

Improving Virtual Enrollment with the Power of Community

Implementing InScribe at WGU

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Executive Summary

Enrollment in higher education can be a stressful and isolating experience, especially for online students. One opportunity presented by educational technology is the ability to create and maintain online environments that alleviate such challenges. This report describes the implementation of an online community designed to connect prospective students with peers, alumni, and university staff, and thus enriching the enrollment experience.

WGU Labs partnered with InScribe to integrate a community platform into the enrollment process at Western Governors University (WGU). The online community enabled applicants to connect

with WGU staff and alumni, as well as each other. The interactive platform hosted resources and conversations that accumulated over time. These features increase the capacity to share knowledge and build a sense of belonging among potential students.

As part of the implementation, WGU Labs conducted an experiment on the extent to which the community impacted key enrollment metrics: specifically, matriculation and time between admission and the enrollment interview. Additional feedback was collected by surveying WGU applicants and interviewing community moderators.

RESULTS AT A GLANCE



Applicants who actively participated in the community (by viewing posts within the platform or posting) were more than twice as likely as those who did not participate to matriculate at WGU.

80,000+

views of posts in the community (with some conversations receiving more than 4,000 views)

MOST POPULAR TOPICS:

transcripts transfer credit financial aid WGU experience

KEY FINDINGS

WGU successfully integrated an applicant community into the university's enrollment portal. The community, which featured 3,545 participants over the course of five months, received high levels of engagement from invited applicants.

- The community had 80,000+ total views, with several posts receiving more than 4,000 views, illustrating the power of scaling answers to commonly asked questions.
- The most popular topics of discourse included transcripts, transfer credits, and the WGU student experience, representing a mix of tactical and aspirational conversations.

Random assignment to receive access to the applicant community did not affect enrollment metrics or accelerate matriculation timelines. However, two key findings emerged from the applicants assigned to the enrollment community:

- Applicants who actively participated in the community (by viewing posts within the platform or posting) were more than twice as likely as those who did not participate to matriculate at WGU.
- Applicants in the community also reported a higher Net Promoter Score corresponding to the enrollment experience.

Figure 1illustrates the higher rates of matriculation for various subgroups within the applicant community. While 13% of these applicants matriculated on average, the matriculation rates for applicants who viewed the community (N = 388) and who posted in the community (N = 57) were 33% and 40%, respectively.

This result is insufficient to make causal claims about the impact of the applicant community, but it suggests that students who actively participate in the community may be more serious about enrolling at WGU. If this trend holds, the community could enhance WGU's ability to identify the applicants who are most likely to complete the enrollment process.

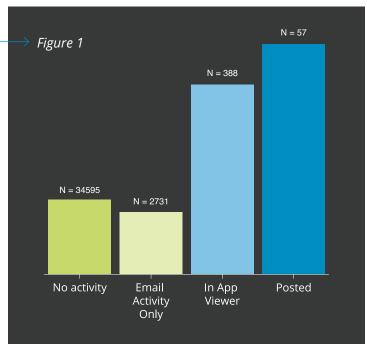
The community was supported by a small team of dedicated community moderators, including

two members of the WGU Chat Team and 17 alumni volunteers. Both groups fostered the community's growth by providing timely, accurate answers to applicant questions and sharing helpful resources, from scholarship tips to inspirational tales of their own student journey.

And while alumni were less comfortable answering tactical enrollment questions, they reported benefiting from increased engagement with students and each other. They also enjoyed using a platform without the "negativity" and "wild tangents" seen on social media. WGU's sprawling, engaged alumni network offers a compelling future resource for the enrollment team.

While it remains in a nascent stage, the community has accumulated a growing repository of resources and conversations across a broad range of topics. At an online university without traditional applicant offerings like campus tours, palatial admissions offices, and the like, a robust applicant community could forge a deeper connection between students and WGU.

Building a sustainable community to its full potential is a long-term investment. The findings in this report offer insight into how WGU and InScribe leveraged the applicant community to provide a seamless transition and solid footing for new students entering a unique university experience, and recommendations on how the community can evolve to create an even larger, positive impact for prospective students, WGU alumni, and our enrollment team.





Background

One of the most memorable moments for many students enrolling in a traditional university is the campus tour. When these students arrive at the campus, they experience a live, in-person introduction to the university community and its members. This type of early socialization experience has been shown to be critical for students' sense of belonging and subsequent academic success (Alt, 2020; Freeman et al., 2007).

For online universities such as Western Governors University (WGU), the "campus tour" happens virtually. Potential students navigate the website and interact with the enrollment team to learn about WGU and whether it's right for them. Although WGU has innovated in this space, there remain opportunities to build stronger connections among students and to facilitate an effective transition into the world of online learning. One potential innovation is to build an applicant community into the enrollment process.

