a part of this RFP.

1.4 Issuing Office and RFP Contact Person

The following person from the issuing office listed below is the sole point of contact for this RFP. Communication with any other contact person from the date of release of this RFP until the selection of the successful Offeror(s) without approval, may result in disqualification.

RFP Point of Contact: Nicole Agena
email: nicole.agena@k12.hi.us
Phone: (808) 675-0130
Fax: (808) 675-0133

Issuing Office:
Hawaii State Department of Education
Procurement and Contracts Branch
Waipahu Civic Center
94-275 Mokuola Street, Room 200
Waipahu, Hawaii 96797

1.5 Procurement Timetable

Except as noted, the following schedule represents the STATE's best estimate. All times indicated are Hawaii Standard Time (HST). If any component of this schedule is delayed, the rest of the schedule will likely be amended by the same number of days, however the STATE reserves the right to amend or revise the timetable without prior written notice when such revision or amendment is in the STATE's best interest.

Activity	Estimated Dates
Public Notice announcing Request for Proposals (RFP)	August 23, 2023
Pre-Proposal Conference	9:00 a.m., August 31, 2023
Deadline for submission of written questions	On or before 4:00 p.m., September 12, 2023
STATE's responses to written questions	on or about September 19, 2023
Proposal Due Date/Time Proposals will be received through the State of Hawaii eProcurement System (HlePRO) at https://hiepro.ehawaii.gov until 4:30 p.m., Hawaii Standard Time (HST) THERE ARE NO EXCEPTIONS TO THIS PROPOSAL DUE DATE UNLESS THE DATE IS AMENDED IN WRITING BY THE PROCUREMENT AND CONTRACTS BRANCH.	4:30 p.m., October 13, 2023
Evaluation of Proposals	October 16 through 27, 2023
Determination of Priority-Listed Offerors (if necessary)	To be determined, if necessary
Best and Final Offers (if necessary)	To be determined, if necessary
Contract Award	November 2023
Contract Commencement Date/Notice to Proceed	January 2024

1.6 Cancellation of RFP; Rejection of Proposals

This RFP may be cancelled and any or all proposals may be rejected in whole or in part, when it is determined to be in the best interest of the STATE.

1.7 Electronic Procurement

- 1.7.1 The STATE utilizes the Hawaii State eProcurement (HlePRO) System to promote an open and transparent system for vendors to compete for contracts electronically. Offerors interested in responding to this solicitation must be registered on HlePRO. Registration information is available at the State Procurement Office (SPO) website: <https://hiepro.ehawaii.gov>, select HlePRO Vendor Registration and then Vendor Registration Guide.
- 1.7.2 The STATE will use HlePRO to issue the RFP, receive Offers, and issue Addenda to the RFP. Addenda and the other information and materials shall be provided by the STATE through HlePRO, including additions or changes with respect to the dates specified herein. The STATE is not responsible for any delay or failure of any Offeror to receive any materials regarding this RFP on a timely basis.
- 1.7.3 As part of this procurement process, Offerors are informed that awards made for this solicitation, if any, shall be done through the HlePRO and shall, therefore, be subject to a mandatory .75% (.0075) transaction fee, not to exceed \$5,000 for the total contract term, payable to Tyler Hawaii,

the vendor administering HlePRO. The mandatory fee (.75%) is applicable for sales calculated on a quarterly basis for the first year only. This transaction fee shall be based on the total sales made against this contract, payable to Tyler Hawaii, the vendor administering HlePRO.

- 1.7.4 HlePRO Special Instructions. Offeror shall review all special instructions located in HlePRO. Offerors are responsible for ensuring that all necessary files are attached to their offer prior to the proposal deadline.
- 1.7.5 Payment to Tyler Hawaii. HlePRO is administered by Tyler Hawaii. Tyler Hawaii shall invoice the Contractor(s) directly for payment of transaction fees. Payment must be made to Tyler Hawaii within thirty (30) days from receipt of invoice. Tyler Hawaii is an intended third-party beneficiary of transaction fees, which are used to fund the operation, maintenance and future enhancements of the HlePRO system.

Offerors are advised that they should not wait until the last minute to submit their proposal on HlePRO. Offerors should allow ample time to review their submitted proposal, including attachments, prior to the proposal deadline.

1.8 Required Review/Written Questions

It is the Offeror's responsibility to carefully review this solicitation for defects and questionable or objectionable matter. Solicitation documents include this RFP, any attachments, plans referred to herein, and any other relevant documentation.

Comments concerning defects, discrepancies, omissions, questionable or objectionable matter, or questions related to this RFP must be made in writing to allow issuance of any necessary amendments to the RFP. It will also help prevent exposure of Offeror's proposal prepared in response to a defective or inaccurate solicitation upon which award could not be made.

Comments related to this solicitation shall be communicated in writing to the RFP Contact Person identified via fax or e-mail by the date and time established for submission of written questions to ensure an official response. The STATE will not respond to verbal or informal questions.

Such comments shall contain pertinent information to identify the prospective Offeror, its telephone number, e-mail address, the RFP number, as well as reference to the specific page, section, and/or paragraph as applicable.

The response(s) to the prospective Offerors' written questions received by the scheduled date shall be compiled, shall omit reference to the source(s) of the questions, shall be issued as an addendum to the RFP, and shall become a part of the RFP. The STATE will publish the questions as they are submitted including any background information provided with the question. The STATE at its sole discretion may omit questions which may be combined or may paraphrase questions and background content for clarity.

The STATE's responses shall be communicated in writing via addenda and will be posted on the HlePRO. The STATE is not responsible for delays or non-receipt of any communications by the prospective Offerors.

If an Offeror submits a question after the scheduled date, the STATE may answer the question but does not guarantee that the answer will be provided prior to the Proposal due date.

1.9 RFP Addenda

The STATE reserves the right to amend this RFP at any time prior to the closing date, or prior to the due date for best and final offers. All addenda issued shall be incorporated into the resulting contract. Failure of any Offeror's receipt of any such addenda or interpretations shall not relieve the Offeror of any obligation under this solicitation. It is the responsibility of the prospective Offeror to monitor the HlePRO to obtain RFP addenda or other information relating to the RFP.

1.10 Notice of Intent to Offer (Letter of Intent)

A notice of intent to submit a Proposal is NOT required.

1.11 Pre-Proposal Virtual Conference

Interested Offerors are invited to participate in the Pre-Proposal Virtual Conference. Attendance shall be voluntary but interested Offerors are encouraged to participate to gain an understanding of the breadth and scope of work involved under this RFP. Official responses to questions and revisions to the original terms will be issued in writing as an addendum to this RFP.

Pre-Proposal Virtual Conference: Thursday, August 31, 2023, at 9:00 a.m. Hawaii Standard Time.

Offerors may participate in the pre-proposal virtual conference with the following webinar link or via phone number and pass code:

WebEx: <https://tinyurl.com/HIDOEpreproposalconf>

Password: 1234

Number: 1-844-621-3956 (toll free)

Access code: 2624 426 0628

1.12 Deadline for Proposals

Proposals shall be received through HlePRO. Proposals received after the deadline will not be accepted. Timely receipt of offers shall be evidenced by the date and time on HlePRO.

1.13 Proposal Opening

Proposals shall not be opened publicly, but the register of proposals and Offerors' proposals shall be open to public inspection upon posting of the award.

1.14 Disqualification of Offers

The STATE reserves the right to consider as acceptable only those proposals submitted in compliance with all the requirements set forth in this RFP and which demonstrate an understanding of the issues involved and the scope of work.

An Offeror shall be disqualified, and the Offeror's Proposal shall be rejected for any one or more of the following non-exclusive reasons as solely determined by the STATE:

1.14.1 Proposal received after specified deadline.

1.14.2 Proposals not received on HlePRO.

- 1.14.3 Proposal not properly completed as required herein or containing any unauthorized additions or deletions, defects including but not limited to irregularities of any kind which may make the Proposal incomplete, indefinite, or ambiguous as to its meaning (e.g. un-initialed erasures, prices which are obviously unbalanced).
- 1.14.4 A Proposal which is incomplete or conditional proposals including but not limited to a Proposal which includes any other set of terms and conditions, or any terms or conditions contradictory to those included in this RFP.
- 1.14.5 A Proposal signed by other than an authorized individual.
- 1.14.6 More than one Proposal from an individual, partnership, firm, organization, corporation, joint venture, or other legal entity under the same or different names (Offeror), whereby all proposals from the Offeror shall be rejected.
- 1.14.7 Evidence to the STATE's sole satisfaction of collusion among Offerors, lack of responsibility and cooperation to STATE requests during the RFP process or as shown by past work, being in arrears on existing contracts with the State of Hawaii, or defaulting on previous contract(s).
- 1.14.8 Failure to possess proper licenses, facilities, equipment or sufficient experience to provide the proposed solution or to perform the work contemplated.
- 1.14.9 Evidence of any noncompliance with any applicable law or rule.

1.15 Proposal Evaluation

The STATE will conduct a comprehensive, fair, and impartial evaluation of the proposals it receives in response to this RFP. Refer to Section 5 of this RFP for specific requirements and details of the process.

1.16 Proposal as Part of the Contract

This RFP and part or all of the successful proposal may be incorporated into the contract.

1.17 Additional Terms and Conditions

The STATE reserves the right to add terms and conditions, if any. These terms and conditions will be within the scope of the RFP and will not affect the proposal evaluations.

1.18 Offer Acceptance Period

The STATE's acceptance of a proposal, if any, will typically be made within ninety (90) calendar days after the opening of proposals. Prices quoted by the Offeror shall therefore remain firm for ninety (90) calendar days from the receipt of proposals.

1.19 Contract; Contract and Performance Period

The CONTRACTOR(s) receiving the award shall be required to enter into a formal written contract. Upon execution of contract, the STATE will issue a notice to proceed and a fully executed copy of the contract to the CONTRACTOR. No work will be undertaken by the CONTRACTOR prior to the commencement date specified on the contract as the STATE is not liable for any work, contract costs, expenses, loss of profits, or any damages whatsoever incurred by the CONTRACTOR prior to official starting date.

1.19.1 Contract Term

The Contract shall commence upon full execution of the contract by the Superintendent of the Hawaii State Department of Education and shall end on September 30, 2024.

IF SELECTED FOR FUTURE PHASES II AND III:

1.19.2 If selected for future Phases II and III, the Contract may be extended for not more than three (3) additional twelve-month periods, i) upon mutual written agreement of the parties, ii) prior to expiration and iii) under the same terms and conditions of the original agreement or as negotiated between the STATE and the CONTRACTOR. Contract extension(s) shall be contingent upon i) the need for continued services and ii) funding availability beyond the current fiscal year. As each option(s) to extend is mutually agreed upon, the CONTRACTOR shall be required to execute a supplement to the Contract for each additional period.

1.19.3 Performance Period

The CONTRACTOR shall complete the work within the time limits specified herein. The time specified herein is the maximum time allowed.

1.20 Contract Award

Award(s), if any, shall be made to the responsible Offeror(s) with the highest number of points (no more than two Offerors) meeting the minimum evaluation score as specified in RFP Section 5.2, Evaluation Criteria, and whose proposal(s) the STATE deems advantageous in accordance with the evaluation criteria specified.

1.21 Responsibility of Offerors; Hawaii Compliance Express

The Offeror is advised that if awarded under this RFP, Offeror shall, upon award, furnish proof of compliance with the requirements of HRS §103D-310 and HAR § 3-122-112 including:

- Chapter 237, General Excise Tax Law;
- Chapter 383, Hawaii Employment Security Law;
- Chapter 386, Workers' Compensation Law;
- Chapter 392, Temporary Disability Insurance;
- Chapter 393, Prepaid Health Care Act; and

One of the following:

1. That Offeror is registered and incorporated or organized under the laws of the State of Hawaii (hereinafter referred to as a "Hawaii business"); or
2. That Offeror is registered to do business in the State of Hawaii (hereinafter referred to as a "compliant non-Hawaii business").

Offeror may demonstrate proof of compliance with the above-referenced requirements by submitting a *Certificate of Vendor Compliance* issued by the Hawaii Compliance Express (HCE) online system to the Hawaii State Department of Education, Procurement and Contracts Branch upon award. The HCE service allows vendors to register online through a simple wizard interface at <http://vendors.ehawaii.gov>. The *Certificate of Vendor Compliance* provides current compliance status as of the issuance date, satisfies requirements of Chapter 103D-310(c), HRS, and is therefore acceptable for contracting purposes. CONTRACTORS that elect to use HCE services are required to pay an estimated annual registration fee of \$12.00.

Due to the time required to obtain the HCE *Certificate of Vendor Compliance*, it is highly recommended that the interested Offeror begin the registration process immediately.

1.22 Failure to Execute Contract; Timely Submission of Certificates

At time of award, the above *Certificate of Vendor Compliance* and any other documentation and certification shall be submitted to the Hawaii State Department of Education, Procurement and Contracts Branch as soon as possible or by the deadline established by STATE. If a valid certificate or compliant documentation is not submitted on a timely basis for award, award made to an Offeror otherwise responsible may be annulled.

Failure to execute a contract as required within ten (10) calendar days or such further time as the STATE may allow after the Awardee has received the contract for execution shall be just cause for the annulment of the award. STATE may award the contract to the next responsible Offeror or may call for other offers, whichever is deemed to be in the best interest of the STATE.

1.23 Notification of Award; Non-selected Offeror(s)

Upon award to the successful Offeror(s), the STATE shall post publicly, a notice of award which may be viewed on the Hawaii Awards and Notices Data System (HANDS) website at <https://hands.ehawaii.gov/hands/awards>. Additionally, the STATE will provide notification of the award to any non-selected Offeror(s). The STATE is not responsible for delays or non-receipt of such notification. Failure of any Offeror to receive any such notification shall not relieve the Offeror of any obligations or requirements herein.

1.24 Debriefing

The purpose of a debriefing is to inform the non-selected Offeror(s) of the basis for the source selection decision and award. An Offeror(s) not selected for award shall submit a written request for a debriefing within three (3) working days after the posting of the award. The debriefing shall be held, to the maximum extent possible, within seven (7) working days after the posting of the award.

1.25 Protest

Pursuant to §103D-701, HRS and §3-126, HAR, a protest of the solicitation must be submitted prior to the date set for receipt of offers, and a protest of an award or proposed award shall be submitted within five (5) working days after the posting of award or within five (5) working days following a debriefing. The award(s), if any, resulting from this solicitation shall be posted on the Hawaii Awards and Notices Data System (HANDS) website at <https://hands.ehawaii.gov/hands/awards>.

Any protest pursuant to §103D-701, HRS and §3-126, HAR shall be submitted in writing to the Hawaii State Department of Education's, Chief Procurement Officer, c/o Procurement and Contracts Branch at the Waipahu Civic Center, 94-275 Mokuola Street, Room 200, Waipahu, Hawaii 96797.

2. RFP PURPOSE AND OVERVIEW

Introduction and Project Objectives

The Hawaii State Department of Education (STATE) is seeking proposals from qualified offerors to develop Virtual Students (i.e., Artificial intelligence (AI) students or student bots), conduct psychometric analysis, and involve Virtual Teachers (i.e., AI teachers or teacher bots), and Virtual Community Members (i.e., AI community members or community member bots) in the test development process. The objective of this project is to create virtual student, teacher, and community member representations, facilitate psychometric analysis, engage Virtual Teachers in scoring student work samples and engage Virtual Teachers and Virtual Community Members (i.e., Virtual Stakeholders) in determining grade-level, classroom-based assessment cut scores for proficiency. This innovative approach aims to streamline assessment processes and enhance efficiency while ensuring fair and reliable outcomes.

The STATE believes that the use of Virtual Students and Virtual Stakeholders has the potential to revolutionize the way that assessments are developed and administered. By using Virtual Students and Stakeholders, the STATE can reduce the need for human test takers and scorers, and save time and money. Additionally, the use of Virtual Students and Stakeholders can help to ensure that the assessment is fair and equitable for all students.

The project will be executed through the following three (3) distinct phases:

2.1. Phase I: Proof of Concept

During Phase I of the project, Contractor(s) awarded for this phase will develop a proof of concept to demonstrate the scientific, technical, and practical potential of developing an AI Assessment Community. The initial focus will be on the creation of Virtual Students. The eventual project will develop Virtual Teachers, and Virtual Community Members (Virtual Stakeholders) to participate in the development of classroom-based assessments and the scoring of student work samples.

A pivotal aspect of this proof of concept will be the evaluation and demonstration of the Virtual Students' authenticity in providing test responses that align with the unique characteristics and perspectives of Hawaii's diverse student population. To ensure fidelity to local customs, culture, and sensitivities, the AI algorithms and models will be meticulously designed to emulate "Hawaii-like" responses. These Virtual Students will exhibit a realistic range of cognitive processes, problem-solving strategies, and test-taking behaviors, accurately reflecting the diverse demographic representations and educational needs present in Hawaii's public schools.

A critical aspect of Phase I is the rigorous validation of the Virtual Students. The Contractor will be responsible for conducting comprehensive validation efforts to demonstrate the authenticity and alignment of the Virtual Students' behaviors with those of real students. The validation process will involve utilizing statistical evidence to ensure that the Virtual Students' responses closely resemble real students' behaviors.

The Contractor shall present statistical criteria that the Virtual Students must meet, ensuring that their responses align with real students' behaviors and performance. This validation process will involve comprehensive comparisons of the distribution of student scores on each assessment item between the Virtual Students and real students, correlations between item responses, and objective measures of written responses, such as word usage, grammatical constructions, and misspellings.

Furthermore, this proof of concept will lay the foundation for the subsequent development of Virtual Teachers and Virtual Community Members, highlighting their potential to provide valuable insights into student learning and assessment practices. The development efforts will prioritize the incorporation of Hawaii-specific subject expertise, instructional practices, and decision-making processes in the virtual entities' functionalities. This fidelity to local perspectives will contribute to the establishment of a

comprehensive AI Assessment Community that genuinely addresses the unique needs and aspirations of Hawaii's educational landscape.

By successfully demonstrating the authenticity and viability of the AI Assessment Community's components, this proof of concept will serve as a catalyst for the subsequent phases of research and development, validating the potential for a transformative and inclusive virtual assessment environment.

The STATE is seeking proposals to furnish and deliver a Proof of Concept. Once the Proof of Concept is complete, the STATE will further evaluate the Proof of Concept in accordance with the evaluation criteria set forth in section 5 to determine if the STATE will exercise its option to move forward with Phases II and III. If the STATE moves forward with Phases II and III, one (1) Contractor will be selected to perform Phases II and III.

2.2. Phase II: Full Research and Development

Upon successful completion of Phase I and based on the positive outcomes of the proof of concept, the Contractor(s) awarded in Phase I shall be further evaluated for selection to move forth with future Phase II, focusing on full-scale Research and Development efforts. One (1) Contractor will be selected for Phases II and III. The aim is to develop robust and reliable Virtual Students and Virtual Stakeholders, ensuring efficient data collection, psychometric analysis, and scoring of real student work samples.

Virtual Student Refinement:

The Contractor shall develop Virtual Students, virtual representations of Hawaii's public school student population, to simulate the behaviors, characteristics, and abilities of real students. The Virtual Students should accurately reflect the diversity of demographics, grade levels, and academic abilities present in Hawaii's public schools. The Virtual Students' virtual profiles should include attributes such as age, grade level, gender, ethnicity, and special educational needs. Additionally, their cognitive processes, problem-solving skills, and test-taking behaviors should align with the targeted grade levels and subject areas.

The Virtual Students should exhibit realistic behavior and responses to assessment items, including attention span, motivation, and strategies employed while answering questions. The Contractor shall design an intuitive user interface that allows test developers to administer assessment items to the Virtual Students and collect their responses effectively. The interface shall provide a realistic test-taking experience, ensuring that the Virtual Students' interactions with the items closely resemble those of real students.

Virtual Stakeholder Development:

In addition to Virtual Students, the project scope includes the development of Virtual Teachers (teacher bots) and Virtual Community Members (community member bots) who together comprise the Virtual Stakeholders (stakeholder bots). The Virtual Teachers will be responsible for scoring student work samples, applying established rubrics and scoring guidelines consistently. These Virtual Teachers should emulate the expertise, knowledge, and scoring accuracy of real teachers across different subject areas and grade levels. The Virtual Teachers' scoring process should be transparent, replicable, and free from bias, providing reliable and valid scores for student work samples.

