Including Multiple Measures in a Placement Program by Employing ACCUPLACER Functionality
First—a little context....

First, a little context for this presentation.
An older model of course placement emphasized the test scores, often to the exclusion of any other information. Students took placement tests, with little to no preparation or understanding as to how the results would be used, as part of a speedy registration process that minimized multiple trips to campus. The idea was to complete all steps necessary for registration as quickly as possible. At the same time, it wasn’t always clear how placement cut scores were determined, and even within the same college or university system, the same test score could result in very different recommendations.

The newer model of course placement starts with the premise that a test score is simply one piece of information available, and that in some instances, students have already documented college readiness and don’t need a placement test at all. Where a test is needed, students are strongly encouraged to prepare—or even required to participate in a mandatory assessment orientation. Finally the resulting scores are used in conjunction with other available information, particularly when a student might fall within a few points of the required cut score for a particular course.
In looking at designing or revising a placement program, it’s important to consider the latest research and determine how those results apply at the local level. Is it possible to develop exemption policies for the recent high school graduate or even the returning adult—and what information is required to demonstrate that exemption? Some examples of exemption policies include using HS GPA and HS Transcripts, HS Exit Exam scores, evaluating HS Course Taking Patterns or Employing a Guided Self-Placement model. Additionally, are multiple measures going to be employed for those students who DO test? Do faculty need diagnostic information, and what kind of preparation is going to be required or provided for the student? And how does all of this impact relationships with local schools?
In evaluating a potential placement instrument, these are some common questions and concerns. Does it provide diagnostics where needed? Do we have a plan for using the diagnostics? Are the instrument’s test administration requirements logistically feasible? Faculty can have very different needs when compared to student services and/or testing, and how are those to be balanced? What support is available, not only for the initial implementation, but on-going support (both technical and policy)? What student preparation and engagement options exist—and do those have a cost? How flexible is the instrument—will it be able to meet not only today’s needs, but evolve with the institution’s plans?
It’s important to define multiple measures in a placement program context. Some institutions are focusing on exemption policies as their first step in designing or revising their placement program. But simply exempting a student from a placement test requirement is not necessarily using “multiple measures.” For example, a HS GPA might be used to waive the testing requirement, but that is still ONE measure being substituted for another. However, using a HS GPA along with perhaps the number of years of math courses to exempt a student IS a multiple measure.

For students not immediately exempt, the same information can still be combined with the test score. Or additional information can be gathered during the testing session itself and used to influence the placement recommendation.

Some examples of this “additional information” include HS GPA, Years out of school, HS grades in a particular course/courses, course taking patterns, self reported information, or other test scores such as ACT/SAT, PARCC, Smarter Balanced, Advanced Placement, CLEP, or state high school exit exams.
Multiple measures research is varied and on-going. Here are three websites where institutions can review available research and discussions.

The Research and Planning Group for California Community Colleges is in the process of evaluating the use of Non-Cognitive Variables in placement programs and a number of useful materials can be found on their website RPGroup.org under their Multiple Measures Project section.

Research for Action has available a document titled Examining Reforms in Postsecondary Student Placement Policies on their website researchforaction.org.

And WestEd at wested.org has posted Core to College Evaluation—Exploring the Use of Multiple Measures for Placement into College-Level Courses.

The Community College Research Center has also done extensive research, with a number of current and completed projects around student assessment and placement.
How does ACCUPLACER incorporate multiple measures?
While a number of institutions still rely on test scores alone, ACCUPLACER functionality allows the inclusion of background questions, major/program indicators, user defined fields, and composite scores in placement recommendations.
Many institutions are routinely asking a handful of background questions as part of the testing session. What is often unclear is how the resulting information is used, but the ACCUPLACER platform does allow this information to be incorporated into placement decisions.

Background questions should be reserved for information that is not captured during the usual admissions process or that will potentially impact the placement recommendation. Institutions should be thoughtful and deliberate about adding background questions and consider carefully the number of questions to be asked.

Additionally, the platform allows an institution to capture student intent in regards to major or program of study and include that information as well.
Through functionality called User Defined Fields, institutions can import additional data elements. These data elements can include HS GPA, other test scores, course grades—practically anything the institution might want.

And through the Composite Scoring tool, institutions can standardize placement components into a single formula for easier use within the platform.
As mentioned earlier, the ACCUPLACER platform allows institutions to ask up to 99 background questions before, between or after the subject area test. However, we caution institutions to limit the number of questions to what is truly relevant, so as not to fatigue the student. Keep in mind that no subject area test exceeds 40 questions (diagnostic assessments are each 40 questions) and most placement tests are around 20 questions. Be careful about asking more background questions than the student sees during the actual testing session.

Sometimes institutions want to ask questions before having the answers impact placement recommendations. This is completely fine. There is often a period of data gathering (i.e., having students answer these questions) and analysis (do the answers appear to have any relationship to test scores and subsequent course grade?) before full implementation. Institutions can also determine if the answers to these questions should be weighted or unweighted in the placement rules.

