



Point of View: College Admissions

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Higher education institutions in America have a long track record for resilience and innovation: perhaps the most familiar example is how colleges and universities embraced the GI bill and implemented the largest expansion of access to postsecondary education in the world (Olson, 1973). The 2020 COVID-19 pandemic poses a new and daunting challenge, leading many educators and analysts to wonder if higher education will ever return to what it once was. Indeed, some critics of the American system (at all levels), borrowing the perhaps tired cliché about not letting a good crisis go to waste, hope the current challenge will lead to fundamental reforms. One education leader sees it as a “Sputnik-like opportunity” (Reville, 2020).

Whether and how the system continues to adapt will depend on a combination of political will, economic constraints, technological possibilities, and commitment to core values of teaching and learning. Meanwhile, changes are already apparent: classrooms are moving to remote or hybrid formats requiring adaptations by faculty and staff, administrators are considering alternative semester schedules to ease congestion and enable “social distancing,” and admissions offices are modifying requirements such as standardized tests in an effort to ease burdens on students already struggling to complete high school (or college) successfully.

That the role of testing is so significant in times of change is not surprising, given our long history of relying on a wide range of measurement technologies in selection, placement, and assessment of learning (Berman et al., 2019). Since the COVID-19 outbreak, over 50% of bachelor-degree-granting institutions have made standardized college admissions tests such as the SAT and ACT optional for the class of 2025 (FairTest, 2020); dozens of colleges and universities had already moved to “test-optional” (Carnahan, 2019). Of the 50% of institutions that have made the tests optional, approximately 15% have completely dropped the requirement. Some business schools have also waived GMAT requirements for the fall semester and are considering extending this decision to 2021 (Thomas, 2020).

In addition, the University of California’s Board of Regents recently announced their decision to phase out the use of the SAT and ACT over the next five years (UC Office of the President, 2020) and either replace them with another assessment or completely eliminate the requirement of a standardized test.

To ensure that admissions offices have the best insights possible on their applicants, CAE believes that our Collegiate Learning Assessment (CLA) provides a unique opportunity. Our research has shown:

- the Collegiate Learning Assessment is predictive of college and post-college outcomes (Zahner et al., 2012; Zahner & James, 2016; Zahner & Lehrfeld, 2018);
- CAE assessments allow underrepresented students an opportunity to demonstrate their 21st century success skills, critical for career placement and workplace success (Arum & Roska, 2014).

As institutions explore innovations in college admissions assessments, they should consider CLA+, an assessment that focuses on estimating (and predicting) students’ capacities with the requisite skills for success in the 21st century.



21st Century Success Skills Assessment

Skills such as critical thinking, problem solving, and communication are required to be successful in the classroom and workplace (Hart Research Associates, 2013). The current model of standardized assessments that emphasize literacy and quantitative skills, although providing useful information, are limited in their capacity to predict success for students who are entering labor markets in a time of ongoing technological and organizational change. CAE’s assessments ask students to apply knowledge and produce solutions or recommendations to problems, thus providing more nuanced information than tests relying primarily on multiple-choice formats.

To estimate how students perform in situations requiring a blend of factual knowledge and problem-solving adaptability, CAE’s assessments situate students in real-world scenarios that require purposeful written responses. Students are asked to address issues, propose solutions to problems, and recommend courses of action appropriate to resolving conflicts. They are instructed to support their responses by utilizing information provided within the assessment, which may include reference materials such as technical reports, data tables, newspaper articles, office memoranda, and emails. There is usually no “right” answer, and scores reflect a range of plausible and effective response strategies—a process that, by design, mimics real-world and complex decision environments.

CAE’s flagship assessment focuses on scientific and quantitative reasoning, critical reading and evaluation, and the ability to critique arguments by identifying logical flaws and questionable assumptions—skills that are increasingly relevant in our dynamic and uncertain environment. Students are prompted to make logical decisions or conclusions, or advocate actions supported by appropriate data, ideas, computed values, theories, and other relevant inputs. They are challenged to:

- analyze and understand data;
- evaluate the credibility of various documents;
- identify questionable or critical assumptions;
- deal with inadequate, ambiguous, and conflicting information;
- identify additional information that would help resolve issues;
- construct an organized and logically cohesive argument by providing elaboration on facts or ideas (e.g., explaining how evidence bears on the problem, providing examples, and emphasizing especially convincing evidence);
- organize and synthesize information from several sources;
- marshal evidence from different sources in a written response.