ENROLLMENT AT WGU

During the WGU enrollment process, potential students follow a series of well-defined steps from the moment they submit an application to the day they begin classes. The WGU enrollment team keeps track of applicants' progress through each step and provides personalized guidance to those who need assistance.

One key feature of this experience is the enrollment portal, a central repository with resources built to help applicants move through the process. The design of the enrollment portal, including flexible capabilities for software integrations and the use of well-defined metrics for tracking enrollment, made it ideal for testing the impact of an applicant community.

In addition to the practical benefits of testing the efficacy of the community within the enrollment framework, WGU and InScribe also saw several potential benefits to integrating a community platform into the enrollment process, including:

- Allowing for "late night" answers. Enrollment Counselors work during the day; busy adult students ask questions at night. Building a platform that vetted and organized resources by helpfulness helped "scale" answers to common questions.
- Serving a high volume of applicants. WGU's remarkably high volume of applicants makes it difficult to provide timely, personalized answers to every question.
- Forging community among distant applicants.
 Without a sense of belonging, prospective
 students are less motivated to enroll. Past
 research also revealed that WGU applicants
 are more likely to enroll if they already know a
 current WGU student.
- Leveraging alumni energy. Prospective students want to hear from peers who've traveled down similar paths and alumni welcome the opportunity to share their lived experiences with applicants in a safe, positive forum.

OBJECTIVES

In light of these factors, InScribe partnered with WGU Labs (Labs) to implement the applicant community platform at WGU. The objective of this study was to conduct a full-scale implementation and evaluation of an applicant community built into the enrollment portal. The study was organized into four key phases:

- Preliminary research via interviews with WGU students, applicants and staff. In the first phase of the research, Labs interviewed multiple stakeholders to learn where the applicant community has the highest potential for helping potential students. These findings guided the rest of the implementation.
- Implementation of the InScribe platform. Labs facilitated the collaboration between the InScribe Customer Success team and the WGU Technology team to integrate the InScribe platform into the enrollment portal. This process included staffing the applicant community with trained moderators.
- Experimental research on key enrollment metrics. To assess the impact of the applicant community on enrollment, Labs conducted a randomized control trial in which students were assigned to receive access to the applicant community at random.
- Feedback from applicants and staff involved in the implementation. Labs collected feedback from all participants in the applicant community to identify opportunities for improvement.



Initial Student Experience Research

Before building the enrollment community, Labs first conducted interviews with applicants, current students, Enrollment Counselors (ECs), and Enrollment Team leadership to design a valuable applicant experience. These conversations centered on three key questions:

- Where are the biggest challenges applicants face during the enrollment process?
- What kind of communities serve applicants and students in the most meaningful way?
- What is the best way to define and structure the purpose of such a community?

INTERVIEWS

Our team connected with others throughout WGU to explore ways to design the study.



Nine Students and Potential Students

- Five prospective students currently in the Enrollment Process
- Four students in their first term at WGU



Five Members of the Enrollment Team

- Management and Supervisors
- Enrollment Counselors



Five Senior Management and Leadership

- Student Communities
- Interactive Products
- Alumni Relations
- Enrollment

In addition to these interviews, our team reviewed previous WGU-commissioned studies to help further illuminate applicants' concerns, as well as applicants' stated reasons for not matriculating at WGU.

GUIDING THE IMPLEMENTATION

This background research provided a wealth of information that helped guide the study design. Some of the most important insights included:

- Communities need to be relevant and focused to hold value for the applicant.
- Applicants overwhelmingly value the opportunity to talk with and learn about other student and alumni experiences.

- WGU applicants lean heavily on ECs for guidance, but there are significant gaps where applicants must wait, which can be frustrating.
- ECs spend a lot of time answering the same questions.
- Applicants who are already connected to others (via referral or social media) are having better experiences and are more likely to matriculate.
- There is a lot of misinformation in social media forums.
- In interviews, eight of nine applicants and students said enrollment could be improved if they had engaged with students or alumni to ask experiential questions.

BUILDING APPLICANT PERSONAS

From these interviews, the Labs team identified three personas to help project leaders empathize with applicants as they moved through the enrollment process. The creation of these personas helped Labs and InScribe design an experience that would be valuable to applicants. The personas also offered a beneficial tool to use when training community moderators.

PERSONAS



Applicant Without Referral

- Generally knows what he wants to achieve from his education
- Doesn't know what questions to ask
- "How do I take tests at WGU?"



Applicant With Referral

- Hears about WGU from coworkers and friends
- May have a lot of incorrect information
- "My friend said she graduated in 4 months! Can I do that?"



Applicants Needing Additional Guidance

- Knows she needs a degree to advance in her job
- Doesn't know which program would be best for her needs
- "Which degree will help me the most?"