Validation

A key aspect of Phase II will be the rigorous validation work conducted to ensure the authenticity, accuracy, and alignment of these virtual entities with real-world counterparts in Hawaii's educational context. The Contractor shall meticulously undertake a comparative analysis of the Virtual Students' responses, Virtual Teachers' scoring patterns, and Virtual Community Members' decision-making against similar real-world counterparts. Through this rigorous evaluation, the Contractor will actively review and evaluate the virtual entities' behaviors and interactions to ensure their fidelity to Hawaii's cultural, linguistic, and educational nuances.

Validation efforts will encompass in-depth item analysis, statistical assessments, and stakeholder feedback, enabling the Contractor to ascertain the virtual entities' alignment with the intended constructs and their capacity to effectively represent diverse perspectives in decision-making processes.

The validation plan will be meticulously documented, providing transparency in the process and outlining data sources, evaluation metrics, and benchmarks. The results of the validation work will serve as a foundation for potential refinements to enhance the virtual entities' performance and adaptability in an ever-evolving educational landscape.

Throughout Phase II, the Contractor's expertise and commitment to data-driven validation methodologies are paramount in ensuring the credibility and reliability of the Virtual Students and Virtual Stakeholders. By engaging in comprehensive validation work, the Contractor will deliver virtual entities that effectively emulate real students, teachers, and community members, demonstrating their authenticity and potential to transform educational assessments in Hawaii.

2.3. Phase III: Deployment

With the successful completion of Phase II and validation of the AI Assessment Community, the Contractor shall proceed to Phase III which will focus on the application of the developed technology for use in field testing items, scoring student work samples, and the setting of cut scores for common assessments.

Newly developed items will be administered to Virtual Students who will provide responses to the assessment items as real students would. The field testing process will focus on evaluating the effectiveness, validity, and quality of these items, ensuring they align with the intended construct and possess appropriate difficulty levels. The data collected from the Virtual Students' responses will undergo rigorous item analysis, calibration, and validation, enabling the fine-tuning and refinement of the assessments for optimal performance and accuracy.

Virtual Teachers, equipped with advanced artificial intelligence and natural language processing capabilities, will assess the quality, accuracy, and completeness of human student responses based on established rubrics and scoring guidelines. The Virtual Teachers' scoring process will ensure consistency and reliability in evaluating the student work, providing constructive feedback and insightful critique that mirrors the expertise and professional judgment of real teachers. Through this virtual scoring approach, the project aims to streamline the scoring process, enhance efficiency, and maintain scoring consistency across different administrations of assessments, contributing to fair and valid assessment results while minimizing human bias and variability.

Virtual Community Members, who act as virtual representatives of the community in the test development process, will engage in the standard-setting process. These Virtual Community Members will participate in determining grade-level assessment cut scores, ensuring the fair and valid establishment of performance levels. The Virtual Community Members should reflect the diversity of perspectives and expertise found in the actual community, providing input and insights that contribute to the determination of appropriate performance standards.

By leveraging Virtual Students, Virtual Teachers, and Virtual Community Members, this project aims to create a comprehensive virtual assessment environment that mimics real-world testing scenarios. The development of these virtual entities and their involvement in the assessment process will enable efficient data collection, psychometric analysis, and fair scoring practices while reducing costs and logistical challenges associated with traditional assessment methods.

3. SCOPE OF WORK; PROJECT AND OFFEROR REQUIREMENTS

Project Requirements

3.1. Phase I: Proof of Concept

In Phase I, the project will center around conducting a comprehensive proof of concept to assess the scientific, technical, and practical potential of developing an AI Assessment Community. The primary objective is to determine the viability of creating Virtual Students, Virtual Teachers, and Virtual Community Members (Virtual Stakeholders) and involving them in the test development process and the scoring of student work samples. The following are the key project requirements for Phase I:

- 3.1.1. Feasibility Assessment: Conduct an in-depth assessment of the feasibility of developing an AI Assessment Community. This assessment shall include a detailed examination of the technological, scientific, and operational aspects of creating Virtual Students and Virtual Stakeholders.
- 3.1.2. Virtual Student Prototype: The proof of concept shall involve the initial development of prototype Virtual Students to assess their ability to simulate real students' behaviors, characteristics, and abilities. The virtual students will have to respond to the full range of items offered on our assessments.

Virtual students will provide realistic responses to test items, with the collection of responses to each item covering the range, depth, and complexity of real responses. In the aggregate, the collection of responses to sets of items will be suitable to replace field-test responses and allow for the accurate calibration of items.

The Virtual Students' virtual profiles should represent a diverse range of demographics, grade levels, and academic abilities found in Hawaii's public school student population. A pivotal aspect of this development will be the evaluation and demonstration of the Virtual Students' authenticity in providing test responses that align with the unique characteristics and perspectives of Hawaii's diverse student population. To ensure fidelity to local customs, culture, and sensitivities, the AI algorithms and models will be meticulously designed to emulate "Hawaii-like" responses. These Virtual Students will exhibit a realistic range of cognitive processes, problem-solving strategies, and test-taking behaviors, accurately reflecting the diverse demographic representations and educational needs present in Hawaii's public schools. The Contractor shall be responsible for coordinating the evaluation of the proof of concept in collaboration with educational experts and psychometricians, employing qualitative and quantitative methodologies to assess the authenticity and alignment of the Virtual Students' responses with Hawaii's educational context. The involvement of Hawaii experts in the evaluation is crucial to ensure that the Virtual Students' development meets the specific needs and requirements of Hawaii's diverse student population and educational landscape.

- 3.1.3. Virtual Stakeholder Analysis: Contractor shall explore the potential role and involvement of Virtual Teachers and Virtual Community Members in the assessment process. The analysis should identify how Virtual Stakeholders can contribute to the test development process, including scoring student work samples and determining grade-level assessment cut scores for proficiency. The development efforts will prioritize the incorporation of Hawaii-specific subject expertise, instructional practices, and decision-making processes in the virtual entities' functionalities. This fidelity to local perspectives will contribute to the establishment of a comprehensive AI Assessment Community that genuinely addresses the unique needs and aspirations of Hawaii's educational landscape.

- 3.1.4. Validation Study: Contractor shall undertake a comprehensive validation study to evaluate the authenticity, accuracy, and alignment of the Virtual Students with real-world counterparts in Hawaii's educational context. This validation process will involve a meticulous comparative analysis of the Virtual Students' responses, ensuring they closely emulate the behaviors, characteristics, and abilities of real students. The Virtual Students' virtual profiles should represent a diverse range of demographics, grade levels, and academic abilities found in Hawaii's public school student population. Validation requirements for Virtual Students include the following:
- 3.1.4.1. *Comparative Analysis:* A thorough comparative analysis should be conducted to compare the Virtual Student bot's responses with those of real students. The distribution of scores on each item should be statistically similar between the bot and real students, given typical field-test sample sizes. Correlations between items should also match between the bot responses and real student responses.
 - 3.1.4.2. *Authenticity Assessment:* The Virtual Student bot's responses to assessment items should closely resemble those of real students. This includes factors like the level of comprehension, depth of understanding, and appropriate application of knowledge and skills.
 - 3.1.4.3. *Demographic Representation:* The Virtual Student bot should accurately reflect the diversity of demographics present in Hawaii's public school student population. This includes considerations of age, grade level, gender, ethnicity, language proficiency, and specific educational needs or accommodations.
 - 3.1.4.4. *Test-Taking Behaviors:* The Virtual Student bot's interactions with assessment items should emulate realistic test-taking behaviors, such as attention span, motivation, effort, and strategies employed while answering questions.
 - 3.1.4.5. *Language and Expression:* The Virtual Student bot's language usage, phrases, grammatical constructions, word misuses, misspellings, and other language-related aspects should be comparable to those of real students. This analysis should ensure that the bot's written responses exhibit language proficiency appropriate for the grade levels and reflect realistic variations in language use.
 - 3.1.4.6. *Statistical Properties Assessment:* The Statistical Properties Assessment in the validation study will involve comprehensive item analysis to evaluate the statistical properties of Virtual Students' responses to assessment items, examining item difficulty, discrimination, and effectiveness. This analysis will play a crucial role in confirming the accuracy and reliability of Virtual Students' simulated behaviors, enhancing the overall validity and authenticity of the AI Assessment Community.
 - 3.1.4.7. *Expert Validation:* The Expert Validation process engages educational experts, psychometricians, and local educators to validate Virtual Students' behaviors and interactions, ensuring alignment with Hawaii's cultural and educational nuances. Gathering expert feedback enhances the authenticity of Virtual Students, creating a robust AI Assessment Community tailored to Hawaii's diverse student population.
 - 3.1.4.8. *Stakeholder Feedback and Iterative Improvement:* The Contractor should establish mechanisms to gather feedback from educators and other stakeholders to continuously improve the Virtual Student bot's performance and align it more closely with real student behaviors.
- 3.1.5. Technical Requirements: Contractor should outline the technical specifications and infrastructure necessary for developing and implementing the AI Assessment Community. This includes

detailing the hardware, software, AI algorithms, and data storage capabilities required to support Virtual Students and Virtual Stakeholders.

- 3.1.6. **Data Privacy and Security:** The proof of concept shall address data privacy and security measures to protect the confidentiality and integrity of student information and assessment data. Contractor shall propose robust data encryption and secure storage mechanisms to comply with relevant data protection regulations.
- 3.1.7. **Stakeholder Engagement Plan:** Contractor shall outline a stakeholder engagement plan to involve educators, administrators, policymakers, and other relevant stakeholders in providing input and feedback during the proof of concept. This plan should ensure that the perspectives and needs of key stakeholders are considered in shaping the AI Assessment Community.
- 3.1.8. **Risk Assessment and Mitigation:** Contractor shall identify potential risks and challenges associated with the development of the AI Assessment Community and propose appropriate mitigation strategies to address these risks effectively.
- 3.1.9. **Timeline and Milestones:** Contractor shall provide a detailed timeline and milestones for the Phase I proof of concept, indicating the key deliverables and progress benchmarks.
- 3.1.10. **Reporting and Documentation:** Contractor shall outline the requirements for reporting and documentation of the proof of concept results. This includes clear and comprehensive reports that summarize the findings, outcomes, and recommendations from the feasibility assessment.

The successful completion of Phase I and the fulfillment of these project requirements will pave the way for Phase II, focusing on full-scale research and development efforts to create a robust and reliable AI Assessment Community.

3.2. Phase II: Full Research and Development

During Phase II of the project, the selected Contractor will embark on a comprehensive research and development (R&D) journey to bring the concept of an AI Assessment Community to fruition. Building upon the successful proof of concept developed in Phase I, the primary focus will be on the meticulous creation and refinement of Virtual Students, Virtual Teachers, and Virtual Community Members (Virtual Stakeholders). This phase marks a crucial stage in the development process, where cutting-edge AI technologies and advanced algorithms will be harnessed to design and engineer these virtual entities with the highest levels of accuracy, reliability, and authenticity. The primary objective is to develop robust and reliable virtual entities that emulate real students, teachers, and stakeholders, ensuring seamless participation in the test development process and the accurate scoring of student work samples. Throughout this phase, rigorous testing, validation, and iterative refinement will be conducted to ensure the seamless integration of Virtual Students, Virtual Teachers, and Virtual Community Members into the assessment process, setting the stage for a groundbreaking approach to educational assessment that embraces innovation, efficiency, and fairness.

3.2.1. *Virtual Student Development:*

The Contractor shall build upon the prototype developed in Phase I and undertake the comprehensive development of Virtual Students, virtual representations of Hawaii's public school student population, in line with the project objectives. Drawing insights and lessons from the proof of concept evaluation, the Virtual Students' development will prioritize authenticity and fidelity to Hawaii's diverse student population.

The Virtual Students should exhibit authentic behaviors, motivations, and cognitive processes in their responses to assessment items. This requires the Contractor to design algorithms and models that simulate the thinking, problem-solving, and test-taking strategies of real students.

The Virtual Students should demonstrate varying levels of engagement, attention, and effort, taking into account factors such as student motivation, fatigue, and test anxiety.

To facilitate the administration of assessment items, the Contractor shall develop a user-friendly interface that allows administrators to deliver the items to the Virtual Students and collect their responses. The interface should support the presentation of various item formats, including multiple-choice, open-ended, and interactive items, ensuring that the Virtual Students' interactions with the items closely resemble those of real students. The interface should also enable efficient data collection, synchronization, and secure storage of the assessment responses.

3.2.2. *Virtual Teacher Development:*

The Contractor shall build upon the insights gained from the prototype development in Phase I and develop Virtual Teachers (teacher bots) as virtual entities capable of scoring student work samples reliably and consistently. Leveraging the valuable feedback and insights from educators and psychometricians during the proof of concept evaluation, the development of Virtual Teachers will prioritize the emulation of real teachers' expertise and professional judgment when evaluating student work samples. This includes the ability to understand and apply scoring criteria, provide constructive feedback, and assess the quality, accuracy, and completeness of student responses. The Virtual Teachers should possess subject-specific knowledge and be able to evaluate student work across various content domains, such as mathematics, science, language arts, and social studies.

To develop Virtual Teachers, the Contractor should utilize advanced AI and natural language processing (NLP) techniques. These technologies can enable the Virtual Teachers to analyze and interpret student work samples accurately, considering both the content and the quality of the responses. The Virtual Teachers should be able to assess student understanding, critical thinking skills, creativity, and other relevant aspects based on the provided rubrics and scoring guidelines.

The Contractor should ensure that the Virtual Teachers' scoring process is transparent, replicable, and free from bias. The Virtual Teachers should demonstrate consistency in their scoring decisions, even when presented with different student work samples. The scoring process should also include mechanisms for quality assurance and oversight, allowing for periodic checks and calibration to maintain scoring accuracy and reliability.

The interface used to facilitate the scoring process should be intuitive and user-friendly, enabling the Virtual Teachers to efficiently review and score student work samples. It should allow for the secure upload and storage of student work samples, as well as provide tools for highlighting, commenting, and providing feedback on the assessed responses. Additionally, the interface should support collaboration and communication among Virtual Teachers, allowing them to discuss and resolve scoring discrepancies or challenging cases.

The development of Virtual Teachers should involve iterative testing, validation, and refinement to ensure their alignment with the desired scoring standards and criteria. The Contractor shall provide documentation and evidence of the Virtual Teachers' scoring accuracy, reliability, and validity through statistical analyses, inter-rater agreement measures, and comparisons with human teacher scoring as appropriate.

By developing reliable and accurate Virtual Teachers, the project aims to streamline the scoring process, enhance efficiency, and maintain scoring consistency across different administrations of the assessments. The Virtual Teachers should contribute to the generation of fair and valid assessment results while reducing human bias and variability.

3.2.3. *Virtual Community Member Development:*

Building upon the insights gained from the prototype development in Phase I, the Contractor shall develop Virtual Community Members (stakeholder bots) who will play a crucial role in the

standard-setting process. The development of Virtual Community Members will focus on enhancing their virtual representation of diverse perspectives, expertise, and backgrounds found in the actual community.

The development of Virtual Community Members should involve capturing the essential characteristics and viewpoints of stakeholders relevant to the standard-setting process. These stakeholders may include educators, administrators, policymakers, subject matter experts, parents, community leaders, and other individuals who have a vested interest in the assessment outcomes. The Virtual Community Members should represent a broad range of perspectives to foster inclusivity and comprehensive decision-making.

To develop Virtual Community Members, the Contractor should employ techniques such as machine learning, natural language processing, and data mining. These technologies can help analyze and extract valuable insights from a diverse range of resources, including educational literature, stakeholder surveys, public forums, and expert opinions. The goal is to create virtual entities that emulate the knowledge, experience, and decision-making processes of real community members in the standard-setting process.

The Virtual Community Members should be capable of participating in the determination of grade-level assessment cut scores by evaluating the performance standards against the performance data and the assessment results. They should contribute their expertise, judgments, and perspectives to establish meaningful and appropriate proficiency levels for different grade levels and subject areas.

The Contractor should ensure that the involvement of Virtual Community Members in the standard-setting process is transparent, reliable, and replicable. The virtual representatives should engage in collaborative discussions, deliberations, and decision-making activities that mirror the dynamics of real stakeholder interactions. The interface used to facilitate this process should allow for the exchange of ideas, the presentation of evidence, and the consideration of multiple viewpoints to arrive at informed and fair decisions.

The development of Virtual Community Members should undergo rigorous testing, validation, and calibration to ensure the alignment of their judgments with established standards and guidelines. The Contractor should provide documentation and evidence of the Virtual Community Members' contributions, inter-rater agreement measures, and comparisons with human stakeholder decision-making as appropriate.

By involving Virtual Community Members, the project aims to incorporate diverse perspectives, promote transparency, and ensure the representativeness of the standard-setting process. The virtual representation of stakeholders in the form of Virtual Community Members enables efficient and inclusive decision-making while maintaining the integrity and validity of the grade-level assessment cut scores.

3.2.4. *Virtual Entity Validation*

Phase II of the project will undertake comprehensive validation efforts to ensure the authenticity, accuracy, and reliability of all developed virtual entities, including Virtual Students, Virtual Teachers, and Virtual Community Members. The validation process will focus on assessing whether the virtual entities' behaviors, interactions, and decision-making processes closely align with real-world counterparts in Hawaii's educational context. The following outlines the key components of the Validation section for Phase II:

- 3.2.4.1. *Comparative Analysis:* Conduct a rigorous comparative analysis of the virtual entities' responses, interactions, and decision-making with similar real-world counterparts. Compare the behavior of Virtual Students with real student responses and Virtual Teachers with real teacher scoring patterns to validate their authenticity.

- 3.2.4.2. *Alignment with Hawaii Educational Context:* Evaluate the virtual entities' performance against Hawaii's specific cultural and educational nuances. The virtual interactions and decision-making should be calibrated to resonate with Hawaii's unique customs, traditions, and sensitivities.
- 3.2.4.3. *Expert Review:* Engage educational experts, psychometricians, and local educators to review and validate the virtual entities' behaviors and contributions. Experts' input will provide valuable insights into the authenticity of the virtual entities' interactions and decision-making.
- 3.2.4.4. *Item and Scoring Analysis:* Conduct in-depth item analysis to assess the statistical properties of Virtual Students' responses and the scoring consistency of Virtual Teachers. Ensure that the virtual entities' performance aligns with the intended constructs and maintains fairness and accuracy.
- 3.2.4.5. *Stakeholder Review:* Seek feedback from local stakeholders, educators, policymakers, and community leaders to validate the virtual entities' interactions and contributions. Incorporate stakeholder feedback to enhance the virtual entities' involvement in the assessment process.
- 3.2.4.6. *Decision-Making Consistency:* Evaluate the consistency of Virtual Community Members' decisions in standard-setting scenarios and ensure that they align with established standards and guidelines for fair and valid decision-making.
- 3.2.4.7. *Adaptability and Customization:* Assess the virtual entities' adaptability to evolving educational landscapes and their capacity to respond effectively to changing assessment needs. Ensure that the virtual entities remain relevant and up-to-date with the latest educational practices and policies.
- 3.2.4.8. *Inclusivity and Representativeness:* Validate the virtual entities' representation of diverse stakeholder groups and perspectives, focusing on promoting inclusivity and equitable decision-making in the standard-setting process.

By conducting thorough validation of all virtual entities, the project aims to establish their reliability, authenticity, and potential for enhancing the assessment process. The validation findings will inform further refinements and improvements, ensuring that the AI Assessment Community becomes a trusted and transformative tool for educational assessment in Hawaii.

3.3. Phase III: Deployment

With the successful completion of Phase II and the validation of the AI Assessment Community, the project requirements now shift towards the pivotal phase of Deployment. In Phase III, the culmination of innovative research and development efforts takes center stage as the newly developed Virtual Students participate in field testing of newly developed test items. Virtual Teachers, embodying the knowledge and expertise of real educators, embark on the vital task of scoring real student work samples, providing valuable feedback and constructive critique. Additionally, Virtual Stakeholders, representing the diversity of perspectives from the actual community, participate in standard-setting, determining grade-level assessment cut scores that accurately reflect the community's expectations for proficiency. Through the seamless interaction of Virtual Students, Virtual Teachers, and Virtual Stakeholders, Phase III ensures efficient data collection, psychometric analysis, and the establishment of fair and reliable performance standards.

3.3.1. *Virtual Field Testing*

The Contractor shall conduct virtual field testing that accurately replicates realistic testing conditions for the Virtual Students. The virtual field testing platform will enable the controlled

administration of field test items, ensuring accurate data collection for further analysis. The primary objective is to collect data that will be used to calibrate the items for future use in computer adaptive testing (CAT). This process enables the evaluation of item performance, including content alignment, fairness, and sensitivity.

