Assessment Avenue

The Benefits of Formative Assessment in an Online World

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In the modern landscape of higher education, the widespread adoption of online learning platforms has been noticeable, to say the least. This quickly emerging technique of presenting students with the flexibility and access to educational materials is gaining popularity at a staggering rate. However, online learning presents faculty with new obstacles concerning the effective evaluation of student learning and engagement. In response to these challenges, formative assessment has emerged as an effective pedagogical strategy. Departing from traditional summative assessment models which typically occur at the commencement of a course, formative assessment allows an ongoing process that delivers continuous feedback to both students and instructors.

In the context of online education, where face-to-face interaction is limited, formative assessment can take a central role in monitoring student progress and can promptly address any course content areas where students need further learning or assistance. Daily activities, from practical exams to basic note taking serve as checkpoints for students to reinforce their understanding of course material. Through the requirement of regular submissions of the activities performed in class, educators administer consistent engagement with the material, which in turn results in limited procrastination.

In my courses, substantial weighting of daily activities constitutes 75% of the final grade, which magnifies its significance in overall course assessment. The emphasis on sustained effort and active participation marks a departure from traditional reliance on high-stakes summative assessments. By prioritizing the daily (or sometimes weekly) submission of classroom assignments, I am able to encourage students to engage regularly with course content, promoting a deeper understanding of the subject material. By regularly evaluating student progress throughout the course, I am able to quickly address any conceptual, theoretical or cognitive concerns. Depending on its implementation, engaging the formative assessment process could also allow students to progress at their own pace, which would create a more effective environment conducive to the absorption of material. By addressing the course content areas where students need further learning or assistance early on, the idea of tailoring instruction to individual needs becomes a much more viable possibility.

While summative testing does still remain an integral component of the evaluation process, its role has been redefined. By allocating 25% of the final grade to summative activities, its value is still realized. However, because summative activities are "devalued" to only 25%, course integrity (especially in an online, synchronous modality) is upheld. Instead of solely relying on high stakes exams or final "capstone" projects, I am able to evaluate a student's performance over a longer period of time, which also allows me to avoid just aiming for a specific outcome. From my direct observation, this approach seems to foster a deeper understanding of the subject matter by creating an intrinsic response to learning. It also is a natural deterrent to a "less than ethical" approach to test taking, especially when monitoring is limited or nonexistent. In laymen's terms, I devalue the activities that can be compromised by a lack of proctoring that is inherent in an online course.

In conclusion, leveraging formative assessment as the primary evaluation method for online classes offers a host of benefits for both students and educators. By emphasizing daily activities and weighting them significantly in the final grade, we can promote consistent engagement, active participation, and continuous learning. This approach not only enhances student performance, but also fosters a culture of collaboration and growth. Summative testing remains relevant, but integrating it into a broader assessment framework offers a more comprehensive view of online student learning.

Assessing BCC's CUNY Language Immersion Program (CLIP)
Jason Davis, CLIP Director

The CUNY Language Immersion Program (CLIP) is a comprehensive English as a second language (ESL) program designed to enhance the language and academic skills of non-native English speakers to prepare them for the rigors of college-level coursework.

To be eligible for CLIP, students must first be accepted to a CUNY college and then take the ESL Accuplacer Exam. Those who score below 105 on the exam have the option to enroll in one of several developmental courses (ESL 1, ESL 2, ESL 3, ESL 9) or join CLIP. Students scoring 105 or above are placed directly into first-year composition (ENG 111).

CLIP distinguishes itself with several unique features. The program provides 25 weekly instructional hours in either daytime or evening sessions, which is substantially more than developmental ESL courses, and at much lower cost. Each class is guided by one instructor throughout the semester, accommodating students with varied proficiency levels. The instructors employ content-based curricula customized to students' linguistic requirements. Daily computer lab sessions to boost technological skills are also available to students.

Upon completing CLIP, students retake the ESL Accuplacer exam and are placed in college-level ESL or English courses based upon various factors including their scores on the Accuplacer exam, CLIP exam, instructors' recommendations, and results from the multiple-choice test students take at the end of the semester. Earlier this year, in an effort to further enhance the ESL and English placement process and to better prepare students for college-level English courses, CLIP instructors engaged in the following activities:

1. Observed college-level English courses.
2. Alternated CLIP course levels taught.
3. Participated in an in-house professional development day.

To gain a deeper understanding of the CLIP instructors' experiences with these activities, CLIP collaborated with BCC's Office of Institutional Effectiveness (OIE) in March. The following insights are derived from a focus group conducted with seven CLIP instructors, facilitated by Handan Hizmetli from OIE.

