A natural disaster student support program for online students faces the challenge of COVID-19

Jennie Sanders  |  Bernadette Howlett  |  Michelle Jungbauer  |  Alonna Koch  |  AnnaMaria Bliven  |  Jesse Velarde  |  Heather Saulnier

Faculty Experience and Academic Services, Western Governors University, Salt Lake City, Utah, USA

Abstract
This article describes Western Governors University’s emergency management student support program in place prior to the pandemic and the challenge to adapt and address the unprecedented needs students faced due to COVID-19. Included are key lessons learned in addressing the impact of COVID-19 and evidence-based learnings in response to the large-scale student needs during the prolonged pandemic.

INTRODUCTION
Online college students face many of the same demands as traditional students, including time management, family and work obligations, and meeting coursework deadlines. These demands become more challenging in the aftermath of a tornado, hurricane, earthquake, flood, and even in the case of a public health pandemic and civil unrest. In such instances, online college students need extra support to maintain academic progress. Western Governors University (WGU), along with other online universities, has special support programs, policies, and procedures designed to assist students in overwhelming circumstances due to the impact of environmental barriers. Through these compassionate university programs, students in these circumstances receive services to alleviate their stress and minimize environmental barriers to their academic success.

This chapter introduces the WGU Environmental Barrier (EVB) Program as a successful model for student support during a natural disaster in an online environment. Additionally, the authors describe the university-wide strategies employed by WGU during the COVID-19 pandemic to identify and address the urgent and widespread needs of our students. The shared learnings from this experience provide important insights into supporting students in crisis as an ever-evolving online community of care.

STUDENT-FOCUSED NATURAL DISASTER MANAGEMENT IN HIGHER EDUCATION
Past studies in the domain of higher education and disaster resilience show that college students recovering from natural disasters who receive support are more likely to continue...
with their coursework and graduate (Cerqua & Di Pietro, 2017; Frankenberg et al., 2013). Early communication and a compassionate offering of support to students potentially impacted by a natural disaster may improve their overall resilience and sense of connection that are vital to a successful recovery from a disruptive event (Kaniasty & Norris, 2009). However, this early support only occurs in colleges and universities that have planned for disasters (Ramey-Hlinka, 2013). Online universities face similar risks that need to be mitigated for students, staff, and faculty that could potentially halt their students’ academic progress (Berger et al., 2018).

The use of a proactive process for communication, collaboration, and support following a disaster is an indicator of ongoing academic success (Costa et al., 2015). Other research found that students recovering from a major earthquake who received constant communication, staff and faculty collaboration, and equipment assistance were able to continue their coursework and were highly satisfied amidst aftershocks, dislocation, building demolition and remediation, equipment loss or failure, and limited access to resources (Johnston et al., 2016). These studies support the need for online universities to explore natural disaster student support models that offer timely and personalized support for students facing these unfortunate barriers to their success. The WGU EVB Program is one such program.

**WGU EVB Program overview**

WGU established a natural disaster student support plan in 2017 to reduce student barriers to success during natural disasters and to strengthen our online community culture as part of a vibrant community of care. The EVB Program establishes a proactive outreach to students potentially impacted by natural disasters or other major events. Since implementation, the EVB Program has supported an average of 12,000 students annually impacted by an average of 30 major events each year (events with temporary or permanent displacement). This section provides a brief review of the history and phased design of this natural disaster student support program for an online higher education community of care.

**Phase 1: The WGU EVB Program pilot**

The initial pilot for the WGU EVB Program stemmed from the improved success of students who were proactively assisted by rescheduling online proctored exams in locations impacted by natural disasters in 2015 and 2016. This early effort was driven by our student service teams who often saw online learners’ academic plans derailed when they experienced external impacts and who wanted to do more to assist them. In 2017, WGU developed a university-wide initiative to identify potentially impactful events and design an individualized student care plan to remove barriers for learners. Support included replacement laptops, webcams, student crisis support information, and financial hardship fund applications.