3.3.2. *Psychometric Analysis:*

The Contractor shall conduct comprehensive psychometric analysis of the data generated by the Virtual Students' responses to the assessment items. This analysis should include various statistical procedures and techniques to evaluate the validity, reliability, fairness, and overall quality of the assessment.

The psychometric analysis should involve item analysis, including the determination of item difficulty, discrimination, and other relevant item statistics. The Contractor shall employ appropriate statistical methods to generate item calibration parameters and equating procedures, ensuring consistent measurement and scoring across different administrations of the assessment. The analysis should also examine the validity and reliability of the assessment scores, including internal consistency, test-retest reliability, and construct validity.

The results of the psychometric analysis should be presented in comprehensive reports and documentation. These reports should include detailed descriptions of the statistical analyses conducted, interpretation guidelines for the assessment scores, and recommendations for any necessary refinements or improvements to the assessment items or scoring procedures.

3.3.3. *Virtual Standard Setting:*

The project requirements include the important task of standard setting, which involves the establishment of grade-level assessment cut scores to define performance levels and proficiency benchmarks. Standard setting is a critical process that ensures the assessment results accurately reflect students' achievement levels and provide meaningful information for decision-making. The Contractor shall develop a robust and transparent standard setting procedure that involves the participation of Virtual Community Members (stakeholder bots) and subject matter experts.

The standard setting process should incorporate diverse perspectives, promote transparency, and maintain the validity and fairness of the grade-level cut scores. The documentation of the standard setting process should provide a clear account of the factors considered and rationale behind the determined grade-level cut scores.

By incorporating standard setting into the project requirements, the aim is to establish rigorous and fair performance standards that accurately reflect students' achievement levels and support informed decision-making at the classroom, school, and complex area levels. The standard setting process should ensure the alignment of assessment outcomes with educational goals and provide a solid foundation for evaluating student performance and progress.

3.3.4. *Virtual Scoring of Real Student Work:*

The virtual scoring component of the project focuses on establishing a robust and reliable scoring process facilitated by Virtual Teachers (teacher bots). The scoring process will ensure accurate evaluation of student work samples, aligning with established rubrics and scoring guidelines. The primary objective is to develop Virtual Teachers capable of scoring real student work samples reliably, consistently, and in accordance with desired scoring standards.

The scoring process conducted by the Virtual Teachers will utilize advanced AI and NLP techniques. These technologies will enable the Virtual Teachers to analyze and interpret student work samples accurately, considering both the content and quality of the responses. The scoring process should encompass various aspects, including understanding, critical thinking skills, creativity, and adherence to rubrics and scoring guidelines.

To ensure the integrity and reliability of the scoring process, the Virtual Teachers' scoring decisions should demonstrate consistency, even when presented with different student work samples. The scoring process will incorporate mechanisms for quality assurance and oversight, including periodic checks and calibration, to maintain scoring accuracy and consistency.

The interface used for virtual teacher scoring should be intuitive and user-friendly, facilitating an efficient review and scoring process for student work samples. It should support secure upload and storage of real student work samples, as well as provide tools for highlighting, commenting, and providing feedback on the assessed responses.

The scoring process will undergo iterative testing, validation, and refinement to ensure its alignment with the desired scoring standards and criteria. The Contractor will provide documentation and evidence of the Virtual Teachers' scoring accuracy, reliability, and validity through statistical analyses, inter-rater agreement measures, and comparisons with human teacher scoring as appropriate.

The implementation of reliable and accurate Virtual Teachers for scoring will streamline the scoring process, enhance efficiency, and ensure scoring consistency across different administrations of assessments. The scoring process will contribute to the generation of fair and valid assessment results while minimizing human bias and variability.

Scope of Work; Technical

3.4. Phase I: Proof of Concept

During Phase I of the project, the scope of work will revolve around conducting a comprehensive proof of concept to assess the scientific, technical, and practical potential of developing an AI Assessment Community. The focus will be on the meticulous development and evaluation of a prototype for Virtual Students, aiming to emulate the behaviors, characteristics, and abilities of real students in Hawaii's public schools. The following outlines the key components of the Phase I Proof of Concept scope of work:

3.4.1. Feasibility Assessment:

- 3.4.1.1. Conduct an in-depth analysis to assess the feasibility of the AI Assessment Community development project, with a primary focus on the Virtual Student prototype.
- 3.4.1.2. Evaluate the scientific, technical, and operational aspects of creating Virtual Students, considering factors such as authenticity, adaptability, and responsiveness.
- 3.4.1.3. Identify potential challenges and risks associated with the development of Virtual Students and propose mitigation strategies to address these issues effectively.

3.4.2. Virtual Student Prototype Development:

3.4.2.1. Demographic Representation:

- 3.4.2.1.1. Develop a comprehensive database of demographic characteristics representing Hawaii's public school student population. This should include factors such as age, grade level, gender, ethnicity, language proficiency, and any specific educational needs or accommodations.
- 3.4.2.1.2. Utilize the database to create a diverse set of Virtual Students, ensuring that their virtual profiles encompass a wide range of demographic attributes to provide a comprehensive representation of Hawaii's student population.

3.4.2.2. Behavioral Outcome Simulation:

- 3.4.2.2.1. Employ educational experts and domain specialists to define the behavioral outcomes exhibited by real students in the targeted grade levels and subject areas.
- 3.4.2.2.2. Develop algorithms and models that simulate the behavioral patterns and responses of real students, ensuring that the Virtual Students exhibit behavior consistent with expected outcomes in educational contexts.

- 3.4.2.3. Prototype Development and Validation:
 - 3.4.2.3.1. Develop a functional prototype of the Virtual Students, incorporating the diverse demographic representations and behavioral outcomes defined in previous stages.
 - 3.4.2.3.2. Conduct rigorous testing and validation of the Virtual Students in simulated assessment scenarios to ensure their authenticity and alignment with real students.
 - 3.4.2.3.3. Iterate and refine the Virtual Students based on validation results and expert feedback to enhance their accuracy and reliability.
- 3.4.3. Virtual Stakeholder Analysis:
 - 3.4.3.1. Define the technical specifications and infrastructure needed to support the development and integration of Virtual Students.
 - 3.4.3.2. Specify the required hardware, software, and AI algorithms for creating and operating the Virtual Students' prototype.
 - 3.4.3.3. Design a data storage and security plan to protect student information and assessment data, ensuring compliance with data protection regulations.
- 3.4.4. Validation Study:
 - 3.4.4.1. Comparative Analysis:
 - 3.4.4.1.1. Conduct a rigorous comparative analysis of the Virtual Students' responses, interactions, and decision-making against real student counterparts.
 - 3.4.4.1.2. Compare the behavior of Virtual Students with authentic student responses to validate their alignment with real-world characteristics.
 - 3.4.4.2. Authenticity Assessment:
 - 3.4.4.2.1. Engage educational experts and cognitive psychologists to review and assess the Virtual Students' authenticity and behavioral outcomes.
 - 3.4.4.2.2. Ensure that Virtual Students demonstrate a realistic range of cognitive processes, problem-solving skills, and subject-specific knowledge.
 - 3.4.4.3. Demographic Representation:
 - 3.4.4.3.1. Evaluate the Virtual Students' virtual profiles to ensure they accurately represent the diverse demographics of Hawaii's public school student population.
 - 3.4.4.3.2. Assess the coverage of demographic attributes, including age, grade level, gender, ethnicity, language proficiency, and specific educational needs or accommodations.
 - 3.4.4.4. Test-Taking Behaviors
 - 3.4.4.4.1. Develop the Virtual Student bot to emulate realistic test-taking behaviors exhibited by real students in assessment scenarios.
 - 3.4.4.4.2. Implement algorithms that enable the Virtual Student bot to employ various test-taking strategies while answering questions, such as educated guessing, elimination of answer choices, and time management techniques.
 - 3.4.4.4.3. The Virtual Student bot should demonstrate a range of response strategies that align with real students' approaches in tackling assessment items.
 - 3.4.4.5. Language and Expression Analysis:
 - 3.4.4.5.1. Analyze the language usage, phrases, grammatical constructions, and writing quality of Virtual Students' responses.
 - 3.4.4.5.2. Ensure that Virtual Students exhibit language proficiency suitable for the targeted grade levels and subject areas.
 - 3.4.4.6. Statistical Properties Assessment:
 - 3.4.4.6.1. Conduct in-depth item analysis to assess the statistical properties of Virtual Students' responses.
 - 3.4.4.6.2. Validate the reliability and consistency of Virtual Students' responses for accurate calibration of assessment items.

- 3.4.4.7. Expert Validation:
 - 3.4.4.7.1. Engage educational experts, psychometricians, and local educators to validate the Virtual Students' behaviors and interactions.
 - 3.4.4.7.2. Gather expert feedback to ensure the virtual entities' fidelity to Hawaii's cultural and educational nuances.
- 3.4.4.8. Stakeholder Feedback and Iterative Improvement:
 - 3.4.4.8.1. Seek feedback from local stakeholders, educators, policymakers, and community leaders to validate the Virtual Students' interactions and contributions.
 - 3.4.4.8.2. Incorporate stakeholder feedback to enhance the Virtual Students' involvement in the assessment process.
- 3.4.5. Technical Requirements:
 - 3.4.5.1. Define the technical specifications and infrastructure needed to support the AI Assessment Community.
 - 3.4.5.2. Specify the required hardware, software, and AI algorithms for creating and operating Virtual Students and Virtual Stakeholders.
 - 3.4.5.3. Design a data storage and security plan to protect student information and assessment data.
- 3.4.6. Data Privacy and Security:
 - 3.4.6.1. Develop a robust data privacy and security strategy to safeguard student information and assessment data throughout the Virtual Student development process.
 - 3.4.6.2. Implement data encryption and secure storage mechanisms to ensure the confidentiality and integrity of student data.
- 3.4.7. Stakeholder Engagement Plan:
 - 3.4.7.1. Devise a stakeholder engagement plan primarily focused on educators, administrators, and other key stakeholders relevant to the development of Virtual Students.
 - 3.4.7.2. Organize meetings, workshops, and focus groups to gather input and feedback on the development of the Virtual Students' prototype and its potential applications.
- 3.4.8. Risk Assessment and Mitigation:
 - 3.4.8.1. Identify potential risks and challenges related to Virtual Student development, implementation, stakeholder engagement, and data security.
 - 3.4.8.2. Formulate mitigation strategies to address identified risks effectively and ensure the successful completion of the Virtual Student prototype.
- 3.4.9. Timeline and Milestones:
 - 3.4.9.1. Develop a detailed timeline for the Phase I proof of concept, including key milestones and deliverables specific to the Virtual Student prototype development.
 - 3.4.9.2. Set clear progress benchmarks to track the advancement of the Virtual Student development process and ensure timely completion.
- 3.4.10. Reporting and Documentation:
 - 3.4.10.1. Generate regular progress reports detailing the findings, outcomes, and progress of the Virtual Student prototype development.
 - 3.4.10.2. Compile a final proof of concept report summarizing the results, conclusions, and recommendations for the subsequent phases of the AI Assessment Community development project, with an emphasis on the Virtual Student prototype's potential for further enhancement and integration.

By successfully completing the Phase I proof of concept scope of work, the project will gain valuable insights into the viability of developing an AI Assessment Community, with the Virtual Student prototype serving as a foundational element for subsequent research and development efforts in Phase II.

3.5. Phase II: Full Research and Development

During Phase II, the Contractor will embark on a transformative journey to actualize the potential of the AI Assessment Community. Building upon the promising results of the Phase I proof of concept, this phase will be dedicated to the comprehensive research and development of Virtual Students, Virtual Teachers, and Virtual Community Members (Virtual Stakeholders). The Scope of Work in Phase II encompasses the creation and refinement of these virtual entities, ensuring they possess the necessary knowledge, expertise, and functionalities to contribute significantly to the assessment process. The development efforts will encompass sophisticated AI algorithms, natural language processing techniques, and machine learning models that simulate authentic student behavior, teacher expertise, and community perspectives. The successful completion of Phase II will pave the way for the practical application of these innovative AI technologies in the field of education, transforming test development and scoring practices and yielding valuable insights into student learning and achievement.

3.5.1. Development of Virtual Students (Student Bots)

Building upon the prototype developed in Phase I, Phase II aims to enhance the Virtual Students' capabilities, refine the user interface design, and address accessibility considerations. Additionally, Phase II focuses on ensuring the scalability, performance, and data security measures for large-scale assessment administration.

- 3.5.1.1. Enhancements to Virtual Students:
 - 3.5.1.1.1. Expand the capabilities of the Virtual Students to cover a broader range of subjects and grade levels, ensuring they can address various educational needs effectively.
 - 3.5.1.1.2. Incorporate additional cognitive processes and problem-solving strategies into the Virtual Students to provide more nuanced responses to assessment items.
- 3.5.1.2. User Interface Design:
 - 3.5.1.2.1. Enhance the user interface design to provide a more immersive and realistic test-taking experience for users administering the assessments.
 - 3.5.1.2.2. Improve the interface to accommodate various item formats, including multiple-choice, open-ended, and interactive items, ensuring seamless interactions with the Virtual Students.
- 3.5.1.3. Accessibility Considerations:
 - 3.5.1.3.1. Conduct a thorough review of accessibility requirements and guidelines to ensure the Virtual Students can effectively accommodate students with diverse needs.
 - 3.5.1.3.2. Implement appropriate accommodations and adaptations within the Virtual Students' virtual profiles to support the participation of all students in the assessment process.
- 3.5.1.4. Scalability and Performance:
 - 3.5.1.4.1. Optimize the Virtual Students' performance to handle a large-scale assessment administration efficiently.
 - 3.5.1.4.2. Conduct extensive load testing to ensure the system can accommodate a significant number of Virtual Students simultaneously, enabling smooth interactions and data collection.
- 3.5.1.5. Data Privacy and Security:
 - 3.5.1.5.1. Strengthen data privacy and security measures to protect the confidentiality and integrity of student information and assessment data.
 - 3.5.1.5.2. Ensure that the Virtual Students' virtual profiles and assessment responses are securely stored and encrypted to prevent unauthorized access, complying with relevant data protection regulations and industry best practices.

3.5.2. Development of Virtual Teachers (Virtual Teacher Bots):

In the development of Virtual Teachers, the Contractor shall consider the following details:

3.5.2.1. *Subject Expertise:*

- 3.5.2.1.1. Ensure that Virtual Teachers possess the knowledge, expertise, and scoring capabilities of real teachers across various subject areas and grade levels.
- 3.5.2.1.2. The Virtual Teachers should demonstrate proficiency in subject-specific content, curriculum standards, and instructional practices relevant to Hawaii's public schools, allowing them to evaluate student work samples in subjects such as mathematics, science, language arts, and social studies.

3.5.2.2. *Scoring Consistency:*

- 3.5.2.2.1. Develop Virtual Teachers capable of scoring student work samples reliably and consistently.
- 3.5.2.2.2. Align their scoring decisions with established rubrics and scoring guidelines, ensuring consistency in evaluations, even with different student work samples.
- 3.5.2.2.3. Utilize advanced AI and NLP techniques to enable Virtual Teachers to accurately analyze and interpret student work based on provided rubrics and scoring guidelines.

3.5.2.3. *Feedback and Constructive Critique:*

- 3.5.2.3.1. Enable Virtual Teachers to provide constructive feedback and critique on student work samples, assessing quality, accuracy, completeness, and depth of responses.
- 3.5.2.3.2. Design an intuitive interface that allows Virtual Teachers to highlight, comment, and provide effective feedback, fostering collaboration and communication among human teachers to resolve scoring discrepancies or challenging cases.

3.5.2.4. *Transparency and Replicability:*

- 3.5.2.4.1. Ensure transparency and replicability in the Virtual Teachers' scoring process. Document the scoring decisions clearly and make them easily understandable to stakeholders. Provide comprehensive documentation outlining algorithms, models, and criteria used by Virtual Teachers in scoring student work samples, contributing to the validity and reliability of assessment results.

3.5.2.5. *Calibration and Quality Assurance:*

- 3.5.2.5.1. Ensure transparency and replicability in the Virtual Teachers' scoring process.
- 3.5.2.5.2. Document the scoring decisions clearly and make them easily understandable to stakeholders.
- 3.5.2.5.3. Provide comprehensive documentation outlining algorithms, models, and criteria used by Virtual Teachers in scoring student work samples, contributing to the validity and reliability of assessment results.

3.5.3. Development of Virtual Community Members (Virtual Community Member Bots):

In the development of Virtual Community Members, the Contractor shall consider the following details:

3.5.3.1. *Representation of Community Member Perspectives:*

- 3.5.3.1.1. Ensure that Virtual Community Members represent a diverse range of perspectives and expertise relevant to the standard-setting process.
- 3.5.3.1.2. Develop virtual entities that emulate the knowledge, experience, and decision-making processes of real community members, including

- educators, administrators, policymakers, subject matter experts, parents, community leaders, and other stakeholders.
- 3.5.3.1.3. The Virtual Community Members should reflect the diversity of viewpoints present in the actual community, promoting inclusivity and comprehensive decision-making.
- 3.5.3.2. *Informed Decision-Making:*
 - 3.5.3.2.1. Enable Virtual Community Members to participate in the determination of grade-level assessment cut scores, contributing their expertise, judgments, and perspectives.
 - 3.5.3.2.2. Utilize techniques such as machine learning, natural language processing, and data mining to empower Virtual Community Members to analyze relevant resources, consider evidence, and provide informed insights during the decision-making process.
- 3.5.3.3. *Collaboration and Discussion:*
 - 3.5.3.3.1. Develop an intuitive and user-friendly interface that supports collaborative discussions, deliberations, and decision-making activities for Virtual Community Members.
 - 3.5.3.3.2. Facilitate the exchange of ideas, presentation of evidence, and consideration of multiple viewpoints, allowing Virtual Community Members to engage in productive discussions, resolve differences, and arrive at informed and fair decisions regarding grade-level assessment cut scores.
- 3.5.3.4. *Validation and Calibration:*
 - 3.5.3.4.1. Ensure alignment of Virtual Community Members' judgments with established standards and guidelines through rigorous testing, validation, and calibration activities.
 - 3.5.3.4.2. Provide documentation and evidence of Virtual Community Members' involvement, including inter-rater agreement measures and comparisons with human stakeholder decision-making as appropriate.

By considering these specific details in the development of Virtual Teachers and Virtual Community Members, the Contractor can create virtual entities that possess the knowledge, expertise, scoring capabilities, and decision-making processes of real teachers and community stakeholders. This will contribute to a comprehensive virtual assessment environment that ensures reliable scoring practices and inclusive decision-making processes, resulting in fair and valid grade-level assessment cut scores.

3.5.4. Virtual Entity Validation:

As an integral part of the research and development process, Phase II will prioritize the comprehensive validation of all virtual entities, including Virtual Students, Virtual Teachers, and Virtual Community Members. The validation process will focus on assessing whether the virtual entities' behaviors, interactions, and decision-making processes closely align with real-world counterparts in Hawaii's educational context. The following outlines the key components of the Virtual Entity Validation section for Phase II:

- 3.5.4.1. *Comparative Analysis:*
 - 3.5.4.1.1. Conduct a rigorous comparative analysis of the virtual entities' responses, interactions, and decision-making with similar real-world counterparts.
 - 3.5.4.1.2. Compare the behavior of Virtual Students with real student responses and Virtual Teachers with real teacher scoring patterns to validate their authenticity.
- 3.5.4.2. *Alignment with Hawaii Educational Context:*
 - 3.5.4.2.1. Evaluate the virtual entities' performance against Hawaii's specific cultural and educational nuances.
 - 3.5.4.2.2. The virtual interactions and decision-making should be calibrated to resonate with Hawaii's unique customs, traditions, and sensitivities.

