

Intelligent Technology-Enabled Exam Development: Quicker to Quality Items with i-SFT

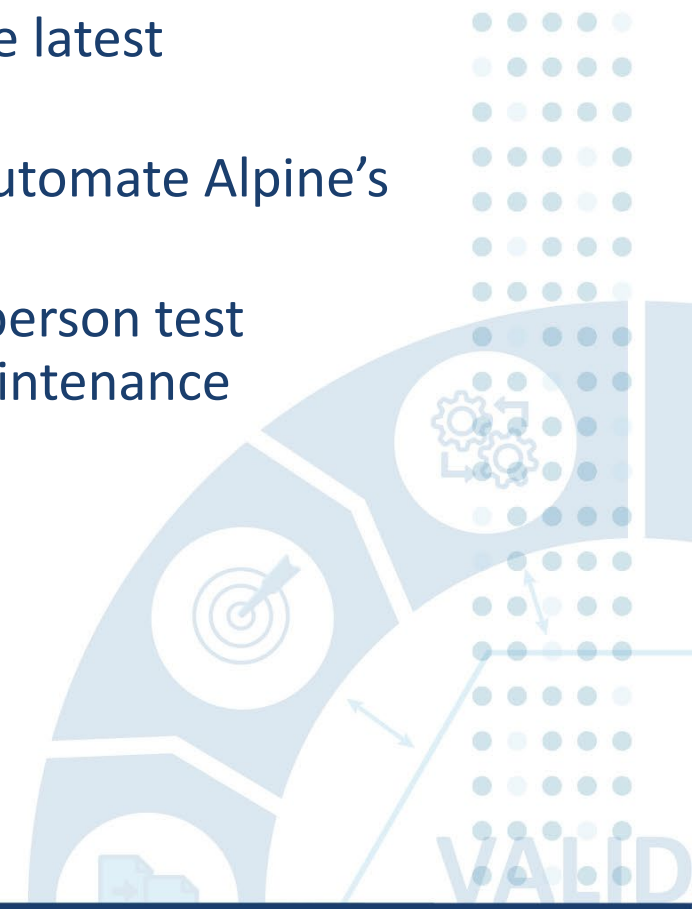
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Alpine is your partner
to help you...

- Capitalize on technology to enhance the people-powered exam development process
- Decrease time-to-market for new exams and exam refreshes
- Reduce SME (subject matter expert) time commitments while increasing the efficacy of their efforts
- Increase validity evidence for your exams

- Intelligent End-to-End Solutions – Better, Faster, and More Cost Effective

- A modernized approach to exam development that incorporates the latest technological advances without sacrificing psychometric quality
- Will provide a full suite of components that can be customized to automate Alpine's high-quality psychometric workflows
- Optimized for both asynchronous and synchronous remote and in-person test design, blueprint and item development, exam publication, and maintenance



i-SFT (eye-sift)- Item Screening and Feedback Tool

- Generate better items faster, more efficiently, and with increased consistency
- Automatically generate customized feedback on exam items
- Incorporates Alpine's psychometric standards and exam development best practices
- Allows for incorporation of custom requirements, including branding and style preferences



Example 1

Is it okay to cook food in the oven while it is pre-heating? Why or why not?

- A. Yes, it will decrease total cooking time
- B. Yes, food will cook more thoroughly
- C. No, food may get overcooked
- D. No, it will increase the total cooking time.

i-SFT Feedback

- Revise to avoid yes/no question.
- Revise to remove "Why or why not" in the stem

Example 2

When might it be appropriate to use a sousvide cooking method?

- A. Need to use high direct heat to cook food quickly
- B. Need to use dry heat where hot air envelops the food
- C. Need to use water to cook food at an extremely accurate temperature
- D. Need to use high pressure to cook food evenly

i-SFT Feedback

- Revise to remove subjective language.
- Move repetitive language in options to stem (or remove).
- Grammar/Spelling: misspelled word in stem (“sousvide”)

Example 3

A chef must cook three main course dishes for a single event: prime rib, chicken marsala, and trout almandine. She needs to ensure the chicken and trout don't overcook, and the prime rib needs to be kept at medium rare. What should she do?