WGU’s ethical commitment to care for each of our students as part of a community of care aligned with the improved student success observed during the EVB pilot. Additionally, consistent with the regulatory guidelines put forth by the United States Department of Education General Order 17-08, WGU is committed to applying approved support and flexibility to bolster our students’ personal and academic well-being in times of disaster (United States Department of Education Federal Student Aid, 2017). These regulatory considerations, along with the WGU community of care culture, informed
our clear sense of responsibility for distance learners that drove the initial EVB Program development.

During the initial year of the WGU EVB Program, the EVB team monitored 32 major disasters and reached out to nearly 12,000 students potentially impacted by these events (hurricanes, floods, fires, tornadoes, and other events). Each event was assessed for both severity and student impact, using a 1–4 rubric for rating the event and level of impact (Figure 1). Numerous events were rated as a Level 1 event (loss of home); such as Hurricane Irma (335 Level 1 students), the California fires of 2017 (42 Level 1 students), and Hurricane Harvey (252 Level 1 students). Documentation of EVB student records and student support interventions was centralized in our Student Relations Management (SRM) system.

Technology facilitated an efficient identification of students living near the event. The pilot team notified both the students and their faculty support team of our concern and of the university resources available to them, including learner interventions for assessment service solutions, technology and equipment support, financial services, academic program support options, and student crisis counseling services. Over 6500 students had individual student care plans to ensure they were able to continue their studies despite the challenges of displacement from their homes. As a result of the care plans, 84% of students remained in their programs, consistent with overall WGU retention rates during the same period.

Given the pilot’s success in both retention rates and positive student feedback, university leaders determined that the EVB early notification process and documentation of student impact should be expanded as part of our ongoing student support services. This initial success led to the standardization of the EVB Program as phase two of our university-wide collaborative effort to reduce student barriers to success during natural disasters and strengthen our online community of care culture.

### Phase 2: Standardization of EVB event management and student outreach protocols

Following the pilot completion, the Student Success department designated a service team to continue as a dedicated EVB team to improve and formalize the pilot model for both event management and student outreach protocols. These activities include daily monitoring of natural disasters and weather alert sources for potential natural disasters and highly impactful weather events, careful vetting of the severity of the event, and verification of the impact to residents in the area (Figure 1). During this phase, the program expanded EVB outreach to support students living in communities devastated by mass shootings or other public safety events. Lessons learned from the pilot informed EVB event best practices, including use of a dual-vetting process for all new events to ensure appropriately scoped events are calibrated for a full event outreach. This process includes a review of both the level of severity of the disaster and the confirmed impact on residents. If the level of local impact is loss of homes (Level 1) or evacuations (Level 2), the event is confirmed as a full EVB event (see Figure 1).
The EVB Event Management Team used a geo-mapping tool to improve accurate identification of students living in the event area and a mass mailing platform to send these students templated emails relaying WGU concern for their well-being and the availability of additional support, if needed. Department and executive leadership teams receive an EVB event summary, including details of the natural disaster or other major event and the number of students potentially impacted by the event.

Each student at WGU is assigned to a Program Mentor who supports them with each step of their academic journey. Mentors are faculty members who are professionals from the student’s field of study, assigned to support and advise the student from orientation through graduation. The mentors of potentially impacted students are also notified of the EVB event and the potential impact to their student. This vital student support relationship between the student and their mentor is the heart of the integrated EVB Student Care Plan. Phase 2 developments strengthened the mentor support for their EVB student by implementing the EVB Mentor Response Protocol that is Reach—Assess—Assist:

1. Reach out to student(s) identified as being at risk for having an environmental barrier to their academic success.
2. Assess the actual level of impact of the environmental barrier and identify individual student academic needs related to the event. Details are then documented in the student’s EVB record within the SRM.
3. Assist the student with the individual academic needs identified to minimize the impact of the event by offering compassionate support resources for non-academic needs, including student crisis counseling, local disaster resources, and financial hardship application information if needed.

The mentor documents the student situation in the EVB student record and updates the record from unknown (the default status at time of the record creation), to the confirmed level of personal impact (Levels 1–4, see Figure 1). They also initiate an individualized student care plan, which is integrated across the community of care, based on the student’s individualized needs during recovery from the natural disaster. In addition, the EVB Care Team has a routine EVB audit process, to ensure student impact details are accurately documented and each highly impacted student’s plan of care is in place to support academic progress and offer additional resources when needed. The EVB Working Group, composed of leaders from across all departments, collaborates on learner intervention strategies for our highly impacted students.