However, institutions sometimes worry about the reliability and validity of student self-reported data. Research suggests students are reasonable accurate in they report, as is reflected in Self-Reported Data in Institutional Research: Review and Recommendations by Robert M. Gonyea. Additionally, this data is rarely given so much weight as to completely ignore the test scores themselves. Rather this data is used to influence placement recommendations falling within a “bubble zone.”
In this example, a state higher education system determined to ask standard background questions, with different answers resulting in more impact to the final score. The ACCUPLACER platform operates on a decimal system, so what you see here is really a 2% increase or even decrease from the actual test score. The first question Which of the following best describes your attitude towards study could result in a 2% “bump” in the score. The second question, Which of the following best describes you as a student, can earn an additional 3% bump. Total, a student could potentially see a 5% increase in his or her actual score. That means a score of 70 with a 5% increase becomes a 73.5 (rounded to a 74) and the placement rule relies on this weighted score to indicate the appropriate course.

Note that it is possible to weight responses both positively AND negatively, as determined by the institution.
In this example, the institution or system decided against having any negative impacts to the student’s actual test score. This *is* an institutional decision and should be part of discussion during the planning stages. Here a student was asked “How confident are you when computing percentage discounts or splitting a dinner check with friends?” The various responses have various weights, with “I’m confident doing the calculations in my head” having the highest weight of 3%. “I don’t feel confident my answer would be correct” has a 0 weight and so would not negatively affect the student’s actual test score.
It is important to note that institutions rarely, if ever, allow so much weighting as to have a student skip an entire course. In other words, a student whose original score indicated a Math 100 placement would never “earn” enough points from a multiple measures model to skip Math 101 and go straight into Math 102. The example here indicates the maximum weighting on a given test doesn’t change the final score by more than 3-6 points and few students answer all questions to maximum positive effect.
The ACCUPLACER system allows institutions to ask students their major or program of interest, degree plan intent, or even career interest during the testing session. This information can then be incorporated into the branching profiles (how the test behaves for each student) and the placement rules (how the test results and other information are used in placement).
User Defined Fields is hidden gem of the ACCUPLACER platform. This feature allows institutions to include other external data to the placement calculation—such as data gleaned from a transcript or other test scores. This data can be uploaded prior to testing, so that the placement calculation is made immediately upon completion, or can be added after the testing session. Adding the information *after* testing will require the course placement to be recalculated by the system, but this recalculation is easily done within the platform.
Composite scoring is a relatively new feature of the ACCUPLACER platform and allows institutions to move more quickly and fluidly through platform setup. In a situation where multiple scores are part of the placement calculation, as in the example above, institutions previously had to enter a row for each individual subject area assessment, make the necessary edits to the overall formula, and repeat with each and every course in the group. This process was time-consuming, and small typos or missing parentheses could take hours to uncover. The composite score tool allows institutions to render these multi-piece placement rules into one combined value or element, saving considerable time and energy for the institutional administrator.
And while this example serves to show how background questions and test scores can be combined for the placement recommendation, this same example is also a prime candidate for collapsing into a composite score. Here an institution is combining the answer to a background question on career clusters with both a reading comprehension score and a local math test score to recommend the final placement.
The result is a placement policy that recognizes additional variables and how those variables might impact the placement recommendation. Whether it is test scores alone, scores within a certain range and a HS GPA above a certain point, test scores within a certain course taking pattern and grades, or creating a composite score, the institution has determined four different ways a student can be placed into the same course.
How does an institution get started?

Now that we've seen the options, how does an institution get started?
What are you already doing?

- Is your advising department already administering a survey or asking key questions during the advising appointment?
- Are you already asking background questions during the test?
- How are those answers used? Is the data analyzed in relation to test scores and course grades?
- Do any of the questions seem more critical than others—more revealing?
- Are some questions specific to a subject? Or asked regardless of subject?
- Consider moving these questions into the placement test, if only to collect and analyze the data for a semester or two. Or conduct an analysis of any questions already being asked.
- Work with faculty to determine what, if any, additional information would be helpful in making a placement recommendation.
- Be careful—just because you can ask lots of questions doesn’t mean you should—consider the impact on the student’s testing experience.

First consider what you are already doing. Are there surveys or even checklists your advising department uses during the initial meeting with a student? Could those results have relevance in the placement recommendation? Are your faculty asking questions in the first week of the course—and what are they doing with the results? Could they be incorporated into the testing session instead and report provided to the faculty or the advisors BEFORE the student enrolls in the course?

Then too, a number of institutions are routinely asking background questions even now—but the results haven’t been analyzed and it’s possible even the questions themselves are no longer relevant. If you are already asking questions, stop and see if they still make sense for your situation.
Think about your logistical situation. What information is available prior to testing—how readily can it be accessed? What mechanisms exist for getting new information? If you want HS GPA, but getting an actual official transcript is difficult, consider allow the student to self-report through a background question. Most students are honest and accurate in what they report.

Don’t forget about returning adults—what do you want to gather from them and how will it impact placement? Though getting high school data is often tricky, it can be significantly easier to obtain when the student is a recent graduate versus several years from graduation.