1. **CLIP instructors' observations of college-level English courses:** All seven CLIP instructors in the focus group agreed that observing college-level ESL and English classes enhanced their understanding of the expectations for CLIP students in these courses. Moreover, all CLIP instructors expressed an interest in continuing to observe ESL/English courses in the future and suggested conducting these observations annually. CLIP instructors believe these observations have deepened their understanding of CLIP students' placement in ESL and English courses, and they felt that engaging in discussions with English and ESL course faculty was one of the most beneficial aspects of these observations. They recommended creating opportunities for CLIP instructors and English faculty to collaborate and discuss expectations for CLIP students' writing and reading skills in ESL and English courses in the future.

Some CLIP instructors also noted that after observing ESL and English courses, they began considering incorporating some of their teaching strategies, such as in-class discussions and reading aloud to students, into their own classes. The instructors noticed that the reading and writing skill

requirements for CLIP align closely with those needed for ESL and English courses. However, they also identified differences in college-level courses, particularly the shorter time frames allocated to cover topics, students taking control of their learning outside of class, and course attendance policies.

2. CLIP instructors alternated course levels taught: All CLIP instructors indicated that teaching across different course levels helped them understand the diverse needs of CLIP students at varying proficiency levels. They expressed interest in alternating the CLIP level they teach and were keen on continuing to arrange course switches through discussions with their CLIP colleagues. CLIP instructors recommended reintroducing tutors to the program, emphasizing that their presence is crucial for supporting student learning.

When comparing teaching lower- and higher-level CLIP courses, CLIP instructors noted that the pace of the lower-level courses is slower and students require more individualized attention. They found teaching lower-level CLIP courses particularly challenging in the post-COVID era, noting that students coming from high school are less prepared. Some CLIP instructors acknowledged the need for additional materials to cover high-level CLIP courses, as they allocate less time to assisting students in these courses. While lower-level CLIP students have always struggled, they are experiencing more difficulties since the pandemic began.

3. CLIP instructors participation in an in-house professional development day: CLIP instructors believe that the CLIP in-house professional development day would be more beneficial with a themed approach, incorporating specific topics for presentations and discussions identified in advance. They also proposed holding this learning opportunity annually, preferably in the spring.

In conclusion, following the focus group discussions, CLIP instructors recommended continuing to annually observe ESL/English classes in the college. Additionally, CLIP will provide more opportunities for CLIP instructors and English faculty to meet and discuss course design, materials, methodologies, and goals. This collaboration will help CLIP instructors to better prepare CLIP students for ESL and college-level courses. The ESL/English classroom observations and meetings with the faculty will enrich the CLIP instructors' experience in placing students into the ESL/English sequence process. The practice of alternating course levels among CLIP instructors was also well-received, prompting our program to continue this practice and foster more discussions among faculty when selecting courses.

Improving the New Student Experience through Assessment: College Discovery Summer Connect
Nathan Aiken, Associate Director

The College Discovery Program (CD) has been supporting students in their transition to and success in college for over fifty years. This assistance is delivered through diverse channels, whether in-person, hybrid, or in virtual platforms. A crucial element of this support is the CD Summer Connect program, a two- to four-week program that typically provides academic and student support workshops aimed at helping students navigate the challenges of college life.

To measure program improvement, CD administers comprehensive surveys on the program's final day. These surveys include a mix of multiple-choice and open-ended questions assessing program learning outcomes, including CD program requirements, digital platforms, and students' sense of belonging. In the following sections, we present the findings from the three surveys related to program learning outcomes from summer 2021 to summer 2023. More than half of the students (N=95) enrolled in the CD Summer Connect program in 2023 responded to the survey compared to 45% of students (N=57) enrolled in 2022 and 46% of students (N=94) enrolled in 2021. The findings from these surveys will be utilized to gain insight into our practices and to inform our team on strategies to improve the program for 2024.

CD Tutoring Policies: CD students are required to complete a minimum of 10 hours of tutoring each semester. This expectation is introduced during the summer to boost registration and attendance rates for the fall semester. Survey results indicate a gradual improvement in students' comprehension of these requirements each year (Figure 1). Following the 2022 survey, we implemented two new strategies. First, we revamped our marketing efforts, prominently featuring the "10 Hours" requirement throughout the CD offices. Additionally, we integrated frequent formative assessments into CD Summer Connect workshops, including questions about CD tutoring expectations. As a result, 70% of students from the 2023 cohort demonstrated understanding of the CD tutoring policy compared to 42% of the previous year's cohort and 30% in 2021.