A challenge identified during phase two of the program development was raising awareness of EVB student needs and disaster support information across multiple colleges and service departments. The EVB leadership needed colleagues from across the community of care who would champion the awareness of the EVB Program and most importantly, the needs of EVB students. An idea was developed for formally locating faculty and staff across the university who would serve as an EVB Champion.

**Phase 3: The EVB Champion Program**

The WGU EVB Program team created the Champion Program in February 2020 with a small pilot group of 13 faculty interested in advocating for the adoption and implementation of the EVB Program to support EVB students across the college programs they represent. EVB staff recognized the need to scale and calibrate student support across colleges. They developed the initial vision to build knowledge, collaboration, and enthusiasm around
assisting impacted students and to provide development and leadership opportunities for faculty participants. By design, EVB Champions help amplify knowledge and awareness of the EVB Program, update their teams on current EVB events impacting students, and encourage EVB record completion across their college, department, or regional team. They serve as a vital bridge among the small EVB team (housed in the Student Success department) and the faculty and departmental service teams across the university. The timely addition of the EVB Champion pilot, just before the pandemic, proved fortuitous in establishing wide-scale awareness across faculty departments of integrated student care plan and EVB student needs in response to the COVID-19 public health event.

The EVB Program response to COVID-19

The EVB team’s monitoring of early COVID-19 warnings led to addressing the first public health event in the program’s history. In early March 2020, the EVB team triggered a new event alert to students and faculty in the Washington State area, with nearly 300 students initially impacted by local school closures. The student impact number increased to over 15,000 students over the next 3 weeks, due to shelter-in-place and other community impact factors. The need to set up a WGU COVID-19 Task Force to meet the escalating and wide-spread student needs related to the growing pandemic was quickly identified.

WGU leveraged and augmented the EVB Program structure to offer support to over 166,000 students, including 45,977 recently-graduated alumni, during the initial year of the coronavirus pandemic. Many students faced a direct impact from the pandemic, whether from being a front-line healthcare worker, facing economic duress, or suffering from the illness or loss of loved ones. Task force work teams were created based on both student support and business continuity concerns and included executive decision makers. WGU was able to quickly monitor the changing student and regulatory landscape (Bogus, 2020), restore business continuity, and make decisions to provide timely support to students in compliance with ongoing updates from the Department of Education's general disaster guidelines (Walter, 2020). The following section explores this university-wide response to the impacts of the pandemic on our entire community of care and the lessons learned about how to improve our student support programs once the pandemic is behind us.

The WGU COVID-19 Task Force and academic solutions

In mid-March 2020, WGU’s President charged a cross-functional team to develop and deploy strategies, procedures, and policies to enable nimble responses to emerging needs. A daily coordination meeting was established to identify new issues resulting from the rapidly changing ecosystem and define working groups to develop solutions to issues that affected student progress (academic options, financial support, student communication, assessments, field experiences/demonstration teaching, and third-party exams). This structure enabled rapid identification, communication, and resolution with flexibility becoming a primary operating objective. The goal was to enable learners to continue their education with dynamic support and viable resources.

The strategy developed by the task force included offering alternative assessments, academic alternatives, interpersonal support, and an emergency fund. One of the most sweeping actions taken was granting automated incompletes for courses that any student had not completed by the end of their term for the months of March through May 2020. The WGU term runs for 6 months starting from each student’s initial matriculation
month, and the incompletes ensured flexibility for course completion and helped students avoid adverse academic effects from systemic disruptions beyond their control. A documentation procedure involving the use of a prescribed set of COVID-19 hashtags (#) was created to facilitate communication across organizational units, to track student impacts, and to measure the effects on students in terms of first- and second-term retention.