- 3.5.4.3. *Expert Review:*
 - 3.5.4.3.1. Engage educational experts, psychometricians, and local educators to review and validate the virtual entities' behaviors and contributions.
 - 3.5.4.3.2. Experts' input will provide valuable insights into the authenticity of the virtual entities' interactions and decision-making.
- 3.5.4.4. *Item and Scoring Analysis:*
 - 3.5.4.4.1. Conduct in-depth item analysis to assess the statistical properties of Virtual Students' responses and the scoring consistency of Virtual Teachers.
 - 3.5.4.4.2. Ensure that the virtual entities' performance aligns with the intended constructs and maintains fairness and accuracy.
- 3.5.4.5. *Stakeholder Review:*
 - 3.5.4.5.1. Seek feedback from local stakeholders, educators, policymakers, and community leaders to validate the virtual entities' interactions and contributions.
 - 3.5.4.5.2. Incorporate stakeholder feedback to enhance the virtual entities' involvement in the assessment process.
- 3.5.4.6. *Decision-Making Consistency:*
 - 3.5.4.6.1. Evaluate the consistency of Virtual Community Members' decisions in standard-setting scenarios and ensure that they align with established standards and guidelines for fair and valid decision-making.
- 3.5.4.7. *Adaptability and Customization:*
 - 3.5.4.7.1. Assess the virtual entities' adaptability to evolving educational landscapes and their capacity to respond effectively to changing assessment needs.
 - 3.5.4.7.2. Ensure that the virtual entities remain relevant and up-to-date with the latest educational practices and policies.
- 3.5.4.8. *Inclusivity and Representativeness:*
 - 3.5.4.8.1. Validate the virtual entities' representation of diverse stakeholder groups and perspectives, focusing on promoting inclusivity and equitable decision-making in the standard-setting process.

3.5.5. Validation Plan:

- 3.5.5.1. **Design and Documentation:** Develop a comprehensive plan outlining the validation procedures, including the data sources, evaluation metrics, and benchmarks used for comparison.
- 3.5.5.2. **Validation Data Collection:** Gather data from a broad and diverse range of real student responses, teacher scoring patterns, stakeholder interactions, and expert feedback to form the basis for the validation process.
- 3.5.5.3. **Data Analysis and Interpretation:** Analyze the collected data to draw meaningful insights and conclusions about the authenticity and effectiveness of the virtual entities.
- 3.5.5.4. **Validation Reporting:** Document and present the results of the validation process, highlighting the strengths, limitations, and potential refinements needed for the virtual entities.

By considering these specific details in the development and validation of Virtual Students, Virtual Teachers, and Virtual Community Members, the Contractor can create virtual entities that possess the knowledge, expertise, scoring capabilities, and decision-making processes of real teachers and community stakeholders. This will contribute to a comprehensive virtual assessment environment that ensures reliable scoring practices and inclusive decision-making processes, resulting in fair and valid grade-level assessment cut scores.

3.6. Phase III: Deployment

In Phase III, the Contractor will undertake the crucial task of implementing the AI Assessment Community in real educational settings. Building upon the success of Phase II's full-scale Research and Development efforts, this phase will focus on operationalizing the Virtual Students,

Virtual Teachers, and Virtual Community Members (Virtual Stakeholders) to contribute to essential aspects of the assessment process. The Scope of Work in Phase III encompasses the administration of field test items to Virtual Students, the scoring of real student work samples by Virtual Teachers, and the participation of Virtual Community Members in the standard-setting process. The seamless integration of these virtual entities into the assessment landscape will facilitate efficient data collection, accurate scoring, and fair determination of performance standards. This phase represents a significant milestone in the AI Assessment Community project, as it brings to fruition the realization of advanced AI technologies in the assessment domain, promising enhanced educational outcomes and equitable opportunities for learners.

3.6.1. Virtual Field Testing:

The Contractor will conduct virtual field testing of newly developed test items as part of the assessment development process. Virtual field testing aims to accurately replicate realistic testing conditions for the Virtual Students, providing a controlled environment for the administration of field test items. The primary objective of virtual field testing is to collect data that will be used to calibrate the items for future use in computer adaptive testing (CAT).

3.6.1.1. *Virtual Field Testing Platform:*

3.6.1.1.1. The Contractor shall develop a platform for virtual field testing and ensure the controlled administration of field test items to the Virtual Students. This platform should closely resemble real-world testing conditions, providing an authentic testing experience.

3.6.1.1.2. The Contractor shall create an intuitive user interface that allows for the efficient and seamless administration of field test items to the Virtual Students. The platform should facilitate data collection, ensuring accurate and reliable results.

3.6.1.2. *Item Database:*

3.6.1.2.1. The Contractor shall collect data on the performance of the Virtual Students on the field test items.

3.6.1.2.2. The item data will be stored in an item database that can be accessed by STATE staff.

3.6.2. Psychometric Analysis:

The Contractor shall conduct comprehensive psychometric analysis of the data generated by the Virtual Students' responses to the classroom-based assessment items. This analysis aims to evaluate the validity, reliability, fairness, and overall quality of the assessments. The following specific aspects and procedures should be included in the psychometric analysis:

3.6.2.1. *Item Analysis:*

3.6.2.1.1. The Contractor shall perform item analysis to examine the characteristics and quality of each assessment item. This includes determining item difficulty, discrimination, and other relevant item statistics.

3.6.2.1.2. The analysis shall assess the performance of individual items in relation to the construct being measured and the intended population.

3.6.2.1.3. The analysis should investigate potential item bias or differential item functioning across different demographic groups to ensure fairness and equity.

3.6.2.2. *Scaling and Equating:*

3.6.2.2.1. The Contractor shall employ appropriate scaling and equating procedures to ensure consistent measurement and scoring across different administrations of the assessment. This includes generating item calibration parameters and conducting equating studies to establish score comparability and comparability of proficiency levels across different forms or versions of the assessment.

- 3.6.2.3. *Reliability Analysis:*
 - 3.6.2.3.1. The Contractor shall assess the reliability of the assessment scores. This includes examining internal consistency, test-retest reliability, and other relevant reliability coefficients.
 - 3.6.2.3.2. The analysis shall provide evidence of the consistency and stability of the assessment scores over time and across different subsets of items.
- 3.6.2.4. *Validity Evaluation:*
 - 3.6.2.4.1. The Contractor shall conduct a thorough evaluation of the validity of the assessment scores. This involves examining the evidence supporting the interpretation and use of the assessment scores for the intended purposes.
 - 3.6.2.4.2. The analysis should consider different types of validity evidence, such as content-related evidence, criterion-related evidence, and construct-related evidence.
- 3.6.2.5. *Fairness Analysis:*
 - 3.6.2.5.1. The Contractor shall conduct a fairness analysis to examine potential sources of bias or differential performance across different demographic groups or subgroups.
 - 3.6.2.5.2. The analysis shall explore whether the assessment produces equitable results for all students, regardless of factors such as gender, ethnicity, socioeconomic status, or English language proficiency.
- 3.6.2.6. *Reporting and Documentation:*
 - 3.6.2.6.1. The Contractor shall provide comprehensive documentation of the psychometric analysis procedures, findings, and interpretations. This includes clear and detailed reports that describe the methods employed, the results obtained, and the implications of the analysis.
 - 3.6.2.6.2. The documentation shall adhere to established reporting standards to ensure transparency and clarity.

By conducting comprehensive psychometric analysis, the Contractor ensures that the assessment meets rigorous standards for validity, reliability, fairness, and overall quality. This analysis provides evidence of the assessment's psychometric properties, allowing stakeholders to have confidence in the assessment results and make informed decisions based on the scores obtained.

3.6.3. Virtual Stakeholder Involvement in Standard Setting:

The project scope includes the meaningful involvement of Virtual Teacher and Community Members (stakeholder bots) in the standard-setting process. The objective is to ensure that the determination of grade-level assessment cut scores incorporates diverse perspectives, promotes transparency, and maintains the validity and fairness of the standards. The following specific details outline the stakeholder involvement in the standard-setting process:

- 3.6.3.1. *Composition of Virtual Community Members:*
 - 3.6.3.1.1. The Contractor shall develop a diverse group of Virtual Community Members who represent the stakeholders involved in the standard-setting process. These stakeholders may include educators, administrators, policymakers, subject matter experts, parents, community leaders, and other individuals with relevant expertise and interest in the assessment outcomes.
 - 3.6.3.1.2. The composition of Virtual Community Members should reflect the demographics and perspectives present in the actual community.
- 3.6.3.2. *Virtual Stakeholder Engagement:*
 - 3.6.3.2.1. The Contractor shall facilitate virtual stakeholder engagement by providing a platform or interface that enables Virtual Community Members to participate in the standard-setting process.

- 3.6.3.2.2. The interface should allow for collaborative discussions, deliberations, and decision-making activities among the Virtual Community Members. It should support the exchange of ideas, the presentation of evidence, and the consideration of multiple viewpoints.
- 3.6.3.3. *Information and Training:*
 - 3.6.3.3.1. The Contractor shall provide Virtual Community Members with the necessary information and training to understand the standard-setting process, assessment results, and relevant criteria for establishing grade-level cut scores. This includes providing background materials, documentation, and clear explanations of the standards, performance levels, and their implications.
 - 3.6.3.3.2. The training should ensure that Virtual Community Members have a common understanding of the assessment goals, procedures, and the interpretation of assessment data.
- 3.6.3.4. *Deliberations and Decision Making:*
 - 3.6.3.4.1. The Contractor shall facilitate deliberations and decision-making activities among the Virtual Community Members. This includes providing structured frameworks, guidelines, and protocols to guide the standard-setting discussions.
 - 3.6.3.4.2. The Virtual Community Members should engage in evidence-based deliberations, considering relevant data, research, and stakeholder perspectives to arrive at informed decisions.
- 3.6.3.5. *Documentation and Reporting:*
 - 3.6.3.5.1. The Contractor shall document and report the standard-setting process, including the involvement of Virtual Community Members and the decisions reached.
 - 3.6.3.5.2. The documentation shall provide a clear account of the deliberations, the factors considered, and the rationale behind the grade-level cut scores.
 - 3.6.3.5.3. The reports shall adhere to established standards for transparency and comprehensiveness, allowing stakeholders to understand the standard-setting process and the basis for the determined performance levels.

By involving Virtual Community Members in the standard-setting process, the project promotes inclusivity, transparency, and the incorporation of diverse perspectives. The virtual representation of stakeholders through Virtual Community Members allows for efficient and effective decision-making while upholding the validity and fairness of the grade-level assessment cut scores.

3.6.4. Virtual Scoring of Real Student Work

The Contractor shall implement the Virtual Scoring of Real Student Work component, which focuses on establishing a robust and reliable scoring system facilitated by Virtual Teachers (teacher bots). The scope of work encompasses the following activities and deliverables:

- 3.6.4.1. *Scoring Process Design and Implementation:*
 - 3.6.4.1.1. Design a user-friendly interface that facilitates the efficient review and scoring of real student work samples by Virtual Teachers.
 - 3.6.4.1.2. Develop a secure platform for the upload, storage, and management of real student work samples, ensuring data privacy and confidentiality.
 - 3.6.4.1.3. Implement scoring mechanisms that enable Virtual Teachers to accurately assess the quality, accuracy, and completeness of real student responses based on established rubrics and scoring guidelines.
 - 3.6.4.1.4. Incorporate quality assurance and oversight mechanisms within the scoring process to maintain scoring accuracy, consistency, and reliability.
 - 3.6.4.1.5. Enable collaboration and communication features among Virtual Teachers to facilitate the resolution of scoring discrepancies or challenging cases.

- 3.6.4.2. *Training and Support:*
 - 3.6.4.2.1. Develop comprehensive training materials and resources for users involved in the Virtual Scoring of Real Student Work process.
 - 3.6.4.2.2. Conduct training sessions and workshops to familiarize users with the scoring interface, guidelines, and best practices.
 - 3.6.4.2.3. Provide ongoing technical support and assistance to address any issues or challenges encountered during the implementation and operation of the Virtual Scoring component.
 - 3.6.4.2.4. Offer continuous professional development opportunities to improve the expertise of users of the system.
- 3.6.4.3. *Iterative Testing, Validation, and Refinement:*
 - 3.6.4.3.1. Conduct rigorous testing and validation of the Virtual Scoring process to ensure its alignment with desired scoring standards and criteria.
 - 3.6.4.3.2. Refine the scoring algorithms and models based on feedback, statistical analyses, inter-rater agreement measures, and comparisons with human teacher scoring as appropriate.
 - 3.6.4.3.3. Provide documentation and evidence of the Virtual Scoring component's accuracy, reliability, and validity through comprehensive reports and analyses.
- 3.6.4.4. *Reporting and Documentation:*
 - 3.6.4.4.1. Generate comprehensive reports and documentation that detail the implementation, performance, and outcomes of the Virtual Scoring of Real Student Work component.
 - 3.6.4.4.2. Include descriptions of the scoring algorithms, statistical analyses conducted, and interpretation guidelines for the assessment scores.
 - 3.6.4.4.3. Provide recommendations for any necessary refinements or improvements to enhance the scoring process.

3.7. Permits, Certifications, and Licenses

The Offeror shall obtain and pay for all permits, certificates, and licenses required and necessary for the performance of the work specified herein, shall post all notices required by law, and shall comply with all laws, ordinances, and regulations bearing on the conduct of the work specified.

The Offeror shall comply with all business registration requirements prior to commencing work under the contract. Failure to comply with the requirements of this paragraph may be grounds for a Proposal to be rejected, an award of Contract to be cancelled, or the awarded Contract to be terminated.

4. PROPOSAL

4.1 General Requirements

- 4.1.1 Any and all costs incurred by an Offeror in preparing and submitting a Proposal and conducting discussions, if any, shall be at the Offeror's sole expense and are the Offeror's sole responsibility. This includes the cost of any visits to client references, and STATE locations by an Offeror, but does not include any costs incurred by the STATE or its representatives for Offeror demonstrations or site visits.
- 4.1.2 Before submitting a proposal, each Offeror must examine the solicitation documents thoroughly. Solicitation documents include this RFP, any attachments, and any other relevant documentation.
- 4.1.3 Offerors are charged with presumptive knowledge of all requirements of all cited authorities. Offeror must become familiar with state, local, and federal laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the work before submitting a proposal. Submission of a proposal by any prospective Offeror shall constitute admission of knowledge on the part of such Offeror.
- 4.1.4 The Scope of Work, Minimum Contract Provisions, General Conditions and other documents referenced in or attached to the proposal shall be considered a part of the proposal submitted, whether or not attached to the proposal at the time of submission. Such documents shall not be altered in any way; any alterations so made by the Offeror may result in rejection of the proposal.
- 4.1.5 Submission of a proposal shall constitute an incontrovertible representation by the Offeror of understanding, acceptance, and compliance with every requirement of this RFP, and that the RFP documents are sufficient in scope and detail to indicate and convey reasonable understanding of all terms and conditions of performance of the work.
- 4.1.6 Any proposal may be withdrawn at any time on the HlePRO prior to the deadline for receipt of offers. The withdrawal of a proposal shall not prejudice the right of an Offeror to submit a new proposal, but any such new proposal must be received before the stated deadline.
- 4.1.7 A proposal that contains any omission, erasure, addition not called for, conditional offer or irregularity of any kind may be rejected. Corrections, if necessary, may be made by submitting a revised proposal on the HlePRO prior to the proposal due date and time.

4.2 Confidential Information in Proposal

The contents of any proposal shall not be disclosed during the review, evaluation, or discussion process. Once the notice of the award is posted, all proposals (both successful and unsuccessful) become available for public inspection.

If an Offeror believes that any portion of its proposal contains information that should be withheld as confidential, then the Procurement and Contracts Branch should be so advised in writing. Offeror shall request in writing nondisclosure of designated trade secrets or other proprietary data to be confidential. Such data shall accompany the Proposal, be clearly marked, and shall be readily separable from the Proposal in order to facilitate eventual public inspection of the non-confidential portion of the Proposal.

Whether those parts shall remain confidential will be determined under § 3-122-58(b), HAR and Chapter 92F, HRS. Pursuant to Section 3-122-58, HAR, if a person requests to inspect the portions of a proposal designated as confidential, the head of the purchasing agency or designee shall consult with the Department of the Attorney General and make a written determination in accordance with Chapter 92F, HRS. If the request for confidentiality is denied, such information shall be disclosed as public information,

unless the Offeror appeals the denial to the Office of Information Practices in accordance with Section 92F-42(12), HRS.

4.3 Proposal Preparation

One of the objectives of this RFP is to make proposal preparation easy and efficient, giving Offerors ample opportunity to highlight their proposals. The evaluation process must also be manageable and effective. When an Offeror submits a proposal, it shall be considered a complete plan for accomplishing the tasks described in this RFP and any supplemental tasks the Offeror has identified as necessary to successfully meet the obligations outlined in this RFP.

The proposal shall describe in detail the Offeror's ability and availability of services to meet the primary project goal of this RFP as stated herein. Proposals shall be prepared in a straightforward and concise manner, in a format that is reasonably consistent and appropriate to the purpose of this RFP. Emphasis shall be on completeness and clarity of content. If any additional information is required by the STATE regarding any aspect of an Offeror's proposal, such information shall be provided within two (2) working days of the STATE's request unless otherwise stated or directed by the STATE.

4.4 Proposal Security

A Bond is not required if submitting a Proposal.

4.5 Proposal Submission and Format

This section prescribes the standard format for a proposal submitted in response to this RFP.

Offeror shall submit a Proposal using the exact forms or reproductions of such forms as provided and as otherwise instructed by this RFP. Failure to comply may result in a determination that the proposal is non-responsive.

The standard format will facilitate the STATE's review, comparison, evaluation of proposals, and verification as to whether the minimum requirements are met by each Offeror and the Offeror's Proposal. The format is not intended to limit the content of a proposal in any way. The Offeror may include any additional data or information that is deemed pertinent to this RFP.

This electronically submitted offer shall be considered the original. Any offers received outside of the HlePRO shall not be accepted or considered for award, unless otherwise specified herein. The maximum file size that HlePRO can accept is 100MB. Files larger than 100MB must be reduced into two (2) or more files.

Proposals shall be submitted and received electronically by the specified due date and time through the HlePRO (<http://hiepro.hawaii.gov>).

4.6 Proposal Organization and Content

Proposals shall be organized in this order:

- Table of Contents: The table of contents shall clearly identify the material by section and by page number.
- Section 1: Proposal Identification and Information Form (Appendix A)
- Section 2: Executive Summary

Section 3:	Offeror Qualifications (including subsections: Offeror History and Background, Offeror Reference Form (Appendix B), Project Team Organization and Project Team Staffing)
Section 4:	Subcontractors (if any)
Section 5:	Proposed Solution including Technical Proposal
Section 6:	Price Proposal (Appendix C)
Attachment A:	Proof of Compliance Documents

Additional information about specific requirements of each section follow.

4.7 Proposal Identification and Information Form (Appendix A)

Offeror shall submit the Proposal under the company's exact legal name as registered with the Department of Commerce and Consumer Affairs, if applicable, and shall indicate exact legal name in the appropriate space on the Proposal Identification and Information Form. Failure to do so may result in rejection of the proposal or delay proper execution of a resulting contract, if any.

The Offeror's authorized signature on the PROPOSAL IDENTIFICATION AND INFORMATION FORM shall be an original signature in ink, which shall be required before an award, if any, can be made. The submission of the proposal shall indicate Offeror's intent to be bound.

A hard copy (original signature in ink) of the PROPOSAL IDENTIFICATION AND INFORMATION FORM must also be received by the Hawaii State Department of Education, Procurement and Contracts Branch, 94-275 Mokuola Street, Room 200, Waipahu, Hawaii 96797, within five (5) working days after the proposal due date.

4.8 Executive Summary

The executive summary shall summarize the contents of the Proposal in a way that gives readers a broad understanding of the entire Proposal and must also contain the following:

Terms and Conditions - A statement that the Offeror understands and shall comply with all terms and conditions of the RFP (including the General Conditions). If an Offeror does not plan to comply with one or more of the terms or conditions of the RFP, this must be stated; ALL exceptions must be listed and fully described. The STATE reserves the right to accept or not accept any exceptions.

Assumptions or Constraints - A statement on whether the Proposal contains any assumptions or constraints and must also identify and describe each such assumption and constraint. If neither assumptions nor constraints are included in the Proposal, a statement to that effect must be made.

Deviations - If the Proposal deviates from the specifications or requirements of the RFP, a statement must be included identifying and describing each such deviation. If no deviations are included in Offeror's Proposal, a statement to that effect must be made.

Subcontracting - A statement that the products and services of the proposed solution shall be provided solely by the Offeror and the Offeror's company or whether a subcontractor(s) shall assist. The Offeror's use of subcontractor(s) requires the prior written approval of the STATE.

Taxable Transaction – Work to be performed under this solicitation is a business activity taxable under Chapter 237, HRS, and vendors are advised that they may be liable for payment of the Hawaii General Excise Tax (GET). If an Offeror is a person exempt by the HRS from paying the GET and therefore not liable for the taxes on this solicitation, Offeror shall state its tax exempt status and cite the HRS chapter or section allowing the exemption.