Figure 1
Student Knowledge of CD Tutoring Policies
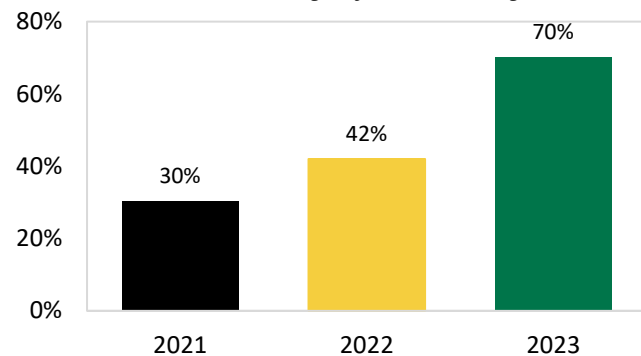
Knowledge of Digital Platforms: Familiarity with digital platforms such as CUNYfirst and Blackboard is necessary for orienting new students to BCC. We provide workshops to introduce students to both platforms and assess student knowledge of those platforms at the end of the program. This was especially important from 2020-2022 when remote classes were commonplace. As indicated in Figure 2, in 2021 and 2022, 88% of CD students successfully met CD's learning outcomes for both Blackboard and CUNYfirst, compared to 68% for Blackboard and 76% for CUNYfirst among the 2023 cohort. This difference may be explained, in part, by the modalities used to facilitate CD Summer Connect during these periods. During 2020-2022, a significant portion of CD Summer Connect was conducted online compared to the 2023 cohort, which was primarily in-person.
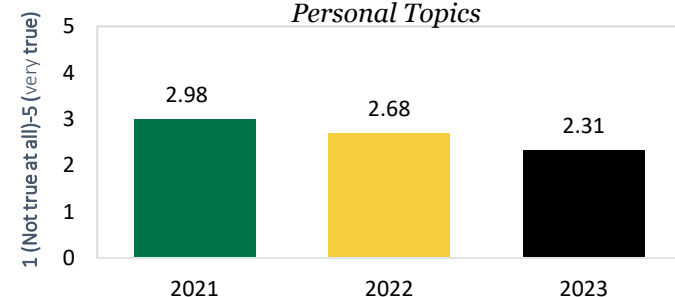
Figure 2
Student Knowledge of Digital Platforms
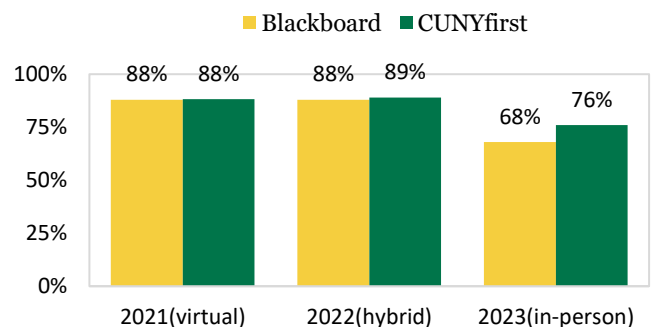
To address the decrease in knowledge of digital platforms, the 2024 lesson plans include more frequent opportunities for hands-on use of both platforms (note that Blackboard modules will be replaced with Brightspace later this year).

Student Belonging: Multiple years of data can reveal trends which are also insightful. In our assessment of students' sense of belonging, we found that each year students were reporting a lower likelihood to reach out to peers for personal support (Figure 3). This was assessed by asking students to rate their level of agreement from 1 (not true at all) to 5 (very true) with the following statement, "I can easily talk to other students about personal topics." Last year, despite focusing more heavily on activities to improve student connection, students reported an agreement level of 2.31 out of 5. Students have expressed having more difficulty with peer socializing since COVID-19. While the 2023 cohort has shifted to more in-person classes, we suspect they may have more difficulty connecting to peers in large group settings compared to cohorts prior to the pandemic. Equipped with this knowledge, CD will modify interpersonal activities so that groups are much smaller. These smaller groups will likely facilitate more peer personal connection, thereby increasing students' sense of belonging as they begin their academic journeys at BCC.

Figure 3
Average Score of Students Who Agreed They Can Easily Talk to Other Students about Personal Topics

In summation, CD Summer Connect is one of many strategies our program employed to facilitate positive student experiences at BCC. In the spirit of continuous improvement, the program is assessed each year and data is reviewed by the CD team. During these debrief meetings, the team interprets assessment results both to maintain the success of best practices and to devise new strategies to address areas of concern. The findings from summer 2021-2023 provided insights related to how well new students understood CD tutoring requirements, their knowledge of digital platforms, and their sense of belonging.