COVID-19 documentation strategies

The scope and varying level of impact of the pandemic on students required an efficient, large-scale approach to elevate the needs of our students quickly and inform a timely and helpful support plan. The current EVB Student Record of Impact (Levels 1–4, Figure 1) lacked sufficient details of how an event had impacted the individual EVB student, especially at Level 3 (impacted but not displaced). This known lack of additional impact detail became a critical data gap in the face of the dynamic and widespread impact of the pandemic on individual students. An additional documentation and impact assessment tool was needed.

The documentation procedure developed for our COVID-19 response involved members of the student's community of care (faculty and staff) entering a specified set of hashtags into the student's record to quickly identify, elevate, and track the personal impact of the pandemic and to document the individualized student support strategies applied. The taskforce identified a set of 16 Impact and eight Intervention hashtags. The task force included representation from all the employee groups who would enter or interpret the tags, which ensured each tag was aligned with employees' training and expectations. The task force defined the final list of Impact tags and published the instructions for employee use to ensure shared understanding of the meaning and use of the tags. Impact hashtags represented student-reported effects caused by COVID-19, including #BasicNeeds, #Deployed, #Displaced, #Distress, #EconomicHardship, #EssentialWorker, #FamilyCare, #FamilyDeath, #HouseholdIllness, #Internet, #OLPIssue (online proctoring issue), #Overtime, #Safety, #StudentIllness, #Tech (technology), and #WFH (working from home).

Intervention hashtags represented a set of academic options that allowed for flexibility with our standard policies and procedures. The intervention tags included #AAGrace (academic activity grace), #CourseDrop, #CourseSwap, #CourseWD (course withdrawal), #FTCA (first term critical action), #IC30 (30-day incomplete), #IC60 (60-day incomplete), and #IC90 (90-day incomplete). It is important to note that WGU’s pre-pandemic policies required full-time enrollment and satisfactory progress across each 6-month term. The academic options developed for our pandemic response enabled flexibility regarding these policies to avoid administrative withdrawals and other actions associated with inactivity.

These academic options included approval requirements and follow-up procedures. For example, Academic Activity Grace applied when a student became inactive for 14 days and reported a COVID-19 impact. A grace period was allowed for the student to catch up on missing activities or submissions, which was tracked by the student's faculty members and their managers. Course drop, swap, and withdrawal were procedures related to adding/removing courses from the student's enrolled term, which otherwise would not have been permitted. The three options for incompletes allowed 30-, 60-, or 90-days additional time past the end of the term for completion of required work. Many of these academic options were available prior to the pandemic but used only in extraordinary circumstances.
TABLE 1  Chi-square test results for 7-month retention

| College            | Level | Hashtag N | Retention percent | No hashtag N | Retention percent | X²   | df | p-value |
|--------------------|-------|-----------|-------------------|--------------|-------------------|------|----|---------|
| Business           | UG    | 9671      | 90.9%             | 11,382       | 82.0%             | 345.3| 1  | <0.001  |
|                    | GR    | 5961      | 94.4%             | 6434         | 89.5%             | 96.3 | 1  | <0.001  |
| Health professions | UG    | 15,169    | 94.5%             | 9025         | 86.9%             | 427.4| 1  | <0.001  |
|                    | GR    | 6484      | 95.1%             | 2725         | 85.8%             | 231.7| 1  | <0.001  |
| Information technology | UG | 3391      | 93.1%             | 9819         | 87.5%             | 79.1 | 1  | <0.001  |
|                    | GR    | 1188      | 93.4%             | 2771         | 87.7%             | 27.7 | 1  | <0.001  |
| Teachers           | UG    | 3458      | 94.0%             | 7470         | 87.6%             | 102.8| 1  | <0.001  |
|                    | GR    | 5099      | 95.8%             | 9081         | 94.0%             | 21.3 | 1  | <0.001  |

Abbreviations: UG, Undergrad; GR, Graduate.