Hawaii Software Development Business Preference (§103D-1006, HRS and §3-124, Subchapter 5, HAR) – If applicable, if an Offeror is a business desiring a preference pursuant to section 103D-1006, HRS, Offeror shall certify that they are a Hawaii software development business. A Certificate of Eligibility form (attached as Exhibit A) issued by the administrator shall be used to certify the business and be included with the Offeror's proposal for consideration and acceptance.

Pending Litigation – The Offeror shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgment. If applicable, please explain how litigation may materially impact the Offeror or the Offeror's ability to fully perform and complete any work under the contract.

Other Notable Items - The Offeror shall disclose any other items of note that may have material impact the Offeror or the Offeror's ability to fully perform and complete any work under the contract.

4.9 Offeror Qualifications

This section of the Proposal shall include the following:

Offeror History and Background. The Offeror shall describe its corporate background and experience including its size and resources, details of corporate experience relevant to the project and a list of other current or recent related projects.

The Offeror shall include its demonstrated experience and expertise in providing assessment contracting services support for educational institutions or government agencies; proven track record in successfully implementing projects that involve the development of AI-driven educational assessment solutions.

Desirable Qualifications - Additional expertise or unique capabilities that set the offeror apart from other potential offerors. These capabilities should demonstrate a clear advantage in addressing the STATE's project needs.

Offeror Reference Form (Appendix B: Offeror Reference Form). Offeror shall provide a minimum of three (3) recent client references. These are to include the name of the client organization; name, title, and telephone number of the contact person; date, duration and brief description of work performed for the client. The Offeror grants the STATE authorization to contact any of the Offeror's previous clients, including but not limited to these client references, to evaluate the Offeror and its work.

Project Team Organization. The Offeror shall present an organizational chart of staff who will be assigned to work on the contract. This shall include the Offeror's and STATE provided resources as defined to provide STATE an understanding as to how the Offeror envisions utilizing its and STATE's resources. Descriptive information for personnel, indicating their titles, major areas of responsibility and location during each phase of the contract, with proposed estimates of the staff-hours to be provided by each individual.

Project Team Staffing. The Offeror shall include specific information regarding the role and function of its assigned staff. The Offeror shall also provide resume/vita for all staff who will be specifically assigned to the contract and provide a narrative description of their roles and their experience. If the Offeror's solution involves use of subcontractors in an amount greater than 10% of the anticipated work, resumes of any subcontractors shall also be included.

Included in Attachment 4, Offeror's Staff Resumes, of the Proposal shall be a resume of each individual who appears on the organization chart. Resumes shall highlight experiences on specific projects that may be relevant to this project. Resumes should contain information relating to each person's experience, education, and skills. This should include, but is not necessarily limited to, specific degrees, dates, names of employers, position titles, and educational institutions attended.

Information/Data Security and Confidentiality. The Offeror shall include specific information regarding its internal control environment, security history, legal compliance and confidentiality compliance (for example: SAS70/SSAE16/SOC2 reports) to ensure processes and policies related to data sharing are performed to STATE's satisfaction.

The Offeror shall confirm that it complies with State and Federal privacy laws and will follow the Department's requirements relating to privacy, including, but not limited to, the Family Educational Rights and Privacy Act (FERPA) and chapters 8-6 and 8-34, HAR.

4.10 Subcontractors

The Offeror may propose to fulfill any of the responsibilities outlined herein by entering into a subcontract with an individual, organization, or other entity that possesses the requisite expertise to fulfill the requirements of the RFP. The Offeror shall retain sole responsibility for the completion of all tasks and for the quality of the work product. The use of subcontractors shall not place additional burdens or demands on the STATE (e.g., coordinating with staff from multiple CONTRACTORS).

For any item listed herein to be fulfilled by a subcontractor, the Offeror shall provide a description of the proposed partner and the subcontractor's capability to meet the demands of the RFP. In the event the Offeror elects to engage the participation of a subcontractor, the STATE retains the right to approve the selection of the subcontractor and the proposed role that the Offeror shall fulfill under this contract.

If a proposal involves the use of any subcontractor, the subcontractor shall also comply with the Offeror qualifications requirements identified in the following sections:

- Offeror History and Background
- Offeror References
- Project Team Organization
- Project Team Staffing
- Information/Data Security and Confidentiality

4.11 Proposed Solution; Technical Proposal

This section shall be a description of the services to fulfill the needs described in Section 2. "RFP Purpose and Overview" and Section 3. "Scope of Work; Project and Offeror Requirements." Offeror shall describe in detail a comprehensive plan for accomplishing all work described to meet the needs of the STATE as follows:

Phase I - Proof of Concept:

- Requirements Understanding: Summarize the offeror's understanding of the requirements for Virtual Students, Virtual Teachers, and Virtual Community Members.
- Development Approach: Describe the approach that will be used to develop prototype Virtual Students, ensuring realistic behaviors, characteristics, and abilities.
- Data Sources: Identify potential sources of data for training and estimating necessary models to enhance the authenticity of virtual entities.
- Validation Studies: Provide a detailed description of the validation studies to be conducted for Virtual Students and their proposed success metrics

Phase II – Full Research and Development:

- Virtual Entity Development: Outline the approach to design and engineer Virtual Students, Virtual Teachers, and Virtual Community Members with authenticity, accuracy, and reliability.
- Validation Strategy: Detail how validation efforts will be conducted, including comparative analysis, alignment with Hawaii's context, expert review, and iterative testing.

- **Technical Infrastructure:** Describe the technical specifications, AI algorithms, and data storage capabilities required for seamless interaction among virtual entities.
- **Stakeholder Engagement:** Present a plan to involve educators, administrators, and policymakers in shaping the development process.
- **Budget and Timeline:** Provide a comprehensive budget estimate and timeline for Phase II activities, including further entity development, infrastructure setup, and stakeholder engagement.

Phase III - Deployment:

- **Virtual Field Testing:** Outline how virtual field testing will be conducted to replicate realistic testing conditions for Virtual Students and ensure accurate data collection.
- **Psychometric Analysis:** Describe the comprehensive psychometric analysis that will be conducted on Virtual Students' responses to assess validity, reliability, fairness, and quality of the assessment.
- **Virtual Standard Setting:** Detail the procedure for involving Virtual Community Members and subject matter experts in the process of establishing grade-level assessment cut scores.
- **Virtual Scoring Process:** Explain the process of virtual scoring of real student work samples by Virtual Teachers, including the use of AI and NLP techniques for accurate evaluation.
- **Scoring Consistency:** Describe mechanisms to ensure consistency and reliability of Virtual Teachers' scoring decisions across different student work samples.

4.12 Price Proposal

The price proposal shall be inclusive of all costs, direct or indirect, and all applicable taxes, as required for the fulfillment of the contract. Appendix C shall be used by the Offeror to provide the necessary pricing data for the proposal evaluation.

4.13 Proof of Compliance Documents

Offeror is advised that if awarded under this RFP, Offeror shall, upon award, furnish the required certificates and documentation (refer to RFP section regarding Responsibility of Offerors). In order to expedite contract execution, if any, it is highly recommended that the certificates be submitted with the Offeror's Proposal as follows:

4.13.1 Certificate of Compliance as issued by the Hawaii Compliance Express online system

4.13.2 Certificate of Insurance

4.14 Certification of Independent Cost Determination

By submitting a proposal in response to this solicitation, Offeror certifies as follows:

4.14.1 The costs in this RFP have been arrived at independently, without consultation, communication, or agreement with any other Offeror, as to any matter relating to such costs for the purpose of restricting competition.

4.14.2 Unless otherwise required by law, the costs which have been quoted in response to this RFP have not been knowingly disclosed by the Offeror prior to award, directly or indirectly, to any other Offeror or competitor prior to the award of the contract.

4.14.3 No other attempt has been made or will be made by the Offeror to solicit or implore any other person or firm to submit or not to submit a proposal in response to this RFP for the purpose of restricting competition.

5. PROPOSAL EVALUATION

The STATE reserves the right to reject any or all Proposals, and waive any defects if the STATE believes the rejection or waiver to be in the best interest of the STATE.

The evaluation will be based solely on the evaluation criteria detailed in this RFP, and shall be performed by the selected members of the Evaluation Committee consisting of at least three (3) governmental employees with sufficient qualifications and experience in this area.

Evaluation criteria and the associated points are listed below. Quantitative scoring techniques will be utilized to maximize the objectivity of the evaluation.

A contract may be awarded on the basis of initial Proposals received, without discussion. Therefore, each initial proposal shall contain the Offeror's best terms from a technical and cost/price standpoint.

Proposals may be classified initially as acceptable, potentially acceptable, or unacceptable. Discussions may be conducted with Offerors who submit proposals determined to be acceptable or potentially acceptable of being selected for award, but proposals may be accepted without such discussions.

The final selection of a Successful Offeror(s), if any, will be made in accordance with the evaluation criteria as specified herein.

5.1 Evaluation Process Overview

The Evaluation Committee will apply a numerical rubric to evaluate the proposals. The following sections describe the evaluation process in more detail.

- Phase 1: Preliminary Evaluation of Proposals
- Phase 2: Rating and Determination of Priority Listed Offerors
- Phase 3: Discussion with Priority-Listed Offerors (at STATE's option)
- Phase 4: Best and Final Offers (at STATE's option)
- Phase 5: Selection and Award

5.2 Evaluation Criteria

The evaluation of proposals will be based on the following criteria:

Technical Proposal:

- Conformance with terms of the RFP - Extent to which the offeror's proposal aligns with the terms, requirements, and instructions specified in the RFP document.
- Project Approach/Methodology - Clear and comprehensive approach and methodology for the research and development of Virtual Students, Virtual Teachers, and Virtual Community Members, focusing on authenticity and alignment with real-world counterparts.
- Project Understanding - Understanding of the STATE's unique requirements and challenges; demonstrates knowledge of the education landscape, familiarity with relevant regulations, and ability to tailor services to meet the STATE's specific needs.
- Quality of Work Plan - Quality, clarity, and completeness of the offeror's proposal. This should include innovative concepts or value-added services that have the potential to enhance the contracting process and achieve favorable outcomes for the STATE.

Offeror Qualifications:

- Offeror History and Background/Relevant Project Experience - Demonstrated experience and expertise in providing assessment contracting services support for educational institutions or

government agencies; proven track record in successfully implementing projects that involve the development of AI-driven educational assessment solutions.

- Desirable Qualifications - Additional expertise or unique capabilities that set the offeror apart from other potential offerors. These capabilities should demonstrate a clear advantage in addressing the STATE's project needs.
- Program Management Requirements/Internal Controls - Ability to efficiently manage the entire assessment contracting services program, including the implementation of robust internal controls. The extent to which the offeror's organizational structure, operational processes, and management practices ensure the seamless and reliable execution of the AI Assessment Stakeholder Development project in alignment with the STATE's goals.
- Project Team Structure/Staffing - Extent to which the project team structure and staffing plan has the necessary resources, expertise, and capacity to successfully execute the AI Assessment Stakeholder Development project for the STATE. The project team should exhibit a comprehensive understanding of educational assessment and AI technology.
- Offeror References - Extent to which clients are satisfied with the quality of services; offeror adherence to contractual agreements.

Scoring under this RFP shall be based on a total of 200 points. Offerors must score a minimum of 100 points to be considered for award. Offerors that score less than 100 points will be rejected and shall not be considered for award.

For evaluation purposes, pursuant to §103D-1006, HRS and §3-124, Subchapter 5, HAR, a price preference will be given to Offerors who are accepted for the Hawaii software development business. This price preference will be ten (10) percent of the price, and will be used for evaluation.

For evaluation purposes, pursuant to §103D-1008, HRS, a tax-exempt proposal submitted in response to a solicitation shall be increased by the applicable retail rate of general excise tax and the applicable use tax. Under no circumstance shall the dollar amount of the award include the aforementioned adjustment.

Offerors shall be evaluated on the following criteria provided below, in the relative order of importance. The following points will be assigned to the proposals for evaluation purposes:

Technical Proposal – 50%	<u>100 points</u>
Conformance with terms of the RFP	25 points (maximum)
Project Approach/Methodology	25 points (maximum)
Project Understanding	25 points (maximum)
Quality of Work Plan	25 points (maximum)
Offeror Qualifications – 40%	<u>80 points</u>
Offeror History and Background/Relevant Project Experience	20 points (maximum)
Desirable Qualifications	20 points (maximum)
Program Management Requirements/Internal Controls	20 points (maximum)
Project Team Structure/Staffing	10 points (maximum)
Offeror References (Appendix B)	10 points (maximum)
Price Proposal (Appendix C) – 10%	<u>20 points</u>

In converting the price to points, the lowest price proposal will automatically receive the maximum number of points allocated to the Price Proposal (total of 20 points). The point allocations for price on the other proposals will be determined through the method set out as follows:

$$[\text{Lowest Price Proposal} \times 20 \text{ points (maximum)}] \div \text{Offeror's Price Proposal} = \text{Points}$$

Example: Lowest acceptable cost proposal is \$50,000 and receives 20 points. The next lowest acceptable cost proposal was \$75,000 and would receive 13.3 points $\{(\text{Lowest Cost Proposal} \div \text{Highest Cost Proposal}) \times 20\}$.

Note: The fractional value of points to be assigned will be rounded to one decimal place.

Subtotal	<u>200 points</u>
Oral Presentation via Webinar (may be required for Priority Listed Offerors)	10 points
GRAND TOTAL FOR PROPOSAL	<u>210 points</u>

5.3 Preliminary Evaluation

A preliminary evaluation shall determine whether each proposal is considered responsive, thus justifying further evaluation. In its preliminary evaluation, the STATE will examine the completeness of each proposal, and its compliance with the instructions, terms and conditions in this RFP. Subsequent review and evaluation will be based on the criteria stated in Section 5.2. Any proposals that are incomplete or that do not comply with the instructions or terms and conditions may be rejected by the STATE and excluded from further consideration.

Responsive proposals must meet all submittal requirements and the minimum eligibility requirements described in the RFP.

5.4 Priority-List of Offerors

Before conducting discussions, a priority list shall be generated by the Evaluation Committee. In order to generate a priority list, proposals shall be initially classified as acceptable, potentially acceptable or unacceptable.

All responsive Offerors who submit acceptable proposals or potentially acceptable proposals are eligible for the prioritized listing.

If numerous acceptable and potentially acceptable proposals are submitted, the Evaluation Committee may limit the priority list to at least three (3) responsible Offerors who submitted the highest-ranked proposals.

5.5 Discussions with Priority-Listed Offerors (at STATE's Option)

Discussions may be conducted with Priority-Listed Offerors if deemed advantageous by the STATE. Discussions will be limited to only "priority-listed" Offerors and are held 1) to promote understanding of the STATE requirements and the priority-listed Offeror's proposals and 2) to facilitate arriving at a contract that will provide the best value to the STATE, taking into consideration the evaluation factors set forth in the RFP. Discussions may include Offeror presentation of its Proposal, interviews with Offeror's key personnel, demonstrations, site visits, or teleconferences. Any discussions shall be conducted in an organized and consistent manner established by the STATE, and in accordance with the following:

- 5.5.1 Priority-listed Offerors shall be accorded fair and equal treatment with respect to any opportunity for discussions and revisions of proposals.
- 5.5.2 Any substantial oral clarification of a proposal shall be reduced to writing by the priority-listed Offeror.
- 5.5.3 If during discussions there is a need for any substantial clarification or change in the RFP, the RFP shall be amended by an addendum to incorporate the clarification or change. Addenda to the RFP shall be distributed only to the priority-listed Offerors.

- 5.5.4 Priority-listed Offerors may be permitted to amend proposals already submitted, limited to the discussions conducted.
- 5.5.5 If in the opinion of the Evaluation Committee a contemplated amendment will significantly change the nature of the procurement, the RFP shall be canceled and a new RFP will be issued.
- 5.5.6 The contents of any proposal shall not be disclosed so as to be available to competing Offerors during the discussion process.

5.6 Best and Final Offers (at STATE's Option)

Following discussions between the Evaluation Committee and the Priority-listed Offerors, each Priority-listed Offeror may be asked to provide their best and final offer. In that event, the procedure as listed below shall apply.

- 5.6.1 The Evaluation Committee will establish a date and time for submission of best and final offers.
- 5.6.2 Offerors may be afforded the opportunity to revise their proposals, including price, during the best and final offer phase.
- 5.6.3 If an Offeror does not submit a notice of withdrawal or a best and final offer, the Offeror's immediate previous proposal will be construed as their best and final offer.
- 5.6.4 After best and final proposals are received, final evaluations will be conducted for an award.
- 5.6.5 Best and final offers shall be submitted only once, unless the Head of the Purchasing Agency determines that it is in the STATE's best interest to conduct additional discussions or change the STATE's requirements by addendum distributed only to priority-listed offerors and require another submission of best and final offers. Otherwise, no discussion of or change in the best and final offers shall be allowed prior to award.

5.7 Evaluation Process Upon completion of Phase I, Proof of Concept

Upon the successful completion of Phase I, Proof of Concept, the prototype developed by the Contractor(s) will undergo a rigorous evaluation process to assess its viability and alignment with the project's objectives. The evaluation process aims to provide valuable insights for the subsequent phases of the project and to inform decision-making regarding the project's continuation. The evaluation will be guided by specific criteria below designed to ensure the effectiveness, authenticity, and alignment of the prototype with the unique requirements of the STATE:

- 5.7.1 *Alignment with Project Objectives:* The extent to which the prototype aligns with the project's objectives, as outlined in the RFP. The prototype should demonstrate its capability to create Virtual Students that closely emulate real-world student behaviors and effectively contribute to the assessment process.
- 5.7.2 *Authenticity and Realism:* Evaluate the Virtual Students' behaviors and interactions to ensure they closely emulate real-world counterparts in Hawaii's public schools. The prototype's interactions, responses, and decision-making processes should accurately reflect the characteristics and perspectives of actual students in Hawaii's educational landscape.
- 5.7.3 *Technical Feasibility:* The technical feasibility of the prototype's implementation, including the compatibility of the technical specifications, data processing capabilities, and interface functionality with the project's requirements. The prototype should effectively utilize AI technologies and algorithms to create a seamless and user-friendly experience.

5.7.4 *Performance Quality*: The quality of the prototype's performance in simulating student responses to assessment items. The prototype's performance should demonstrate accuracy, reliability, and consistency in emulating student behaviors across various assessment scenarios.

5.7.5 *Validation Study Results for Virtual Students*: The results of the validation study conducted to assess the authenticity, accuracy, and alignment of the Virtual Students. The study's findings should validate the prototype's performance against real-world student behaviors and demonstrate its potential to enhance educational assessment in Hawaii.

Scoring for the prototype evaluation will be conducted using a numerical rubric. The evaluation will be based on the criteria outlined herein to each prototype and assign points based on their performance. The final selection of one (1) Contractor for Phase II and III will be made based on the evaluation results of the Contractor with the highest number of points, and the alignment of the prototypes with Hawaii's educational needs and requirements.

Criteria	Description	Score 0-5
1. Alignment with Project Objectives	The extent to which the prototype aligns with the project's objectives, demonstrating its potential to create realistic Virtual Students.	0: Not aligned with objectives 5: Strong alignment, fully supporting the creation of authentic Virtual Students.
2. Authenticity and Realism	The authenticity and realism of the Virtual Students' behaviors, reflecting accurate emulation of real students' characteristics.	0: Lacks authenticity 5: Highly realistic, closely emulating real student behaviors and responses.
3. Technical Feasibility	The technical feasibility of the prototype's implementation, including compatibility with technical specifications and data processing.	0: Technically unfeasible 5: Technically robust, meets specifications seamlessly.
4. Performance Quality	The quality of the prototype's performance in simulating student responses and interactions, demonstrating accurate emulation.	0: Poor performance quality 5: High performance quality, accurate and reliable interactions.
5. Validation Study Results	The results of the validation study assessing authenticity, accuracy, and alignment of Virtual Students with real student behaviors.	0: Validation shortcomings 5: Validation success, demonstrating alignment with real student behaviors.
Total Score Range: 0-25		

APPENDICES:

Appendix A: Proposal Identification and Information Form

Appendix B: Offeror Reference Form

Appendix C: Price Proposal

Appendix D: Contract Minimum and Special Conditions

Appendix E: State's General Conditions

Exhibit A: DOE Form 9

APPENDIX A

**TO PROVIDE ARTIFICIAL INTELLIGENCE STAKEHOLDER DEVELOPMENT FOR CLASSROOM
BASED ASSESSMENTS FOR THE HAWAII STATE DEPARTMENT OF EDUCATION
RFP D24-023**

The undersigned certifies that the information provided below is to the best of the undersigned's knowledge true and correct, has carefully read and understands the terms and conditions specified herein and hereby submits the following proposal to perform the work specified herein, all in accordance with the true intent and meaning thereof, and further that the Offeror shall comply with all terms, conditions, and requirements of the RFP. The undersigned further understands and agrees that by submitting this offer, 1) the undersigned is declaring the undersigned's offer is not in violation of Chapter 84, Hawaii Revised Statutes, concerning prohibited State contracts, and 2) the undersigned is certifying that the price(s) submitted was (were) independently arrived at without collusion.