Above all, lay all the options out on a spreadsheet or flow chart first. The ACCUPLACER platform is fairly intuitive, but none of us work in distraction-free environments and can keep all the bits and pieces firmly in our head while working in the platform.
Recognize that most of the work to be done is OUTSIDE the platform—most institutions have to create committees, review research, and allow for internal discussion for several months prior to actual go-live. Allow plenty of time for a thoughtful planning process and time to set up and verify what you create. Identify your stakeholders and create a timeline for implementation.

Consider refining/prioritizing what you will use. Lots of MMS can be included but how will you know what works if you add a lot at once? Do you want HS GPA, and course grades, AND non-cognitive pieces? Is one element more important than another? Create visual maps—diagrams and flow charts can be critical in getting everyone to “see” the plan. Work through your campus approval process and then complete the setup inside the ACCUPLACER platform.

Remember that counselors/advisors need to understand the new system and have plenty of opportunity for training and discussion. Consider a soft launch or pilot phase.

Be prepared to tweak along the way. You may start out with 5 background questions and after a semester realize that two of the questions aren’t telling you anything useful. Let them go. Then add two more if you want. But watch for “noise” in the system—asking more questions than you get useful answers doesn’t accomplish anything. Evaluate the impact on your course placements if you had weight or unweighted scores and consider the results.
Promote consistency across your institution or system during full implementation. If widespread exceptions are allowed you may never be able to quantify what worked and what did not work. And be prepared for on-going evaluation.
Multiple Measures Resources

- Intro Sample Questions – Multiple Weighted Measures
  - Ron Gordon, EdD, Gordon Associates
- Multiple Weighted Measures: FAQs
- Multiple Weighted Measures: How to Implement, Step by Step Guide

Additional information is available on the accuplacer.collegeboard.org site such as Introduction to Sample Questions by Ron Gordon, an FAQ on Multiple Measures, and a step by step guide to implementation. These are pieces meant to be shared with faculty and administrators and can help during the implementation process.
Recognize that you are never done. Just as your cut scores should be reviewed every 3-5 years, your placement program should undergo that same review, to include any multiple measures you have included. Keep that review in mind from the beginning and involve institutional research so that everyone understands what you’ll need to look for and what data needs to be collected along the way.

It is also critical to document. In designing a placement program, an institution must be prepared to defend its choices and clarify how decisions were made. There should be meeting minutes, formal reports filed in the appropriate office, easily accessible references to the data used, lists of stakeholders and constituent groups consulted—just to name a few. Consider both the need to defend and the need to leave your successors a clear history of the process and the decisions.
Please be assured that the College Board can help in this review process. Through an Admitted Class Evaluation Service (ACES) from our Research department, institutions can validate both its admissions and placement policies, not just using cut scores, but also including up to five factors per course—which means multiple measures can also be evaluated. This service compares ACCUPLACER scores to actual course grades, is confidential, and is FREE to all ACCUPLACER institutions.
Here are just a few examples of institutions who are actively using the ACCUPLACER platform to employ multiple measures. Some are in the early stages, and others have years of data to back up their decisions. Bakersfield Community College and Yuba Community College in California, the Minnesota State Colleges and Universities System, the Alabama Community College System, the North Carolina Community College System, and the State University of New York are just a few.
User Resources
The ACCUPLACER Program offers a wide range of resources to support our users. Many of these are available on-demand 24/7.

Inside ACCUPLACER is the Resources option which contains a variety of tools including:

- Getting Started with ACCUPLACER includes a Quick Start Guide to account setup.
- The ACCUPLACER Program Manual includes information about the tests within the platform as well as information on testing policies and practices.
Resources designed to provide guidance on implementing various aspects of ACCUPLACER can be found on the public ACCUPLACER Resources page at the address shown. Those resources include:

- Information on use of Multiple Weighted Measures which is a process that incorporates use of background questions and external data to fine tune placement practices
- Documents on Intervention Tools That Work to provide evidence of effectiveness and suggestions on implementation
- Information on ACCUPLACER tests for students including both Sample Questions and the Web-Based Study App
- Details on the benefits and process of conducting a Validity Study to understand the effect of your chosen cut scores.
The ACCUPLACER Outreach Team provides professional development in many different formats. A listing of all the resources available is at the address shown.

- Some topics are presented through a live webcast. The Professional Development page provides a list of sessions available along with a link to register. Once registered, you will receive an email with instructions on joining the session.
- Many topics are available as on-demand videos and are available 24/7.
- The ACCUPLACER Account Setup presentation contains details of the process of setting up an ACCUPLACER account along with detailed step-by-step instructions. Also included are video demonstrations of each step in the process.
The ACCUPLACER Program has teams of staff members dedicated to providing support and service to our users.

The Outreach Team of Sr. Assessment Managers provides service to institutions at the campus, system, and state levels which can include consultation, training, professional development, and advocacy for student college readiness. Services can be provided through on campus, face-to-face events or virtually.

ACCUPLACER Support provides a staff of trained service agents ready to answer questions and resolve issues. Support is available 12 hours/day and can be contacted using a toll-free number, through email, and also live chat.