Assessing General Education at BCC
Raymond Galinski, Dean, Office of Institutional Effectiveness

Over the past two years, the Office of Institutional Effectiveness (OIE), in close coordination with the BCC Academic Assessment Council, has been working toward devising a new organized and systematic process for assessing learning throughout the college's general education curriculum, familiarly known as Pathways. In fall 2022, the Council identified six overarching competencies that are closely aligned with Pathways' 46 learning outcomes, and in spring 2023, the Council endeavored to devise new rubrics to facilitate assessments of each of them. The first rubric created, written communication, was used for the college's initial gen ed assessment under the revised process.

Assessing Writing

At the start of the fall 2023 semester, 31 sections of English and Chemistry were selected by their respective chairpersons to participate in the college's written communication assessment. Students enrolled in selected classes were then randomly chosen by staff from OIE; instructors were notified shortly thereafter to submit one written artifact (document) from each student before the conclusion of the fall semester. This process resulted in 124 usable artifacts from 26 sections: 14 from English and 12 from Chemistry.

In January, OIE staff redacted all identifiable information (names, IDs, course information) from the gathered artifacts. The documents were then dummy coded, collated, and placed into electronic folders in preparation for scoring by 10 faculty raters. Each rater was assigned approximately 25 artifacts (at least two raters per artifact)[1] and instructed to submit their scores for each of the rubric's five dimensions into an electronic form.

Results

Overall, students performed well. As noted in Figure 1, the distribution of scores were negatively skewed,

Figure 1
Distribution of Total Scores

meaning students performed at the higher end of the rubric's range. The average total score across all five dimensions was 14.4. More than half of students, 52.3%, achieved a total score of 15 or higher, roughly equivalent to an average score of 3.0 per dimension. The modal score was 15 (out of 20), representing 13% of all scores.
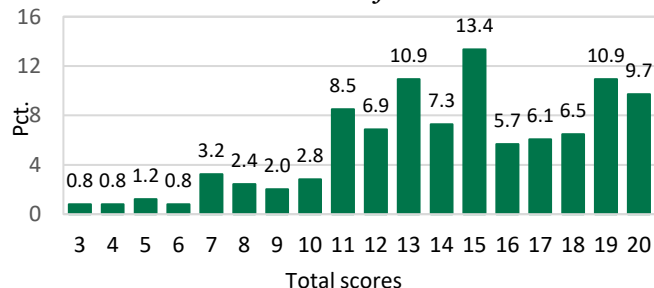
Figure 2 displays the total scores by discipline. Students enrolled in Chemistry courses, on average, performed better than students enrolled in English courses. The average total score in Chemistry sections was 15.9, more than two-points higher than it was in English sections (*M*=13.6). The distribution of scores in English (*SD*=4.1) was more

Figure 2
*Distribution of Total Scores by Discipline*

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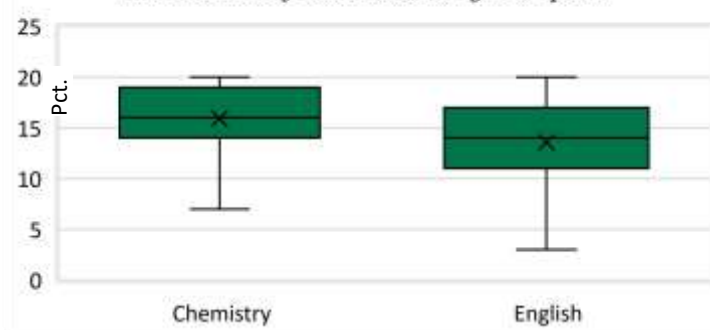
[1] Ten artifacts were score by one rater.

dispersed than scores in Chemistry courses (*SD*=3.3). The box plot in Figure 2 provides the distribtution of scores. As noted by the inter-quartile range (in the green shaded boxes), 50% of Chemistry students scored between 14 and 19, while half of English students scored between 11 and 17. More students in English courses scored on the lower end of the scale as denoted by the lower horizontal bars in the figure.

Average Scores by Dimension

Figure 3 displays the average scores for each criterion on the rubric. Students scored highest on the first criterion, 'Context of and Purpose for Writing' (3.08), followed closely by 'Language: Control of Syntax and Mechanics' (2.99). Averages for both dimensions were near the "Competent" level (Level 3) on the rubric. Students had more difficulty incorporating 'Evidence and Sources' (2.68) and using 'Disciplinary and Genre Conventions' (2.71) into their writing.