Type of Business Entity:

- Sole Proprietor Partnership Corporation Joint Venture
 Limited Liability Company Other: _____

If other than a Sole Proprietorship, the undersigned represents; **(Check ✓ one only)**

<input type="checkbox"/>	A Hawaii business incorporated or organized under the laws of the State of Hawaii; OR
<input type="checkbox"/>	A Compliant Non-Hawaii business <u>not</u> incorporated or organized under the laws of the State of Hawaii, and, if applicable, registered at the State of Hawaii Department of Commerce and Consumer Affairs Business Registration Division to do business in the State of Hawaii.

State of Incorporation _____
 Date of Incorporation/Organization _____
 All State(s) where Offeror is authorized to transact business _____
 Names of all Offeror's parent affiliate and subsidiary organizations: _____

Exact Legal Name of Offeror, including "dba" or "division" of a corporation (furnish the exact legal name of the entity under which an awarded contract, if any, will be executed): _____
 Principal Place of Business (may not be a P.O. Box): _____
 Mailing Address (only if different): _____
 Name and Title of Offeror's Primary Contact Person: _____
 Telephone and Fax Number _____
 Email Address _____
 Federal Tax Identification Number _____
 State of Hawaii General Excise Tax Number _____

 Authorized (Original in Ink) Signature Name (Printed)

 Title Date

APPENDIX B

TO PROVIDE ARTIFICIAL INTELLIGENCE STAKEHOLDER DEVELOPMENT FOR CLASSROOM
BASED ASSESSMENTS FOR THE HAWAII STATE DEPARTMENT OF EDUCATION
RFP D24-023

OFFEROR REFERENCE FORM

Directions:

- Please provide information regarding recent projects and the names of a minimum of three (3) clients who may be contacted for whom services were rendered.
- Any supplemental information related to this project although not required, should be attached to the respective Appendix B, Offeror Reference Form.

Name of Your Company:	
<i>Name of Client:</i>	
<i>Name of Client Contact Person:</i>	
<i>Client's Phone Number:</i>	
<i>Date or period of project/service:</i>	

Description of project/services rendered:

--

Other Information or comments:

--

check here if supplemental information related to this project is attached

APPENDIX C

**TO PROVIDE ARTIFICIAL INTELLIGENCE STAKEHOLDER DEVELOPMENT FOR CLASSROOM-BASED ASSESSMENTS FOR THE HAWAII STATE DEPARTMENT OF EDUCATION
RFP D24-023**

PRICE PROPOSAL

Offeror shall present a comprehensive budget and cost estimation for Phases I-III activities, including the development of Virtual Students and Virtual Stakeholders, technical infrastructure setup, stakeholder engagement efforts, and risk mitigation strategies.

The price proposal shall be inclusive of all costs, direct or indirect, and all applicable taxes, as required for the fulfillment of the contract. Table 1: Price Proposal shall be used by the Offeror to provide the necessary pricing data for the proposal evaluation.

Table 1: Price Proposal

Item No.	Description	Phase I	Phase II	Phase III
1	Personnel (e.g., Lead AI Developer, Data Scientist, User Interface Designer, etc.)			
2	Materials and supplies (e.g., Cloud Computing Services, Software Licenses, etc.)			
3	Subcontractors/Consultants (e.g., AI Education Specialist, Educational Psychometrician, etc.)			
4	Other Direct Costs (e.g., Research Databases and Resources, Secure Data Storage Solutions, etc.)			
5	Additional Costs (e.g., travel expenses, intellectual property costs, etc.)			
TOTAL Items 1-5				
TOTAL Items 1-5, Phases I-III				

CONTRACT MINIMUM AND SPECIAL CONDITIONS

1. Contract Administrator

For purposes of this contract, the person named below or his/her duly authorized representative or successor in office is designated Contract Administrator (hereinafter referred to as "CA"). The CA may be contacted as follows:

Contract Administrator: Brian Reiter
Telephone: (808) 307-3636
E-mail: brian.reiter@k12.hi.us

The CA is responsible for:

- 1.1. The terms, conditions, quantities, specifications, scope of services, other contract terms, and all decisions relating to the contract;
- 1.2. Monitoring the CONTRACTOR's work, documenting that CONTRACTOR maintains the required insurance coverage (if applicable), resolving contract disputes and discrepancies, evaluating the work of the CONTRACTOR, assuring the services or goods are delivered as required in the contract, and processing payment for services rendered; and
- 1.3. Notifying Procurement and Contracts Branch in the event of change in scope of work, change in the performance period, increase or decrease in total compensation, and/or changes in any other contract terms.

Notwithstanding the responsibilities set forth hereinabove, any coordination of services falling outside those articulated above shall remain with the head of the purchasing agency, as set forth in the attached General Conditions (see General Conditions, paragraph 1, entitled "Coordination of Services by the STATE.>").

2. Verification of Employees

In accordance with State rules and regulations, CONTRACTOR shall conduct mandatory criminal background checks at no cost to the STATE, on any employee or subcontractor working directly with students.

CONTRACTOR shall notify the STATE, verbally within twenty-four (24) hours, upon learning of the occurrence of any of the events indicated below:

- 2.1. Any employee, agent or volunteer's license required to perform services under this Contract is or has been suspended, conditioned, revoked, expired, or terminated.
- 2.2. Any employee, agent or volunteer becomes or has been the subject of any disciplinary proceeding or action before any federal or state agency or Board.
- 2.3. Any employee, agent or volunteer is or has been convicted of a fraud or felony.
- 2.4. Any claim, judgment or settlement in which the CONTRACTOR or any of its employees, agents or volunteers is or has been named a defendant.

CONTRACTOR shall maintain the background check records, and shall make the records available for review upon request. Upon review of these records, the STATE reserves the right to request additional background information.

3. Exclusion of Specific Workers

The STATE reserves the right to require the CONTRACTOR to remove an employee, agent, subcontractor or volunteer (Worker) from performing work under this contract. The Contract Administrator shall notify the CONTRACTOR in writing and this exclusion of a specific Worker(s) shall take effect as indicated on the notice. The CONTRACTOR may appeal this decision to the Contract Administrator, in writing within ten (10) working days of receipt of the notice. Removal of the employee, agent, subcontractor or volunteer shall remain in effect pending the outcome of the appeal. This provision shall not infringe upon the right of the CONTRACTOR to employ the removed individual, but shall apply to any work requiring interaction with the STATE, its employees or students.

4. Liability Insurance

The CONTRACTOR shall maintain in full force and effect, during the life of this contract, liability and property damage insurance. This insurance shall protect the CONTRACTOR and his subcontractors, if any, from claims for damages for personal injury, accidental death and property damage which may arise from operations under this contract, whether such operations be by himself or by a subcontractor or anyone directly or indirectly employed by either of them. If any subcontractor is involved in the performance of the contract, the insurance policy or policies shall name the subcontractor as additional insured.

As an alternative to the CONTRACTOR providing insurance to cover operations performed by a subcontractor and naming the subcontractor as additional insured, CONTRACTOR may require subcontractor to provide its own insurance which meets the requirements herein. It is understood that a subcontractor's insurance policy(ies) are in addition to the CONTRACTOR's own policy or policies.

The following minimum insurance coverage(s) and limit(s) shall be provided by the CONTRACTOR, including its subcontractor(s) where appropriate:

<u>Coverage</u>	<u>Limits</u>
General Liability , Commercial (Occurrence Form)	\$2,000,000 aggregate \$1,000,000 combined single limit per occurrence for bodily injury and property damage
Automobile Liability Combined Single Limit	\$1,000,000 per accident

General liability and automobile liability policies required by this contract, including a subcontractor's policy, shall contain the following clauses:

- 1) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contribute with, insurance provided by this policy."
- 2) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."

The minimum insurance required shall be in full compliance with the Hawaii Insurance Code throughout the entire term of the contract, including supplemental agreements. Each insurance policy shall be written by 1) an insurance company licensed to do business in the State of Hawaii, or 2) if not licensed by the State of Hawaii, an insurance company which meets §431:8-301, Hawaii Revised Statutes.

Upon execution of the contract, the CONTRACTOR agrees to deposit with the STATE certificate(s) of insurance necessary to satisfy the STATE that the insurance provisions of this contract have been complied with and to keep such insurance in effect and the certificate(s) therefore on deposit with the STATE during the entire term of this contract, including those of its subcontractor(s), where appropriate. Upon request by the STATE, CONTRACTOR shall be responsible for furnishing a copy of the policy(ies).

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Failure of the CONTRACTOR to provide and keep in force such insurance shall be regarded as material default under this contract, entitling the STATE to exercise any or all of the remedies provided herein.

The procuring of such required insurance shall not be construed to limit CONTRACTOR's liability hereunder nor to fulfill the indemnification provisions and requirements of this contract. Notwithstanding said policy(ies) of insurance, CONTRACTOR shall be obligated for the full and total amount of any damage, injury, or loss caused by the CONTRACTOR, its employees, officers, or agents, in connection with this contract.

CONTRACTOR shall notify the STATE, via written notice within twenty-four (24) hours should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.

5. Invoicing

The CONTRACTOR shall submit an invoice with each request for payment. Original and one (1) copy of the invoice shall be submitted to:

Hawaii State Department of Education
OSIP, AAB, Assessment Section
475 22nd Avenue, Room 126
Honolulu, HI 96816
Attn: Brian Reiter

- 5.1. Invoices shall reference the contract number and must have the following information identified: invoice number, date of invoice, CONTRACTOR's name and remittance address, service period covered, and total amount due.
- 5.2. If a copy is submitted as the original, such invoice must bear an original signature certifying that the invoice is being submitted as the original.

6. Payment

Section 103-10, HRS, provides that the STATE shall have thirty (30) calendar days after receipt of an accepted invoice and satisfactory delivery of goods or performance of the services, to make payment. For this reason, the STATE shall reject any Proposal submitted with a condition requiring payment within a shorter period. Further, the STATE shall reject any Proposal submitted with a condition requiring interest payments greater than that allowed by §103-10, HRS. The STATE will not recognize any requirements established by the CONTRACTOR and communicated to the STATE after award, which requires payment within a shorter period or interest payment not in conformance with §103-10, HRS.

7. Final Payment

The **final payment** on the contract shall be for services rendered during the billing period just prior to the contract expiration date. In addition to the requirements in the General Conditions, the following shall accompany the final payment invoice:

- 7.1. A tax clearance certificate, not over two months old and with an original green "certified copy" stamp, shall accompany the invoice for final payment. In addition to the tax clearance certificate, the "Certification of Compliance for Final Payment" (DOE Form-22) with an original signature will be required for final payment.
- 7.2. In lieu of the above, CONTRACTOR may also submit an original CERTIFICATE OF VENDOR COMPLIANCE as issued by the State Procurement Office via an online system, also referred to

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as "Hawaii Compliance Express". Details regarding this online application process can be viewed at: <http://vendors.ehawaii.gov/hce/>.

All required certificate(s) for the CONTRACTOR and all subcontractors, must accompany the invoice for final payment on the Contract.

8. Availability of Funds

This contract is subject to the availability of funds. Pursuant to Section 103D-309, HRS, except in certain instances, no contract entered into between the STATE and the CONTRACTOR shall be binding or of any force unless the Chief Financial Officer (CFO) certifies that there is an available unexpended appropriation or balance of an appropriation over and above all outstanding contracts sufficient to cover the amount required by the contract.

If the contract calls for performance or payment in more than one fiscal year (July 1 to June 30), the CFO may certify only that portion of the total funds allocated to satisfy the STATE's obligations for payments in the current fiscal year. In that event, the STATE will not be liable for the unpaid balance beyond the end of the current fiscal year, and availability of funds in excess of the amount certified shall be contingent upon future appropriations or special fund revenues. All partially-funded contracts shall be enforceable only to the extent that funds are certified as available. The STATE agrees to notify the CONTRACTOR of such non-allocation at the earliest possible time. The STATE shall not be penalized in the event this provision is exercised. This provision is not meant to permit the STATE to terminate the contract in order to acquire similar equipment or services from a third party.

9. Subcontracting

Prior to award, no work or services shall be subcontracted or assigned without the prior written approval of the CA. After award, no work or services shall be subcontracted or assigned without the prior written approval of the CA. No subcontract shall under any circumstances relieve the CONTRACTOR of its obligations and liability under its contract with the STATE. All persons engaged in performing the work covered by the contract shall be considered employees of the CONTRACTOR.

10. Contract Staffing Requirements

Personnel, whose names and resumes are submitted in the Proposal, shall not be removed from the Project without prior acceptance of the CA. Substitute or additional personnel shall not be used for the Project until a resume is received by and the CA has accepted the new personnel. The STATE shall have the right, and the CONTRACTOR shall comply with any request, to remove and replace any personnel from all work on the Project effective immediately upon notification by the STATE. Personnel changes that are not accepted by the CA may be grounds for contract termination.

11. Inspection and Procedural Changes; Relief Available to State

All work is subject to inspection, evaluation, and approval by the CA. The STATE may employ all reasonable means to ensure that the work is being performed in compliance with the contract. Should the CA determine that corrections or changes are necessary in order to accomplish the intent or purpose of the contract, the CA may direct the CONTRACTOR to make such changes.

In addition to all rights and remedies available to the STATE provided in this contract or otherwise provided under law, if the CONTRACTOR is in non-compliance with contract requirements, the STATE may:

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- 11.1. Suspend Payments – Temporarily withhold or disallow all or part of the billing cost/payments pending correction of a deficiency or a non-submission of a required deliverable by the CONTRACTOR.
- 11.2. Suspend Referrals – Suspend referrals to the CONTRACTOR should the CONTRACTOR fail to comply with any of the requirements or other term(s) or condition(s) of this contract and, further, the STATE may maintain the suspension of referrals until such time as the deficiency or non-compliance is corrected and the CONTRACTOR's corrective actions are determined to be acceptable by the STATE.
- 11.3. Seek Reimbursement – Seek reimbursement from the CONTRACTOR or withhold future payments for any funds paid to the CONTRACTOR subsequent to a determination that such was unauthorized, fraudulently obtained, or inappropriately billed.
- 11.4. Seek Market Value – In the event the CONTRACTOR fails, refuses or neglects to perform the services in accordance with the requirements of these Special Conditions, the Scope of Services or the General Conditions, the STATE reserves the right to purchase, in the open market, a corresponding quantity of the services specified herein and to deduct from any monies due or that may thereafter become due to the CONTRACTOR, the difference between the price named in the contract and the actual cost to the STATE. In case any money due the CONTRACTOR is insufficient for said purpose, the CONTRACTOR shall pay the difference upon demand from the STATE. The STATE may also utilize all other remedies provided by law.

12. Confidentiality Obligations

The following serves to supplement provision 24 of the General Condition, entitled "Confidentiality of Material" and provision 42, entitled "Confidentiality of Personal Information":

- 12.1. Obligations Confidential Information: Infrastructure. The CONTRACTOR must agree to keep confidential and not disclose any information relating to the STATE's information processing infrastructure. This includes but is not limited to, all data, computer hardware, computer software, network designs, network diagrams, firewalls and other security infrastructure, and Internet protocol (IP) addresses.
- 12.2. General Confidentiality Obligations. While performing under this contract, the CONTRACTOR may receive, be exposed to or acquire confidential information. Such information may include names, addresses, telephone numbers, birthdates, social security numbers, medical information, and other educational, student, or personal employment information. The information may be in written or oral form, fixed in hard copy or contained in a computer database or computer readable form. Hereinafter, such language shall be collectively referred to as "Confidential Information."

The CONTRACTOR, including its employees, agents, representatives, and assigns shall abide by the following with regards to Confidential Information: (i) They shall not disclose to any unauthorized party any Confidential Information, except as specifically permitted by the STATE and subject to the STATE's limitations on confidentiality of information and relevant legal requirements of the STATE to include, but be not limited to the Family Educational Rights and Privacy Act ("FERPA"). Permission will be granted through a formal written agreement concerning the disclosure of personally identifiable information (PII) from student education records, signed by the STATE and the CONTRACTOR, and must be provided as an attachment to this contract; (ii) They shall only permit access to Confidential Information to employees, agents, representatives, and assigns having a specific need to know in connection with performance under this contract; and (iii) They shall advise each of their employees, agents, representatives, and assigns of their obligations to keep such Confidential Information confidential in compliance with all relevant state and federal laws.

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CONTRACTOR, its employees, agents, representatives, or assigns shall ensure the security of the Confidential Information. The CONTRACTOR shall provide the STATE with a list of individuals (by name and position) who are authorized to handle the Confidential Information (hereinafter referred to as "Authorized Handlers"). Authorized Handlers shall ensure the security of the Confidential Information. Only Authorized Handlers shall have access to the Confidential Information, which will be kept on password protected computers with the hard copy documents kept in a locked file cabinet. CONTRACTOR shall ensure that procedures exist to prohibit access to the Confidential Information by anyone other than an Authorized Handler.

CONTRACTOR will be responsible for safeguarding the confidentiality of all Confidential Information it receives from the STATE and shall safeguard and protect such documents from unauthorized use, handling, or viewing. CONTRACTOR shall be liable to the STATE and to any person whose records the CONTRACTOR receives custody of under this contract for records protection for any unpermitted release, viewing, or loss of such records.

CONTRACTOR shall assume liability responsibility for records protection and for the inappropriate or unlawful release of Confidential Information. CONTRACTOR shall return all documents containing Confidential Information upon completion of the services CONTRACTOR is contracted to provide under this contract.

12.2.1. Prior Written Approval: CONTRACTOR may not i) share Confidential Information or any other data received under this contract, ii) publish, or iii) distribute such information without the prior written approval of the STATE.

12.2.2. In the event of termination of this contract, CONTRACTOR shall return to STATE all student information received under this contract and further agrees to destroy any and all copies of, or references to, any student information shared by STATE as a result of this contract.

13. Records Retention

The following serves to supplement provision 31 of the General Condition, entitled "Records Retention":

Should the CONTRACTOR be aware of or be made aware of any dispute, disagreement, or request relating to the files, books, or records prior to their destruction, the CONTRACTOR shall retain the files, books, and records until said dispute, disagreement, or request has been fully resolved, including any potential lawsuits or appeals. Said files, books, and records may thereafter be destroyed upon obtaining the agreement of the STATE.

14. Approvals

Any agreement arising out of this RFP may be subject to the approval of the Department of the Attorney General as to form, and is subject to all further approvals, including the approval of the Governor, required by statute, regulation, rule, order, or other directive.

APPENDIX E

STATE'S GENERAL CONDITIONS

The General Conditions are contained in "AG-008 103D GENERAL CONDITIONS" and is attached.

