This research brief examines the implementation of the First Year Early Alert Pilot Project in the spring 2022 semester at UC Merced. The project identifies for intervention students who have late or missing submissions across their portfolio of courses or a lack of engagement with the LMS more generally. In doing so, it complements the support faculty provide in their individual courses. Though a relatively small proportion of students met the intervention criteria, meeting alert criteria was robustly associated with receiving at least one poor mid-semester grade and with ending the term in poor academic standing. Improving outcomes for these students has the potential to better support our first-year students and in turn improve campus retention rates. Making the most of this early alert resource will require robust campus partnerships and support.

Canvas Early Alert Pilot Background
At the start of the COVID-19 pandemic in 2020, we initiated a pilot project to leverage CatCourses (UC Merced’s Learning Management System – LMS) data to identify first year students who might need intervention to help them succeed academically. Intervention was coordinated by the Division of Undergraduate Education and facilitated by the Bobcat Advising Center. It took several semesters to reliably implement the project. This brief examines the spring 2022 implementation.

Alert Definitions & Interventions
For each week of the semester, we identified for intervention first year students with two patterns of LMS activity:

- Submission Alert – the student had a late or missing assignment, quiz, or discussion post in three or more courses. Students with one submission alert in a given week were sent an email with available resources; those with four or more submission alerts were contacted by an academic advisor.
- Activity Alert – the student did not interact with the LMS. Students with any number of activity alerts in a given week were contacted by an academic advisor.

Spring 2022 Alert Activity & Intervention
- Submission Alert - 154 (7%) first year students had a Submission Alert at least one time during the semester.
- Activity Alert – 66 (3%) first year students had an Activity Alert at least one time during the semester.

Only 3 students met the criteria for both alert types indicating that they likely capture different aspects of the academic and/or personal challenges faced by students.

Alerts Predict Poor Mid-Semester Grades
From F1, 69% of students who received at least one Submission Alert and 100% of the students who received at least one Activity Alert prior to mid-semester received at least one poor mid-semester grade in that term. By comparison, 46% of students who did not receive a Submission Alert and 47% of students who did not receive an Activity Alert received a poor mid-semester grade (not pictured).

Alerts Predict Poor Academic Standing
From F1, 34% of students who received a Submission Alert and 98% of students who received an Activity Alert ended the term in poor academic standing. By comparison, 21% of students who did not receive a Submission Alert and 20% of students who did not receive an Activity Alert ended the term in poor standing (not pictured). We have not yet examined the effectiveness of the alert interventions on student success outcomes, which is a future project goal.

Conclusions
Students who receive Submission Alerts and Activity Alerts are less likely to be academically successful, thus highlighting the need for effective support and intervention strategies. The proportion of students who alert is rather small. Yet recent analyses by IRDS indicate that every 20 students retained improves our overall retention rate by 1%, underscoring the value of this project.