Figure 3
Average Score by Dimension
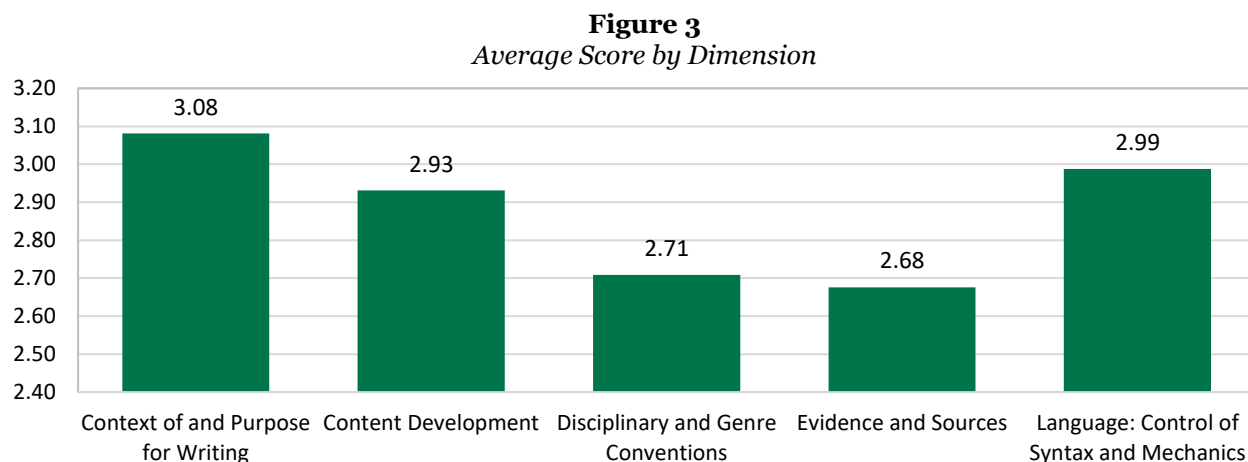
Students enrolled in Chemistry courses outperformed their English counterparts on all five dimensions (Figure 4). With the exception of 'Evidence and Sources' Chemistry students scored at least one-third of a point higher on four of the five dimensions. Differences between English and Chemistry were most pronounced for 'Content Development' and 'Disciplinary and Genre Conventions.'

Figure 4
Average Scores by Criterion by Discipline
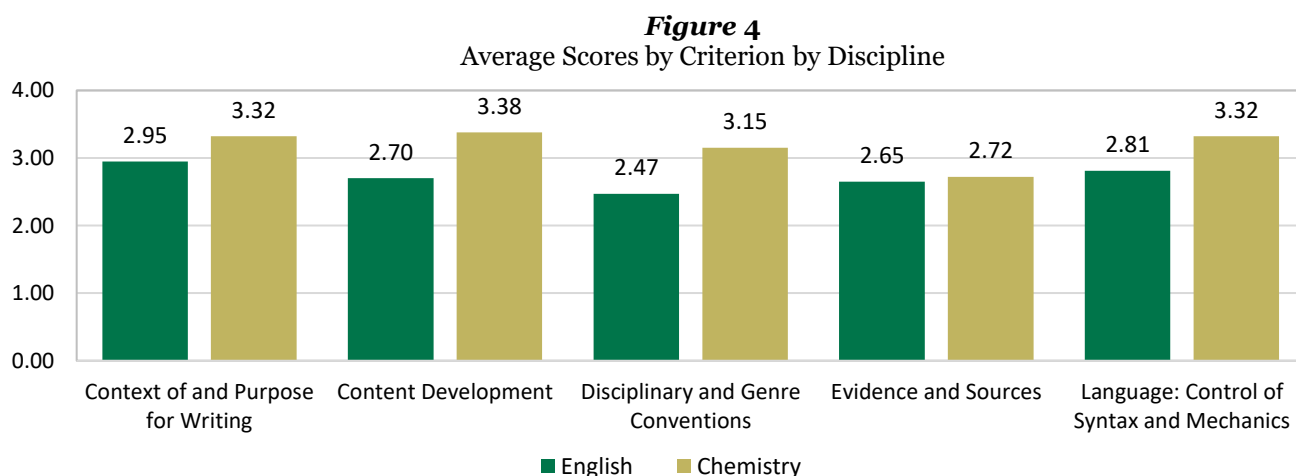
Next Steps

Results from this assessment will be shared with stakeholder groups across campus during the fall semester, including with BCC's Academic Assessment Council. The Council will discuss the implications of the results and may recommend strategies for improving students' written communication skills in the coming semesters. In the fall, the college will also be assessing a second general education competency, information literacy, in select Biological Sciences, History, and Social Sciences courses. Results from this assessment may also contribute to the college's understanding of students' writing ability.