Next Generation Scoring

Blending human and computer scoring to create a best in class solution

Grading individual essays and constructed-response items is hard work while students today challenge their results more than ever before. Turn your grading over to CRASE, the proven automated scoring engine, to meticulously score student-written responses while providing you cost savings and faster turnaround than hand scoring alone.

Your test results can be:

- Fast so you can take action
- Consistent based on your rubric
- Accurate with errors eliminated
- Reliable and trusted
- Grouped for easier human review

CRASE® is the technology-based, scientifically engineered solution that immediately scores students’ submissions to constructed response (short-answer) test items and longer essays. CRASE is proven to deliver accurate, reliable scores and achieve critical cost and time savings when compared with hand scoring.

- Reduce the personnel, facilities, and training cost associated with hand scoring
- Include or retain constructed-response items in your assessments more affordably
- Reduce teachers’ grading burden
- Provide students with feedback as they revise their response and enable students to submit their best response for teacher review

Emulating Human Scoring

The CRASE engine analyzes a sample of human-scored student responses to produce a model that emulates human scoring behavior.

Responses scored by CRASE flow through three stages:

1. Preprocessing: standardizes responses to prepare them for the later scoring stages
2. Feature extraction: analyzes the response using Natural Language Processing tools to produce a set of numeric features that represent key elements of the rubric
3. Score prediction: applies a statistical or machine learning model to feature values to produce a rubric-based score

Scoring Writing Prompts

In analyzing student essays, CRASE looks for information based on the six traits aligned to Education Northwest’s 6+1 Trait® Writing framework. These traits can be configured in different ways to reflect local standards. CRASE is able to score these traits based on your specifications:

- Ideas
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions

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CRASE is a single-scoring platform that has four scoring modules that can be combined to produce the best possible score.

- Non-Attempt Scorer Catches non-attempts such as gibberish or off-topic responses
- Constructed Response Scorer Provides feedback on constructed response items yielding answers up to a paragraph in length
- Cloze Scorer Supports cloze items or oneword/phrase responses
- Essay Scorer Evaluates longer-form essay responses

You receive with CRASE
- Custom engine calibration with setup
- Cloud-hosted solution
- 24/7 on-demand scoring
- User login to access to help materials
- Data archived throughout contract
- Integration with test delivery platform via API
- Industry-standard security measures

Additional Capabilities
- Engine training for additional items/prompts
- Research services for engine training
- Technology support for integration
- Item review for machine scoreability
- Item writer training for automated scoring optimization
- Proof-of-concept studies
- Human rater reliability studies
- Custom reporting and monitoring options

FOR MORE INFORMATION, PLEASE CONTACT CRASE@ACT.ORG