- A. Create a cooking timeline
- B. Set a mis en place
- C. Start the prime rib in the sous vide first, then 2 hours later start the chicken marsala in the oven, and cook the trout on the stovetop last
- D. None of the above

i-SFT Feedback

- Review the stem for the pronoun “she” and replace with a role title.
- Revise to remove “none of the above” in the options.
- Revise to make sure all options are similar in length.

Advanced Reporting Options via i-SFT

- Formative Item Feedback and Progress Report
- Item Productivity Summary Statistics Report
- SME Productivity Summary Statistics Report



Formative Item Feedback and Progress Report

- Item-level feedback for each SME along with associated item screening, psychometric review, and grammar flags, productivity information, and item writing assignment gap analyses
- Summary statistics highlighting progress towards development goals and common issues across the SME panel



Item Productivity Summary Statistics Report

- Summative report of item writing efficacy
- Provides insight into overall development effort efficiency and output quality, as well as document areas for additional focused item writing training.



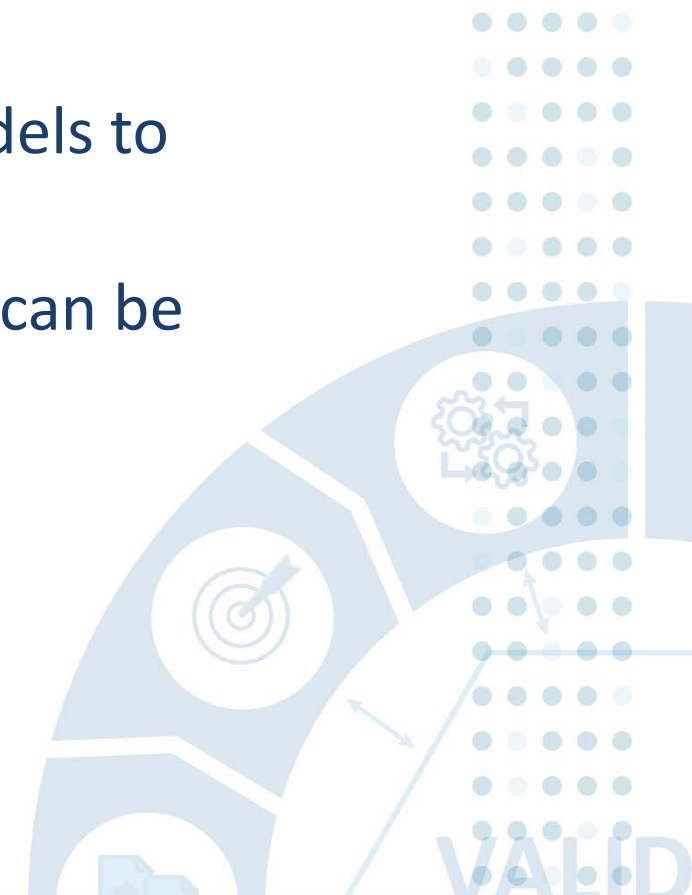
SME Productivity Summary Statistics Report

- Summative report containing individualized subject matter expert (SME) feedback
- Provides personalized insight into SME-specific development effort efficiency and output quality, as well as document areas for additional focused item writing training and/or provide recommendations for future involvement.



Other Technology-Enabled Efforts in Development

- Employing content domain-specific NLP models to generate items (templates, stems and options, distractors)
- Using AI and advance NLP (natural language processing) models to generate domain analysis documentation
- Evaluating what aspects of congruence and accuracy review can be automated with heuristic logic and/or AI
- Many others!



We are committed to helping our clients do more with less—

- Using technological advancements responsibly to reduce SME time
- Optimizing synchronous and asynchronous item development with groundbreaking tools
- Challenging the paradigm of “traditional” exam development to build even stronger validity arguments



Questions?
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VALIDITY
Fair, Reliable, Secure