GENERAL CONDITIONS

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GENERAL CONDITIONS

1. Coordination of Services by the STATE. The head of the purchasing agency ("HOPA") (which term includes the designee of the HOPA) shall coordinate the services to be provided by the CONTRACTOR in order to complete the performance required in the Contract. The CONTRACTOR shall maintain communications with HOPA at all stages of the CONTRACTOR'S work, and submit to HOPA for resolution any questions which may arise as to the performance of this Contract. "Purchasing agency" as used in these General Conditions means and includes any governmental body which is authorized under chapter 103D, HRS, or its implementing rules and procedures, or by way of delegation, to enter into contracts for the procurement of goods or services or both.
2. Relationship of Parties: Independent Contractor Status and Responsibilities, Including Tax Responsibilities.
 - a. In the performance of services required under this Contract, the CONTRACTOR is an "independent contractor," with the authority and responsibility to control and direct the performance and details of the work and services required under this Contract; however, the STATE shall have a general right to inspect work in progress to determine whether, in the STATE'S opinion, the services are being performed by the CONTRACTOR in compliance with this Contract. Unless otherwise provided by special condition, it is understood that the STATE does not agree to use the CONTRACTOR exclusively, and that the CONTRACTOR is free to contract to provide services to other individuals or entities while under contract with the STATE.
 - b. The CONTRACTOR and the CONTRACTOR'S employees and agents are not by reason of this Contract, agents or employees of the State for any purpose, and the CONTRACTOR and the CONTRACTOR'S employees and agents shall not be entitled to claim or receive from the State any vacation, sick leave, retirement, workers' compensation, unemployment insurance, or other benefits provided to state employees.
 - c. The CONTRACTOR shall be responsible for the accuracy, completeness, and adequacy of the CONTRACTOR'S performance under this Contract. Furthermore, the CONTRACTOR intentionally, voluntarily, and knowingly assumes the sole and entire liability to the CONTRACTOR'S employees and agents, and to any individual not a party to this Contract, for all loss, damage, or injury caused by the CONTRACTOR, or the CONTRACTOR'S employees or agents in the course of their employment.
 - d. The CONTRACTOR shall be responsible for payment of all applicable federal, state, and county taxes and fees which may become due and owing by the CONTRACTOR by reason of this Contract, including but not limited to (i) income taxes, (ii) employment related fees, assessments, and taxes, and (iii) general excise taxes. The CONTRACTOR also is responsible for obtaining all licenses, permits, and certificates that may be required in order to perform this Contract.
 - e. The CONTRACTOR shall obtain a general excise tax license from the Department of Taxation, State of Hawaii, in accordance with section 237-9, HRS, and shall comply with all requirements thereof. The CONTRACTOR shall obtain a tax clearance certificate from the Director of Taxation, State of Hawaii, and the Internal Revenue Service, U.S. Department of the Treasury, showing that all delinquent taxes, if any, levied or accrued under state law and the Internal Revenue Code of 1986, as amended, against the CONTRACTOR have been paid and submit the same to the STATE prior to commencing any performance under this Contract. The CONTRACTOR shall also be solely responsible for meeting all requirements necessary to obtain the tax clearance certificate required for final payment under sections 103-53 and 103D-328, HRS, and paragraph 17 of these General Conditions.
 - f. The CONTRACTOR is responsible for securing all employee-related insurance coverage for the CONTRACTOR and the CONTRACTOR'S employees and agents that is or may be required by law, and for payment of all premiums, costs, and other liabilities associated with securing the insurance coverage.

- g. The CONTRACTOR shall obtain a certificate of compliance issued by the Department of Labor and Industrial Relations, State of Hawaii, in accordance with section 103D-310, HRS, and section 3-122-112, HAR, that is current within six months of the date of issuance.
- h. The CONTRACTOR shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs, State of Hawaii, in accordance with section 103D-310, HRS, and section 3-122-112, HAR, that is current within six months of the date of issuance.
- i. In lieu of the above certificates from the Department of Taxation, Labor and Industrial Relations, and Commerce and Consumer Affairs, the CONTRACTOR may submit proof of compliance through the State Procurement Office's designated certification process.

3. Personnel Requirements.

- a. The CONTRACTOR shall secure, at the CONTRACTOR'S own expense, all personnel required to perform this Contract.
- b. The CONTRACTOR shall ensure that the CONTRACTOR'S employees or agents are experienced and fully qualified to engage in the activities and perform the services required under this Contract, and that all applicable licensing and operating requirements imposed or required under federal, state, or county law, and all applicable accreditation and other standards of quality generally accepted in the field of the activities of such employees and agents are complied with and satisfied.

4. Nondiscrimination. No person performing work under this Contract, including any subcontractor, employee, or agent of the CONTRACTOR, shall engage in any discrimination that is prohibited by any applicable federal, state, or county law.

5. Conflicts of Interest. The CONTRACTOR represents that neither the CONTRACTOR, nor any employee or agent of the CONTRACTOR, presently has any interest, and promises that no such interest, direct or indirect, shall be acquired, that would or might conflict in any manner or degree with the CONTRACTOR'S performance under this Contract.

6. Subcontracts and Assignments. The CONTRACTOR shall not assign or subcontract any of the CONTRACTOR'S duties, obligations, or interests under this Contract and no such assignment or subcontract shall be effective unless (i) the CONTRACTOR obtains the prior written consent of the STATE, and (ii) the CONTRACTOR'S assignee or subcontractor submits to the STATE a tax clearance certificate from the Director of Taxation, State of Hawaii, and the Internal Revenue Service, U.S. Department of Treasury, showing that all delinquent taxes, if any, levied or accrued under state law and the Internal Revenue Code of 1986, as amended, against the CONTRACTOR'S assignee or subcontractor have been paid. Additionally, no assignment by the CONTRACTOR of the CONTRACTOR'S right to compensation under this Contract shall be effective unless and until the assignment is approved by the Comptroller of the State of Hawaii, as provided in section 40-58, HRS.

a. Recognition of a successor in interest. When in the best interest of the State, a successor in interest may be recognized in an assignment contract in which the STATE, the CONTRACTOR and the assignee or transferee (hereinafter referred to as the "Assignee") agree that:

- (1) The Assignee assumes all of the CONTRACTOR'S obligations;
- (2) The CONTRACTOR remains liable for all obligations under this Contract but waives all rights under this Contract as against the STATE; and
- (3) The CONTRACTOR shall continue to furnish, and the Assignee shall also furnish, all required bonds.

b. Change of name. When the CONTRACTOR asks to change the name in which it holds this Contract with the STATE, the procurement officer of the purchasing agency (hereinafter referred to as the "Agency procurement officer") shall, upon receipt of a document acceptable or satisfactory to the

Agency procurement officer indicating such change of name (for example, an amendment to the CONTRACTOR'S articles of incorporation), enter into an amendment to this Contract with the CONTRACTOR to effect such a change of name. The amendment to this Contract changing the CONTRACTOR'S name shall specifically indicate that no other terms and conditions of this Contract are thereby changed.

- c. Reports. All assignment contracts and amendments to this Contract effecting changes of the CONTRACTOR'S name or novations hereunder shall be reported to the chief procurement officer (CPO) as defined in section 103D-203(a), HRS, within thirty days of the date that the assignment contract or amendment becomes effective.
 - d. Actions affecting more than one purchasing agency. Notwithstanding the provisions of subparagraphs 6a through 6c herein, when the CONTRACTOR holds contracts with more than one purchasing agency of the State, the assignment contracts and the novation and change of name amendments herein authorized shall be processed only through the CPO's office.
7. Indemnification and Defense. The CONTRACTOR shall defend, indemnify, and hold harmless the State of Hawaii, the contracting agency, and their officers, employees, and agents from and against all liability, loss, damage, cost, and expense, including all attorneys' fees, and all claims, suits, and demands therefore, arising out of or resulting from the acts or omissions of the CONTRACTOR or the CONTRACTOR'S employees, officers, agents, or subcontractors under this Contract. The provisions of this paragraph shall remain in full force and effect notwithstanding the expiration or early termination of this Contract.
 8. Cost of Litigation. In case the STATE shall, without any fault on its part, be made a party to any litigation commenced by or against the CONTRACTOR in connection with this Contract, the CONTRACTOR shall pay all costs and expenses incurred by or imposed on the STATE, including attorneys' fees.
 9. Liquidated Damages. When the CONTRACTOR is given notice of delay or nonperformance as specified in paragraph 13 (Termination for Default) and fails to cure in the time specified, it is agreed the CONTRACTOR shall pay to the STATE the amount, if any, set forth in this Contract per calendar day from the date set for cure until either (i) the STATE reasonably obtains similar goods or services, or both, if the CONTRACTOR is terminated for default, or (ii) until the CONTRACTOR provides the goods or services, or both, if the CONTRACTOR is not terminated for default. To the extent that the CONTRACTOR'S delay or nonperformance is excused under paragraph 13d (Excuse for Nonperformance or Delay Performance), liquidated damages shall not be assessable against the CONTRACTOR. The CONTRACTOR remains liable for damages caused other than by delay.
 10. STATE'S Right of Offset. The STATE may offset against any monies or other obligations the STATE owes to the CONTRACTOR under this Contract, any amounts owed to the State of Hawaii by the CONTRACTOR under this Contract or any other contracts, or pursuant to any law or other obligation owed to the State of Hawaii by the CONTRACTOR, including, without limitation, the payment of any taxes or levies of any kind or nature. The STATE will notify the CONTRACTOR in writing of any offset and the nature of such offset. For purposes of this paragraph, amounts owed to the State of Hawaii shall not include debts or obligations which have been liquidated, agreed to by the CONTRACTOR, and are covered by an installment payment or other settlement plan approved by the State of Hawaii, provided, however, that the CONTRACTOR shall be entitled to such exclusion only to the extent that the CONTRACTOR is current with, and not delinquent on, any payments or obligations owed to the State of Hawaii under such payment or other settlement plan.
 11. Disputes. Disputes shall be resolved in accordance with section 103D-703, HRS, and chapter 3-126, Hawaii Administrative Rules ("HAR"), as the same may be amended from time to time.
 12. Suspension of Contract. The STATE reserves the right at any time and for any reason to suspend this Contract for any reasonable period, upon written notice to the CONTRACTOR in accordance with the provisions herein.
 - a. Order to stop performance. The Agency procurement officer may, by written order to the CONTRACTOR, at any time, and without notice to any surety, require the CONTRACTOR to stop all or any part of the performance called for by this Contract. This order shall be for a specified

period not exceeding sixty (60) days after the order is delivered to the CONTRACTOR, unless the parties agree to any further period. Any such order shall be identified specifically as a stop performance order issued pursuant to this section. Stop performance orders shall include, as appropriate: (1) A clear description of the work to be suspended; (2) Instructions as to the issuance of further orders by the CONTRACTOR for material or services; (3) Guidance as to action to be taken on subcontracts; and (4) Other instructions and suggestions to the CONTRACTOR for minimizing costs. Upon receipt of such an order, the CONTRACTOR shall forthwith comply with its terms and suspend all performance under this Contract at the time stated, provided, however, the CONTRACTOR shall take all reasonable steps to minimize the occurrence of costs allocable to the performance covered by the order during the period of performance stoppage. Before the stop performance order expires, or within any further period to which the parties shall have agreed, the Agency procurement officer shall either:

- (1) Cancel the stop performance order; or
- (2) Terminate the performance covered by such order as provided in the termination for default provision or the termination for convenience provision of this Contract.

b. Cancellation or expiration of the order. If a stop performance order issued under this section is cancelled at any time during the period specified in the order, or if the period of the order or any extension thereof expires, the CONTRACTOR shall have the right to resume performance. An appropriate adjustment shall be made in the delivery schedule or contract price, or both, and the Contract shall be modified in writing accordingly, if:

- (1) The stop performance order results in an increase in the time required for, or in the CONTRACTOR'S cost properly allocable to, the performance of any part of this Contract; and
- (2) The CONTRACTOR asserts a claim for such an adjustment within thirty (30) days after the end of the period of performance stoppage; provided that, if the Agency procurement officer decides that the facts justify such action, any such claim asserted may be received and acted upon at any time prior to final payment under this Contract.

c. Termination of stopped performance. If a stop performance order is not cancelled and the performance covered by such order is terminated for default or convenience, the reasonable costs resulting from the stop performance order shall be allowable by adjustment or otherwise.

d. Adjustment of price. Any adjustment in contract price made pursuant to this paragraph shall be determined in accordance with the price adjustment provision of this Contract.

13. Termination for Default.

a. Default. If the CONTRACTOR refuses or fails to perform any of the provisions of this Contract with such diligence as will ensure its completion within the time specified in this Contract, or any extension thereof, otherwise fails to timely satisfy the Contract provisions, or commits any other substantial breach of this Contract, the Agency procurement officer may notify the CONTRACTOR in writing of the delay or non-performance and if not cured in ten (10) days or any longer time specified in writing by the Agency procurement officer, such officer may terminate the CONTRACTOR'S right to proceed with the Contract or such part of the Contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part, the Agency procurement officer may procure similar goods or services in a manner and upon the terms deemed appropriate by the Agency procurement officer. The CONTRACTOR shall continue performance of the Contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring similar goods or services.

b. CONTRACTOR'S duties. Notwithstanding termination of the Contract and subject to any directions from the Agency procurement officer, the CONTRACTOR shall take timely, reasonable, and

necessary action to protect and preserve property in the possession of the CONTRACTOR in which the STATE has an interest.

- c. Compensation. Payment for completed goods and services delivered and accepted by the STATE shall be at the price set forth in the Contract. Payment for the protection and preservation of property shall be in an amount agreed upon by the CONTRACTOR and the Agency procurement officer. If the parties fail to agree, the Agency procurement officer shall set an amount subject to the CONTRACTOR'S rights under chapter 3-126, HAR. The STATE may withhold from amounts due the CONTRACTOR such sums as the Agency procurement officer deems to be necessary to protect the STATE against loss because of outstanding liens or claims and to reimburse the STATE for the excess costs expected to be incurred by the STATE in procuring similar goods and services.
- d. Excuse for nonperformance or delayed performance. The CONTRACTOR shall not be in default by reason of any failure in performance of this Contract in accordance with its terms, including any failure by the CONTRACTOR to make progress in the prosecution of the performance hereunder which endangers such performance, if the CONTRACTOR has notified the Agency procurement officer within fifteen (15) days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of a public enemy; acts of the State and any other governmental body in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, the CONTRACTOR shall not be deemed to be in default, unless the goods and services to be furnished by the subcontractor were reasonably obtainable from other sources in sufficient time to permit the CONTRACTOR to meet the requirements of the Contract. Upon request of the CONTRACTOR, the Agency procurement officer shall ascertain the facts and extent of such failure, and, if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the CONTRACTOR'S progress and performance would have met the terms of the Contract, the delivery schedule shall be revised accordingly, subject to the rights of the STATE under this Contract. As used in this paragraph, the term "subcontractor" means subcontractor at any tier.
- e. Erroneous termination for default. If, after notice of termination of the CONTRACTOR'S right to proceed under this paragraph, it is determined for any reason that the CONTRACTOR was not in default under this paragraph, or that the delay was excusable under the provisions of subparagraph 13d, "Excuse for nonperformance or delayed performance," the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to paragraph 14.
- f. Additional rights and remedies. The rights and remedies provided in this paragraph are in addition to any other rights and remedies provided by law or under this Contract.

14. Termination for Convenience.

- a. Termination. The Agency procurement officer may, when the interests of the STATE so require, terminate this Contract in whole or in part, for the convenience of the STATE. The Agency procurement officer shall give written notice of the termination to the CONTRACTOR specifying the part of the Contract terminated and when termination becomes effective.
- b. CONTRACTOR'S obligations. The CONTRACTOR shall incur no further obligations in connection with the terminated performance and on the date(s) set in the notice of termination the CONTRACTOR will stop performance to the extent specified. The CONTRACTOR shall also terminate outstanding orders and subcontracts as they relate to the terminated performance. The CONTRACTOR shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated performance subject to the STATE'S approval. The Agency procurement officer may direct the CONTRACTOR to assign the CONTRACTOR'S right, title, and interest under terminated orders or subcontracts to the STATE. The CONTRACTOR must still complete the performance not terminated by the notice of termination and may incur obligations as necessary to do so.

- c. Right to goods and work product. The Agency procurement officer may require the CONTRACTOR to transfer title and deliver to the STATE in the manner and to the extent directed by the Agency procurement officer:

- (1) Any completed goods or work product; and
- (2) The partially completed goods and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing material") as the CONTRACTOR has specifically produced or specially acquired for the performance of the terminated part of this Contract.

The CONTRACTOR shall, upon direction of the Agency procurement officer, protect and preserve property in the possession of the CONTRACTOR in which the STATE has an interest. If the Agency procurement officer does not exercise this right, the CONTRACTOR shall use best efforts to sell such goods and manufacturing materials. Use of this paragraph in no way implies that the STATE has breached the Contract by exercise of the termination for convenience provision.

- d. Compensation.

- (1) The CONTRACTOR shall submit a termination claim specifying the amounts due because of the termination for convenience together with the cost or pricing data, submitted to the extent required by chapter 3-122, HAR, bearing on such claim. If the CONTRACTOR fails to file a termination claim within one year from the effective date of termination, the Agency procurement officer may pay the CONTRACTOR, if at all, an amount set in accordance with subparagraph 14d(3) below.
- (2) The Agency procurement officer and the CONTRACTOR may agree to a settlement provided the CONTRACTOR has filed a termination claim supported by cost or pricing data submitted as required and that the settlement does not exceed the total Contract price plus settlement costs reduced by payments previously made by the STATE, the proceeds of any sales of goods and manufacturing materials under subparagraph 14c, and the Contract price of the performance not terminated.
- (3) Absent complete agreement under subparagraph 14d(2) the Agency procurement officer shall pay the CONTRACTOR the following amounts, provided payments agreed to under subparagraph 14d(2) shall not duplicate payments under this subparagraph for the following:
 - (A) Contract prices for goods or services accepted under the Contract;
 - (B) Costs incurred in preparing to perform and performing the terminated portion of the performance plus a fair and reasonable profit on such portion of the performance, such profit shall not include anticipatory profit or consequential damages, less amounts paid or to be paid for accepted goods or services; provided, however, that if it appears that the CONTRACTOR would have sustained a loss if the entire Contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;
 - (C) Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to subparagraph 14b. These costs must not include costs paid in accordance with subparagraph 14d(3)(B);
 - (D) The reasonable settlement costs of the CONTRACTOR, including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract and for the termination of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of this Contract. The total sum to be paid the CONTRACTOR under this subparagraph shall not exceed the

total Contract price plus the reasonable settlement costs of the CONTRACTOR reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph 14d(2), and the contract price of performance not terminated.

- (4) Costs claimed, agreed to, or established under subparagraphs 14d(2) and 14d(3) shall be in accordance with Chapter 3-123 (Cost Principles) of the Procurement Rules.

15. Claims Based on the Agency Procurement Officer's Actions or Omissions.

a. Changes in scope. If any action or omission on the part of the Agency procurement officer (which term includes the designee of such officer for purposes of this paragraph 15) requiring performance changes within the scope of the Contract constitutes the basis for a claim by the CONTRACTOR for additional compensation, damages, or an extension of time for completion, the CONTRACTOR shall continue with performance of the Contract in compliance with the directions or orders of such officials, but by so doing, the CONTRACTOR shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

- (1) Written notice required. The CONTRACTOR shall give written notice to the Agency procurement officer:

- (A) Prior to the commencement of the performance involved, if at that time the CONTRACTOR knows of the occurrence of such action or omission;

- (B) Within thirty (30) days after the CONTRACTOR knows of the occurrence of such action or omission, if the CONTRACTOR did not have such knowledge prior to the commencement of the performance; or

- (C) Within such further time as may be allowed by the Agency procurement officer in writing.

- (2) Notice content. This notice shall state that the CONTRACTOR regards the act or omission as a reason which may entitle the CONTRACTOR to additional compensation, damages, or an extension of time. The Agency procurement officer, upon receipt of such notice, may rescind such action, remedy such omission, or take such other steps as may be deemed advisable in the discretion of the Agency procurement officer;

- (3) Basis must be explained. The notice required by subparagraph 15a(1) describes as clearly as practicable at the time the reasons why the CONTRACTOR believes that additional compensation, damages, or an extension of time may be remedies to which the CONTRACTOR is entitled; and

- (4) Claim must be justified. The CONTRACTOR must maintain and, upon request, make available to the Agency procurement officer within a reasonable time, detailed records to the extent practicable, and other documentation and evidence satisfactory to the STATE, justifying the claimed additional costs or an extension of time in connection with such changes.

b. CONTRACTOR not excused. Nothing herein contained, however, shall excuse the CONTRACTOR from compliance with any rules or laws precluding any state officers and CONTRACTOR from acting in collusion or bad faith in issuing or performing change orders which are clearly not within the scope of the Contract.

c. Price adjustment. Any adjustment in the price made pursuant to this paragraph shall be determined in accordance with the price adjustment provision of this Contract.

16. Costs and Expenses. Any reimbursement due the CONTRACTOR for per diem and transportation expenses under this Contract shall be subject to chapter 3-123 (Cost Principles), HAR, and the following guidelines:

- a. Reimbursement for air transportation shall be for actual cost or coach class air fare, whichever is less.
- b. Reimbursement for ground transportation costs shall not exceed the actual cost of renting an intermediate-sized vehicle.
- c. Unless prior written approval of the HOPA is obtained, reimbursement for subsistence allowance (i.e., hotel and meals, etc.) shall not exceed the applicable daily authorized rates for inter-island or out-of-state travel that are set forth in the current Governor's Executive Order authorizing adjustments in salaries and benefits for state officers and employees in the executive branch who are excluded from collective bargaining coverage.