Implementation

WGU Labs worked with InScribe and the EdTech team at WGU to integrate the applicant community platform into the enrollment portal. The platform was designed so that applicants who were granted access could seamlessly log into the portal using their WGU single sign-on account. These applicants received automated emails with information from the community and had full access to the platform, which was organized into multiple spaces for both general and targeted conversation.

All students were automatically enrolled in the Community and the "General Enrollment" Channel. Once in the community, students could opt to self-enroll in additional channels, aligned to the four WGU Colleges.

MAIN CHANNEL

GENERAL ENROLLMENT

Topics

- 1. Getting Started with Enrollment
- Timing and process
- Things you should do first
- Student portal overview
- Things to do to prepare

- 2. The WGU Experience
- Value of a WGU degree
- How WGU classes work
- Self-pacing myths
- Day to day, student stories

- 3. Financial Aid
- Submitting your FAFSA
- Where to find scholarships
- Applying for scholarships
- Special situations
- 4. Transcripts and Transfer Credits
- Requesting transcripts
- Transit evaluation process
- WGU Academy
- Program specific pre-regs

COLLEGE CHANNEL COLLEGE OF BUSINESS

.:..

- 1. Alumni Experience
- 2. Connect with the WGU Student Community
- 3. Program Pre-Regs
- 4. Which Degree Should I Get?

COLLEGE CHANNEL

COLLEGE OF I.T.

Topics

- 1. Alumni Experience
- 2. Connect with the WGU Student Community
- 3. Program Pre-Reqs
- 4. Certification and Outside Testing
- 5. Which Degree Should I Get?

COLLEGE CHANNEL

COLLEGE OF NURSING

Topics

- 1. Alumni Experience
- 2. Connect with the WGU Student Community
- 3. Program Pre-Regs
- 4. Certification and Outside Testing
- 5. Which Degree Should I Get?

COLLEGE CHANNEL

COLLEGE OF TEACHING

Topics

- 1. Alumni Experience
- 2. Connect with the WGU Student Community
- 3. Program Pre-Regs
- 4. Certification and Outside Testing
- 5. Which Degree Should I Get?

BUILDING A TEAM OF MODERATORS

One key aspect of community design was selecting the moderators who would monitor student questions and provide timely answers and feedback. ECs who offer personalized services to applicants and must remain up-to-date on all enrollment logistics, are often the busiest members of the enrollment team. As such, it was decided that they would not be able to participate in the study

as active moderators. To maintain the quality of the applicant community, Labs instead recruited a team of alumni mentors, and later enlisted the help of two members of the WGU Chat Team. The Chat team members were brought in as it became apparent that many of the questions coming in were more suited to ECs rather than alumni so the chat team was there to help bridge that gap.

ENROLLMENT COUNSELORS vs. MODERATORS



Enrollment Counselor

- Guides individual students through the Enrollment Process
- Has the most up to date information on program requirements
- Students should be referred back to their enrollment counselor for questions about individual transfers, program requirements, or financial aid



Community Moderators

- Engage students and foster peer to peer connection. Get them excited!
- Share stories of personal experiences as a student - both challenges and successes
- Help students find resources without waiting for the next appointment with their EC
- Verify and endorse information shared in the community
- Connect with students locally ("You're in MO? Here's some local resources you might check out!")

Recruiting Alumni Ambassadors

WGU Labs worked with the Alumni Engagement team to identify and recruit 17 Alumni Ambassadors to moderate the InScribe community. The WGU Alumni Ambassador Team is dedicated to promoting WGU by volunteering their time and experience engaging with potential students, current students, and other alumni.

Alumni reported joining because of their passion for WGU and a desire to give back to the student community. Some mentors lacked this kind of support when they were a student and wanted to provide that benefit to others. One post, with more than 1,000 views, illustrates the power of a single alumni testimonial:



Recruiting the Chat Team

Once the implementation was underway, we discovered that many questions posted by students required special expertise that could only be provided by the enrollment team itself. Many of these questions concerned applicants' transcripts. To address these issues, we recruited two members of the Chat Team to join as moderators. The Chat Team usually engages with live chat on the WGU website, where applicants can receive immediate responses to their questions during business hours.

In the community, Chat Team members interacted with applicants in a similar capacity as the Alumni Ambassadors and were responsible for monitoring the accuracy of information being shared on the platform. They had the capability to retrieve individual applicants' profiles to offer assistance with individual challenges through tools available to them in their role.

The Chat Team also proactively shared resources to answer common applicant questions. The post below highlights an example of a Chat Team member sharing a resource that was viewed by thousands of applicants:



TRAINING THE COMMUNITY MODERATORS

Two moderator training sessions, designed for all parties expected to field student answers and provide resources in the community, were held in July and August, with one check-in session in September, a month after the study started.