CLA+, a Unique Assessment

CAE’s performance-based assessments offer college admissions departments a unique perspective on applicants by measuring critical-thinking, problem-solving, and written-communication skills. CAE’s assessments serve as an effective instrument for identifying high-achieving students from less- and non-competitive institutions by highlighting their 21st century success skills, thus helping to level the playing field (Benjamin, 2016). These are the same types of students who have been identified in the seminal research on the gap in college opportunities for high-achieving, low-income students (Hoxby & Turner, 2013), many of whom demonstrate proficiency in critical thinking as measured by our assessments.



As part of their placement decisions, a domestic military program used CLA+ in conjunction with other variables such as college GPA to assign cadets into their post-university posts (Lehrfeld & Zahner, 2017). CLA+ was specifically selected based upon the skills that are measured by the assessment and our performance task model. Over the past month, leaders in education have increasingly mentioned the use of critical-thinking assessments, and specifically the use of the CLA+ (Jaschik, 2020), as a potential replacement for the SAT and ACT for the University of California.

Predictive Research

Our research (Zahner et al., 2012) shows that high school GPA is the best *single* predictor of college GPA, which is consistent with other studies of factors that predict college GPA. However, adding a standardized assessment improves the validity and reliability of predictions, especially given the unstandardized nature of high school GPA. In our studies, we used students' SAT/ACT scores as well as CLA+ scores. *For graduating seniors, the best two predictors of cumulative college GPA were high school GPA and the CLA+.*

In subsequent research on post-college outcomes (Zahner & James, 2016; Zahner & Lehrfeld, 2018), we found that CLA+ was a predictive measure of employment, salary, or enrollment in a graduate program for students one year after their college graduation. Students with better critical-thinking, problem-solving, and written-communication skills (as measured by CLA+) were more likely to be employed, have higher salaries, or be enrolled in a graduate program. Two years after graduation, we surveyed these students' employers and advisors and found that their managers and advisors felt these skills were important for success in the workplace. Additionally, the CLA+ scores were predictive of managers' and advisors' ratings of students' critical-thinking, problem-solving, and written-communication skills.

Consistently, employers across all domains have identified the skills measured by CLA+ as essential for success in the workplace (Capital, 2016; Hart Research Associates, 2013; Rios et al., 2020; World Economic Forum, 2016). Employers recognize that college graduates need higher-order skills that transcend fact-based domain knowledge.

About the Author

Doris Zahner is the Chief Academic Officer at CAE. She oversees all research studies pertaining to CAE's performance-based assessments and provides scientific oversight of scoring, equating, and reporting.

Dr. Zahner holds a PhD in cognitive psychology and an MS in applied statistics from Teachers College, Columbia University. Her postdoctoral work at the Stevens Institute of Technology was on the use of diagrams in information systems design, and her personal research interests pertain to the use of diagrams in probability and mathematical problem solving. In addition to her responsibilities at CAE, Dr. Zahner is an adjunct associate professor at Barnard College and Teachers College, Columbia University, as well as New York University, where she teaches statistics courses to undergraduate and graduate students in the social sciences.

About CAE

CAE is a not-for-profit organization dedicated to helping educators, students, and parents understand student potential and college/workforce readiness through innovative performance-based assessments



that measure essential 21st century success skills such as critical thinking, problem solving, and written communication. By measuring the skills that matter most for future success, we can provide data and insights that help educators implement targeted strategies for improvement.

Since 2002, CAE has been designing, developing, and administering its performance-based assessments, while also delivering student-level and institutional reports and analysis. CAE's Collegiate Learning Assessment (CLA+) and College and Work Readiness Assessment (CWRA+) have been administered to over 800,000 students at 1,300 institutions worldwide.

In addition to our flagship assessments and our new Success Skills Assessment (SSA+), we provide a range of assessment services to ensure that our assessments measure the constructs that are most important to students and academic institutions.

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