17. Payment Procedures; Final Payment; Tax Clearance.

- a. Original invoices required. All payments under this Contract shall be made only upon submission by the CONTRACTOR of original invoices specifying the amount due and certifying that services requested under the Contract have been performed by the CONTRACTOR according to the Contract.
- b. Subject to available funds. Such payments are subject to availability of funds and allotment by the Director of Finance in accordance with chapter 37, HRS. Further, all payments shall be made in accordance with and subject to chapter 40, HRS.
- c. Prompt payment.
 - (1) Any money, other than retainage, paid to the CONTRACTOR shall be disbursed to subcontractors within ten (10) days after receipt of the money in accordance with the terms of the subcontract; provided that the subcontractor has met all the terms and conditions of the subcontract and there are no bona fide disputes; and
 - (2) Upon final payment to the CONTRACTOR, full payment to the subcontractor, including retainage, shall be made within ten (10) days after receipt of the money; provided that there are no bona fide disputes over the subcontractor's performance under the subcontract.
- d. Final payment. Final payment under this Contract shall be subject to sections 103-53 and 103D-328, HRS, which require a tax clearance from the Director of Taxation, State of Hawaii, and the Internal Revenue Service, U.S. Department of Treasury, showing that all delinquent taxes, if any, levied or accrued under state law and the Internal Revenue Code of 1986, as amended, against the CONTRACTOR have been paid. Further, in accordance with section 3-122-112, HAR, CONTRACTOR shall provide a certificate affirming that the CONTRACTOR has remained in compliance with all applicable laws as required by this section.

18. Federal Funds. If this Contract is payable in whole or in part from federal funds, CONTRACTOR agrees that, as to the portion of the compensation under this Contract to be payable from federal funds, the CONTRACTOR shall be paid only from such funds received from the federal government, and shall not be paid from any other funds. Failure of the STATE to receive anticipated federal funds shall not be considered a breach by the STATE or an excuse for nonperformance by the CONTRACTOR.

19. Modifications of Contract.

- a. In writing. Any modification, alteration, amendment, change, or extension of any term, provision, or condition of this Contract permitted by this Contract shall be made by written amendment to this Contract, signed by the CONTRACTOR and the STATE, provided that change orders shall be made in accordance with paragraph 20 herein.
- b. No oral modification. No oral modification, alteration, amendment, change, or extension of any term, provision, or condition of this Contract shall be permitted.

- c. Agency procurement officer. By written order, at any time, and without notice to any surety, the Agency procurement officer may unilaterally order of the CONTRACTOR:
 - (A) Changes in the work within the scope of the Contract; and
 - (B) Changes in the time of performance of the Contract that do not alter the scope of the Contract work.
 - d. Adjustments of price or time for performance. If any modification increases or decreases the CONTRACTOR'S cost of, or the time required for, performance of any part of the work under this Contract, an adjustment shall be made and this Contract modified in writing accordingly. Any adjustment in contract price made pursuant to this clause shall be determined, where applicable, in accordance with the price adjustment clause of this Contract or as negotiated.
 - e. Claim barred after final payment. No claim by the CONTRACTOR for an adjustment hereunder shall be allowed if written modification of the Contract is not made prior to final payment under this Contract.
 - f. Claims not barred. In the absence of a written contract modification, nothing in this clause shall be deemed to restrict the CONTRACTOR'S right to pursue a claim under this Contract or for a breach of contract.
 - g. Head of the purchasing agency approval. If this is a professional services contract awarded pursuant to section 103D-303 or 103D-304, HRS, any modification, alteration, amendment, change, or extension of any term, provision, or condition of this Contract which increases the amount payable to the CONTRACTOR by at least \$25,000.00 and ten per cent (10%) or more of the initial contract price, must receive the prior approval of the head of the purchasing agency.
 - h. Tax clearance. The STATE may, at its discretion, require the CONTRACTOR to submit to the STATE, prior to the STATE'S approval of any modification, alteration, amendment, change, or extension of any term, provision, or condition of this Contract, a tax clearance from the Director of Taxation, State of Hawaii, and the Internal Revenue Service, U.S. Department of Treasury, showing that all delinquent taxes, if any, levied or accrued under state law and the Internal Revenue Code of 1986, as amended, against the CONTRACTOR have been paid.
 - i. Sole source contracts. Amendments to sole source contracts that would change the original scope of the Contract may only be made with the approval of the CPO. Annual renewal of a sole source contract for services should not be submitted as an amendment.
20. Change Order. The Agency procurement officer may, by a written order signed only by the STATE, at any time, and without notice to any surety, and subject to all appropriate adjustments, make changes within the general scope of this Contract in any one or more of the following:
- (1) Drawings, designs, or specifications, if the goods or services to be furnished are to be specially provided to the STATE in accordance therewith;
 - (2) Method of delivery; or
 - (3) Place of delivery.
- a. Adjustments of price or time for performance. If any change order increases or decreases the CONTRACTOR'S cost of, or the time required for, performance of any part of the work under this Contract, whether or not changed by the order, an adjustment shall be made and the Contract modified in writing accordingly. Any adjustment in the Contract price made pursuant to this provision shall be determined in accordance with the price adjustment provision of this Contract. Failure of the parties to agree to an adjustment shall not excuse the CONTRACTOR from proceeding with the Contract as changed, provided that the Agency procurement officer promptly and duly makes the provisional adjustments in payment or time for performance as may be reasonable. By

proceeding with the work, the CONTRACTOR shall not be deemed to have prejudiced any claim for additional compensation, or any extension of time for completion.

- b. Time period for claim. Within ten (10) days after receipt of a written change order under subparagraph 20a, unless the period is extended by the Agency procurement officer in writing, the CONTRACTOR shall respond with a claim for an adjustment. The requirement for a timely written response by CONTRACTOR cannot be waived and shall be a condition precedent to the assertion of a claim.
- c. Claim barred after final payment. No claim by the CONTRACTOR for an adjustment hereunder shall be allowed if a written response is not given prior to final payment under this Contract.
- d. Other claims not barred. In the absence of a change order, nothing in this paragraph 20 shall be deemed to restrict the CONTRACTOR'S right to pursue a claim under the Contract or for breach of contract.

21. Price Adjustment.

- a. Price adjustment. Any adjustment in the contract price pursuant to a provision in this Contract shall be made in one or more of the following ways:
 - (1) By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;
 - (2) By unit prices specified in the Contract or subsequently agreed upon;
 - (3) By the costs attributable to the event or situation covered by the provision, plus appropriate profit or fee, all as specified in the Contract or subsequently agreed upon;
 - (4) In such other manner as the parties may mutually agree; or
 - (5) In the absence of agreement between the parties, by a unilateral determination by the Agency procurement officer of the costs attributable to the event or situation covered by the provision, plus appropriate profit or fee, all as computed by the Agency procurement officer in accordance with generally accepted accounting principles and applicable sections of chapters 3-123 and 3-126, HAR.
- b. Submission of cost or pricing data. The CONTRACTOR shall provide cost or pricing data for any price adjustments subject to the provisions of chapter 3-122, HAR.

22. Variation in Quantity for Definite Quantity Contracts. Upon the agreement of the STATE and the CONTRACTOR, the quantity of goods or services, or both, if a definite quantity is specified in this Contract, may be increased by a maximum of ten per cent (10%); provided the unit prices will remain the same except for any price adjustments otherwise applicable; and the Agency procurement officer makes a written determination that such an increase will either be more economical than awarding another contract or that it would not be practical to award another contract.

23. Changes in Cost-Reimbursement Contract. If this Contract is a cost-reimbursement contract, the following provisions shall apply:

- a. The Agency procurement officer may at any time by written order, and without notice to the sureties, if any, make changes within the general scope of the Contract in any one or more of the following:
 - (1) Description of performance (Attachment 1);
 - (2) Time of performance (i.e., hours of the day, days of the week, etc.);
 - (3) Place of performance of services;

- (4) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the STATE in accordance with the drawings, designs, or specifications;
 - (5) Method of shipment or packing of supplies; or
 - (6) Place of delivery.
- b. If any change causes an increase or decrease in the estimated cost of, or the time required for performance of, any part of the performance under this Contract, whether or not changed by the order, or otherwise affects any other terms and conditions of this Contract, the Agency procurement officer shall make an equitable adjustment in the (1) estimated cost, delivery or completion schedule, or both; (2) amount of any fixed fee; and (3) other affected terms and shall modify the Contract accordingly.
 - c. The CONTRACTOR must assert the CONTRACTOR'S rights to an adjustment under this provision within thirty (30) days from the day of receipt of the written order. However, if the Agency procurement officer decides that the facts justify it, the Agency procurement officer may receive and act upon a proposal submitted before final payment under the Contract.
 - d. Failure to agree to any adjustment shall be a dispute under paragraph 11 of this Contract. However, nothing in this provision shall excuse the CONTRACTOR from proceeding with the Contract as changed.
 - e. Notwithstanding the terms and conditions of subparagraphs 23a and 23b, the estimated cost of this Contract and, if this Contract is incrementally funded, the funds allotted for the performance of this Contract, shall not be increased or considered to be increased except by specific written modification of the Contract indicating the new contract estimated cost and, if this contract is incrementally funded, the new amount allotted to the contract.
24. Confidentiality of Material.
- a. All material given to or made available to the CONTRACTOR by virtue of this Contract, which is identified as proprietary or confidential information, will be safeguarded by the CONTRACTOR and shall not be disclosed to any individual or organization without the prior written approval of the STATE.
 - b. All information, data, or other material provided by the CONTRACTOR to the STATE shall be subject to the Uniform Information Practices Act, chapter 92F, HRS.
25. Publicity. The CONTRACTOR shall not refer to the STATE, or any office, agency, or officer thereof, or any state employee, including the HOPA, the CPO, the Agency procurement officer, or to the services or goods, or both, provided under this Contract, in any of the CONTRACTOR'S brochures, advertisements, or other publicity of the CONTRACTOR. All media contacts with the CONTRACTOR about the subject matter of this Contract shall be referred to the Agency procurement officer.
26. Ownership Rights and Copyright. The STATE shall have complete ownership of all material, both finished and unfinished, which is developed, prepared, assembled, or conceived by the CONTRACTOR pursuant to this Contract, and all such material shall be considered "works made for hire." All such material shall be delivered to the STATE upon expiration or termination of this Contract. The STATE, in its sole discretion, shall have the exclusive right to copyright any product, concept, or material developed, prepared, assembled, or conceived by the CONTRACTOR pursuant to this Contract.
27. Liens and Warranties. Goods provided under this Contract shall be provided free of all liens and provided together with all applicable warranties, or with the warranties described in the Contract documents, whichever are greater.

28. Audit of Books and Records of the CONTRACTOR. The STATE may, at reasonable times and places, audit the books and records of the CONTRACTOR, prospective contractor, subcontractor, or prospective subcontractor which are related to:
- a. The cost or pricing data, and
 - b. A state contract, including subcontracts, other than a firm fixed-price contract.

29. Cost or Pricing Data. Cost or pricing data must be submitted to the Agency procurement officer and timely certified as accurate for contracts over \$100,000 unless the contract is for a multiple-term or as otherwise specified by the Agency procurement officer. Unless otherwise required by the Agency procurement officer, cost or pricing data submission is not required for contracts awarded pursuant to competitive sealed bid procedures.

If certified cost or pricing data are subsequently found to have been inaccurate, incomplete, or noncurrent as of the date stated in the certificate, the STATE is entitled to an adjustment of the contract price, including profit or fee, to exclude any significant sum by which the price, including profit or fee, was increased because of the defective data. It is presumed that overstated cost or pricing data increased the contract price in the amount of the defect plus related overhead and profit or fee. Therefore, unless there is a clear indication that the defective data was not used or relied upon, the price will be reduced in such amount.

30. Audit of Cost or Pricing Data. When cost or pricing principles are applicable, the STATE may require an audit of cost or pricing data.

31. Records Retention.

- (1) Upon any termination of this Contract or as otherwise required by applicable law, CONTRACTOR shall, pursuant to chapter 487R, HRS, destroy all copies (paper or electronic form) of personal information received from the STATE.
- (2) The CONTRACTOR and any subcontractors shall maintain the files, books, and records that relate to the Contract, including any personal information created or received by the CONTRACTOR on behalf of the STATE, and any cost or pricing data, for at least three (3) years after the date of final payment under the Contract. The personal information shall continue to be confidential and shall only be disclosed as permitted or required by law. After the three (3) year, or longer retention period as required by law has ended, the files, books, and records that contain personal information shall be destroyed pursuant to chapter 487R, HRS or returned to the STATE at the request of the STATE.

32. Antitrust Claims. The STATE and the CONTRACTOR recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, the CONTRACTOR hereby assigns to STATE any and all claims for overcharges as to goods and materials purchased in connection with this Contract, except as to overcharges which result from violations commencing after the price is established under this Contract and which are not passed on to the STATE under an escalation clause.

33. Patented Articles. The CONTRACTOR shall defend, indemnify, and hold harmless the STATE, and its officers, employees, and agents from and against all liability, loss, damage, cost, and expense, including all attorneys fees, and all claims, suits, and demands arising out of or resulting from any claims, demands, or actions by the patent holder for infringement or other improper or unauthorized use of any patented article, patented process, or patented appliance in connection with this Contract. The CONTRACTOR shall be solely responsible for correcting or curing to the satisfaction of the STATE any such infringement or improper or unauthorized use, including, without limitation: (a) furnishing at no cost to the STATE a substitute article, process, or appliance acceptable to the STATE, (b) paying royalties or other required payments to the patent holder, (c) obtaining proper authorizations or releases from the patent holder, and (d) furnishing such security to or making such arrangements with the patent holder as may be necessary to correct or cure any such infringement or improper or unauthorized use.

34. Governing Law. The validity of this Contract and any of its terms or provisions, as well as the rights and duties of the parties to this Contract, shall be governed by the laws of the State of Hawaii. Any action at law or in equity to enforce or interpret the provisions of this Contract shall be brought in a state court of competent jurisdiction in Honolulu, Hawaii.
35. Compliance with Laws. The CONTRACTOR shall comply with all federal, state, and county laws, ordinances, codes, rules, and regulations, as the same may be amended from time to time, that in any way affect the CONTRACTOR'S performance of this Contract.
36. Conflict Between General Conditions and Procurement Rules. In the event of a conflict between the General Conditions and the procurement rules, the procurement rules in effect on the date this Contract became effective shall control and are hereby incorporated by reference.
37. Entire Contract. This Contract sets forth all of the agreements, conditions, understandings, promises, warranties, and representations between the STATE and the CONTRACTOR relative to this Contract. This Contract supersedes all prior agreements, conditions, understandings, promises, warranties, and representations, which shall have no further force or effect. There are no agreements, conditions, understandings, promises, warranties, or representations, oral or written, express or implied, between the STATE and the CONTRACTOR other than as set forth or as referred to herein.
38. Severability. In the event that any provision of this Contract is declared invalid or unenforceable by a court, such invalidity or unenforceability shall not affect the validity or enforceability of the remaining terms of this Contract.
39. Waiver. The failure of the STATE to insist upon the strict compliance with any term, provision, or condition of this Contract shall not constitute or be deemed to constitute a waiver or relinquishment of the STATE'S right to enforce the same in accordance with this Contract. The fact that the STATE specifically refers to one provision of the procurement rules or one section of the Hawaii Revised Statutes, and does not include other provisions or statutory sections in this Contract shall not constitute a waiver or relinquishment of the STATE'S rights or the CONTRACTOR'S obligations under the procurement rules or statutes.
40. Pollution Control. If during the performance of this Contract, the CONTRACTOR encounters a "release" or a "threatened release" of a reportable quantity of a "hazardous substance," "pollutant," or "contaminant" as those terms are defined in section 128D-1, HRS, the CONTRACTOR shall immediately notify the STATE and all other appropriate state, county, or federal agencies as required by law. The Contractor shall take all necessary actions, including stopping work, to avoid causing, contributing to, or making worse a release of a hazardous substance, pollutant, or contaminant, and shall promptly obey any orders the Environmental Protection Agency or the state Department of Health issues in response to the release. In the event there is an ensuing cease-work period, and the STATE determines that this Contract requires an adjustment of the time for performance, the Contract shall be modified in writing accordingly.
41. Campaign Contributions. The CONTRACTOR is hereby notified of the applicability of 11-355, HRS, which states that campaign contributions are prohibited from specified state or county government contractors during the terms of their contracts if the contractors are paid with funds appropriated by a legislative body.
42. Confidentiality of Personal Information.
- a. Definitions.
- "Personal information" means an individual's first name or first initial and last name in combination with any one or more of the following data elements, when either name or data elements are not encrypted:
- (1) Social security number;
 - (2) Driver's license number or Hawaii identification card number; or

- (3) Account number, credit or debit card number, access code, or password that would permit access to an individual's financial information.

Personal information does not include publicly available information that is lawfully made available to the general public from federal, state, or local government records.

"Technological safeguards" means the technology and the policy and procedures for use of the technology to protect and control access to personal information.

b. Confidentiality of Material.

- (1) All material given to or made available to the CONTRACTOR by the STATE by virtue of this Contract which is identified as personal information, shall be safeguarded by the CONTRACTOR and shall not be disclosed without the prior written approval of the STATE.
- (2) CONTRACTOR agrees not to retain, use, or disclose personal information for any purpose other than as permitted or required by this Contract.
- (3) CONTRACTOR agrees to implement appropriate "technological safeguards" that are acceptable to the STATE to reduce the risk of unauthorized access to personal information.
- (4) CONTRACTOR shall report to the STATE in a prompt and complete manner any security breaches involving personal information.
- (5) CONTRACTOR agrees to mitigate, to the extent practicable, any harmful effect that is known to CONTRACTOR because of a use or disclosure of personal information by CONTRACTOR in violation of the requirements of this paragraph.
- (6) CONTRACTOR shall complete and retain a log of all disclosures made of personal information received from the STATE, or personal information created or received by CONTRACTOR on behalf of the STATE.

c. Security Awareness Training and Confidentiality Agreements.

- (1) CONTRACTOR certifies that all of its employees who will have access to the personal information have completed training on security awareness topics relating to protecting personal information.
- (2) CONTRACTOR certifies that confidentiality agreements have been signed by all of its employees who will have access to the personal information acknowledging that:
 - (A) The personal information collected, used, or maintained by the CONTRACTOR will be treated as confidential;
 - (B) Access to the personal information will be allowed only as necessary to perform the Contract; and
 - (C) Use of the personal information will be restricted to uses consistent with the services subject to this Contract.

d. Termination for Cause. In addition to any other remedies provided by this Contract, if the STATE learns of a material breach by CONTRACTOR of this paragraph by CONTRACTOR, the STATE may at its sole discretion:

- (1) Provide an opportunity for the CONTRACTOR to cure the breach or end the violation; or
- (2) Immediately terminate this Contract.

In either instance, the CONTRACTOR and the STATE shall follow chapter 487N, HRS, with respect to notification of a security breach of personal information.

e. Records Retention.

- (1) Upon any termination of this Contract or as otherwise required by applicable law, CONTRACTOR shall, pursuant to chapter 487R, HRS, destroy all copies (paper or electronic form) of personal information received from the STATE.
- (2) The CONTRACTOR and any subcontractors shall maintain the files, books, and records that relate to the Contract, including any personal information created or received by the CONTRACTOR on behalf of the STATE, and any cost or pricing data, for at least three (3) years after the date of final payment under the Contract. The personal information shall continue to be confidential and shall only be disclosed as permitted or required by law. After the three (3) year, or longer retention period as required by law has ended, the files, books, and records that contain personal information shall be destroyed pursuant to chapter 487R, HRS or returned to the STATE at the request of the STATE.

EXHIBIT A

**DEPARTMENT OF EDUCATION
CERTIFICATE OF ELIGIBILITY
TO CLAIM PREFERENCE
AS A HAWAII SOFTWARE DEVELOPMENT BUSINESS
AS DEFINED BY SECTION 103D-1006, HRS**

I, _____
(Authorized Officer's Name)

_____ of _____
(Office or Position Held) (Name of Offeror)

certify that the principal place of business or ancillary headquarters of _____

(Name of offeror)

is located in the State of Hawaii at the following address:

and that the above named office was opened on the following date: _____

and that eighty percent (80%) of the _____
(Name of Offeror)

employees who will be performing the work on the software development project described in
RFP/IFB No. _____ are domiciled in Hawaii. To the best of my knowledge, the
names and residence addresses of the employees who will perform the work are as follows:

_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)

EXHIBIT A

_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)
_____ (Name)	_____ (Address)

(Attach a continuation sheet if necessary.)

I further certify that any changes in the personnel identified above shall be reported to the contact person identified in the RFP/IFB.

Signature of Authorized Officer

Date