TABLE 2  Chi-square test results for 13-month retention

| College            | Level | Hashtag N | Retention percent | No hashtag N | Retention percent | X²    | df | p-value |
|--------------------|-------|-----------|-------------------|--------------|-------------------|-------|----|---------|
| Business           | UG    | 9764      | 90.7%             | 10,105       | 70.3%             | 1311.3| 1  | <0.001  |
|                    | GR    | 5403      | 91.1%             | 5684         | 78.1%             | 352.0 | 1  | <0.001  |
| Health professions | UG    | 13,334    | 91.7%             | 8073         | 74.0%             | 1239.5| 1  | <0.001  |
|                    | GR    | 6743      | 93.9%             | 2559         | 77.6%             | 514.2 | 1  | <0.001  |
| Information technology | UG | 2882      | 91.9%             | 7585         | 75.4%             | 355.2 | 1  | <0.001  |
|                    | GR    | 1092      | 89.4%             | 2144         | 73.3%             | 110.4 | 1  | <0.001  |
| Teachers           | UG    | 3686      | 90.4%             | 6031         | 74.9%             | 352.4 | 1  | <0.001  |
|                    | GR    | 3529      | 95.5%             | 6121         | 88.9%             | 121.9 | 1  | <0.001  |

Abbreviations: UG, Undergrad; GR, Graduate.

Analysis: COVID-19 hashtag documentation and student retention rates

WGU performed an analysis of the COVID-19 hashtag data from the initial year of the pandemic, to determine if students with hashtags had different retention rates than students without hashtags. Approximately 50% of WGU students had at least one hashtag (68,466 students as of April 23, 2021). Results were analyzed to compare retention after the first term (7-month retention) and second term (13-month retention). Student outreach and support is offered as part of our standard Program Mentor program. The additional use of the hashtag documentation for CV19 support confirmed that the student had connected with and disclosed to their Program Mentor how they were impacted. The data show that students with any hashtag (regardless of the type or the quantity) had higher retention rates for both 7-month and 13-month retention than students who had no hashtag in their records. A chi-square test for independence was performed using Python version 3.9.1 (Chi2 Contingency Package). The differences in retention between students with and without hashtags were statistically significant at alpha < 0.05 (two-tailed test), as shown in Table 1 (for 7-month retention) and Table 2 (for 13-month retention).

The results indicate the presence of an annotation in a student record regarding a COVID-19 effect, which signified the student successfully connected to the personalized support offered by their mentor and was associated with a strong, statistically significant lift in retention for both the first (7-month) and second (13-month) terms. The hashtag
annotations, in this case, are an analog signal placed in the students’ records to indicate a variety of interventions that were applied for students who were impacted by COVID-19.

This analysis, in addition to student and staff feedback about the expanded academic options, continues to inform non-pandemic support across our community of care. For example, several teams are leveraging hashtags to document and study student support initiatives beyond COVID-19 for agile, timely analysis about interventions. The EVB Level of Impact record has been enhanced to offer documentation of additional impact details for students affected by other natural disasters, modeled after the learnings from the COVID-19 Impact hashtag data. WGU is adjusting practices and processes to provide the flexibility students found helpful during the pandemic, as well as working toward deeper coordination between the EVB student services team and staff and faculty across the university, to efficiently integrate the various aspects of holistic support to benefit more students.

**CONCLUSION**

WGU’s EVB natural disaster student support program created procedures, structures, and systems to support students during natural disasters and other significant external events. WGU leveraged this existing infrastructure as the backbone for a rapid-solution team that developed student-centric solutions to challenges caused by the COVID-19 pandemic. Additional academic solutions (including alternative secure assessments, automated and extended incompletes, and flexibility in academic engagement requirements), as well as annotations (hashtags) to enable aggregation and analysis of student impacts and interventions, augmented the established procedures to extend and elucidate the effect of student support during the pandemic. An analysis indicated the presence of an annotation in a student record regarding a COVID-19 effect was associated with a statistically significant lift in retention. A rapid, individualized, flexible response to students’ needs when major events disrupt their lives may make a significant positive difference in college student retention.

The results of the COVID-19 response have advanced the use of the annotation (hashtag) approach for surfacing timely signals about student need at WGU. These signals continue to inform flexible, targeted support via the EVB infrastructure and Community of Care to respond quickly to the needs of affected students and help them retain on their educational journey. Being responsive to all the needs of students, not just academic needs, is an essential strategy to increase student success and enable learners to achieve their professional and personal goals.

**REFERENCES**

Berger, E., Carroll, M., Maybery, D., & Harrison, D. (2018). Disaster impacts on students and staff from a specialist, trauma-informed Australian school. *Journal of Child & Adolescent Trauma, 11*(4), 521–530. https://doi.org/10.1007/s40653-018-0228-6

Bogus, E. (2020). Teacher preparation and licensure requirements during COVID-19: Short-term solutions with long-term effects. *The Evollution*. https://evollution.com/programming/program_planning/teacher-preparation-and-licensure-requirements-during-covid-19-short-term-solutions-with-long-term-effects/

Cerqua, A., & Di Pietro, G. (2017). Natural disasters and university enrollment: Evidence from L’Aquila earthquake. *Applied Economics, 49*(14), 1440–1457. https://doi.org/10.1080/00036846.2016.1218431

Costa, R., Hansel, T. C., Moore, M., Many, M., Osofsky, J., & Osofsky, H. (2015). Teachers and school personnel as first responders following disasters: Survivors and supporters. *Journal of Traumatic Stress Disorders & Treatment, 04*(04). https://doi.org/10.4172/2324-8947.1000146

Frankenberg, E., Siki, B., Sumantri, C., Suriastini, W., & Thomas, D. (2013). Education, vulnerability, and resilience after a natural disaster. *Ecology and Society: A Journal of Integrative Science for Resilience and Sustainability, 18*(2), 16. https://doi.org/10.5751/ES-05377-180216
Johnston, L., Wilson, T. M., & MacKenzie, A. (2016). Assisting Ph.D. completion following a natural disaster. *International Journal of Doctoral Studies, 11*, 367–382. https://doi.org/10.28945/3590
Kaniasty, K., & Norris, F. (2009). Distinctions that Matter: Received Social Support, Perceived Social Support, and Social Embeddedness after Disasters. In Y. Neria, S. Galea, & F. Norris (Eds.), *Mental Health and Disasters* (pp. 175-200). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511730030.011
Ramey-Hlinka, K. (2013). Building a student-centered culture in times of natural disaster: A case study. *Community College Journal of Research and Practice*, 37(7), 541–546. https://doi.org/10.1080/10668921003677100
United States Department of Education Federal Student Aid. (2017). *Gen-17-08 subject: Guidance for helping Title IV participants affected by major disaster*. https://fsapartners.ed.gov/knowledge-center/library/dear-colleague-letters/2017-08-29/gen-17-08-subject-guidance-helping-title-iv-participants-affected-major-disaster
Walter, M. (2020). Major disaster guidance for institutions in states impacted by COVID-19. *National Association of Student Financial Aid Administrators (NASFAA)*. https://www.nasfaa.org/news-item/21404/Major_Disaster_Guidance_for_Institutions_in_States_Impacted_by_COVID-19

**AUTHOR BIOGRAPHIES**

**Jennie Sanders** is Vice President of Faculty Experience and Academic Services at Western Governors University. Bernadette Howlett is Director of Faculty Operations Research at Western Governors University. Michelle Jungbauer is Senior Manager of Student Support Services at Western Governors University. Alonna Koch is Manager of Student Support Services at Western Governors University.

**Bernadette Howlett** is Senior Manager of Faculty Experience at Western Governors University.

**Michelle Jungbauer** is Senior Manager of Student Success (EVB Program) at Western Governors University.

**Alonna Koch** is Manager of Student Success (EVB Program) at Western Governors University.

**AnnaMaria Bliven** is Analyst of Evaluation in Authenticity and Integrity Services at Western Governors University.

**Jesse Velarde** is Senior Manager of Business Transformation Project and Change Management at Western Governors University.

**Heather Saulnier** is Director of Student Success Operations at Western Governors University.

**How to cite this article:** Sanders, J., Howlett, B., Jungbauer, M., Koch, A., Bliven, A. M., Velarde, J., & Saulnier, H. (2021). A natural disaster student support program for online students faces the challenge of COVID-19. *New Directions for Student Services, 2021*, 9–17. https://doi.org/10.1002/ss.20401