The training was designed to help moderators learn the purpose of the study, familiarize themselves with InScribe, and understand their role and responsibilities as moderators. This training was attended by Alumni Ambassadors, Chat Team moderators, and members of the Enrollment Team leadership.

Catalyzing Initial Community Engagement

To get the community started, the InScribe Customer Success team and community moderators seeded the platform with a small number of common questions and conversation starters. Applicants were then given multiple access points to the community, including prominent placement on the enrollment portal and through email notifications.

Community engagement grew **from zero to 15,000 views** in the first five weeks. Throughout the four months of the pilot community, posts and resources had more than 80,000 views, while a handful of individual posts fielded more than 4,000 views.

FORUM PARTICIPATION TRENDS

During the four months of ongoing research into the community, we saw two clear trends: (1) a clear applicant preference for passive viewing within the community; and (2) a deluge of questions related to transcripts and transfer credits. The former may have been related to a slow rollout of the community, which is expected for new partnerships with institutions. The latter offered a glimpse into applicants' top tactical priorities.

Community Participation Varied Widely

Of those invited to participate, 57 applicants (about 1.5%) posted in the applicant community, which is consistent with previous studies (Sun et al., 2014). Indeed, the efforts of a few individuals often drive the quality of the community, at least in its early stages. Research has shown that so-called "lurkers" (i.e., viewers) still benefit from access to online communities even without posting. These applicants are likely to obtain value from reading the available resources. The value of an online community is expected to grow as resources and experiences accumulate on the platform.

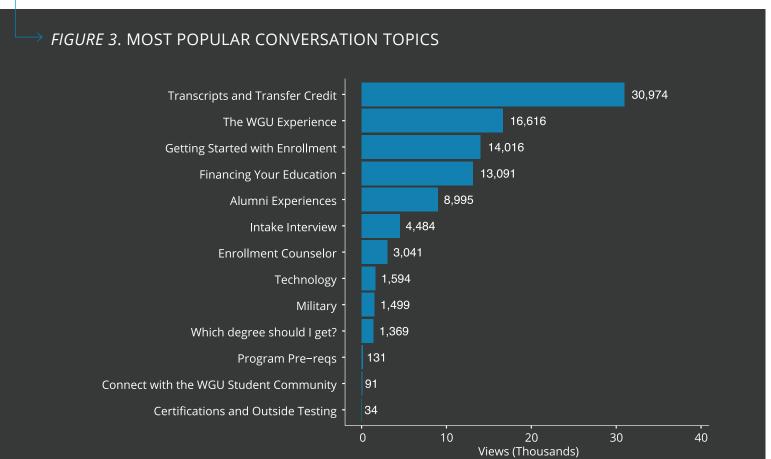
PASSIVE VIEWERS ACTIVE VIEWERS POSTERS 65% 11% Passive viewers benefit Active viewers participate in the Posters participate in the community by navigating the community by making their own from receiving community information through email platform and viewing posts. They contributions, either by posting notifications. may be searching for specific new conversations or replying information or simply exploring. to existing ones.

Table 1. Levels of community participation

Students Most Concerned by Transcript Questions

Applicants' primary concern was getting their transcripts processed by the university. Conversations related to transcripts were by far the most popular topics in the community. A large majority of activity took place in general enrollment, with less engagement in the college-specific forums.

How students were accessing the community may have influenced these behaviors. While students were given multiple access points, the most prominent displays in the enrollment portal were on the "Transcripts" and "Contact Your Enrollment Counselor" pages. Additionally, applicants that came from these links were sent directly to that topic page within the community, bypassing the Channels area that highlighted the college-specific spaces.





Experimental Research

While the applicant community was designed to meet many needs, one key question emerged early in the study: To what extent does building an applicant community improve enrollment metrics? As part of the implementation, WGU Labs conducted a randomized control trial (RCT) to assess potential outcomes, including matriculation rates, related to InScribe use.

Once the platform was integrated into the enrollment portal, new applicants were randomly assigned to receive access to InScribe. Applicants in the treatment group were invited to the platform with email notifications and links in the enrollment portal. The final sample contained 37,771 students: 3,542 in the treatment group and 34,226 in the control group. Details about the methodology are reported in Appendix A.

The experiment tested a pair of <u>pre-registered</u> hypotheses:

- Hypothesis 1: The matriculation rate will be higher for students with access to InScribe in the enrollment portal than students with access to the default enrollment portal.
- Hypothesis 2: The average time between application and intake interview will be shorter for students with access to InScribe in the enrollment portal than students with access to the default enrollment portal.

We estimated two sets of models for testing the hypotheses: (1) logistic regression with matriculation regressed on treatment; and (2) linear regression with time to enrollment interview regressed on treatment. Within each set of models, we tested the following model variations:

- Intent-to-treat model (i.e., treatment assignment regardless of participation level)
- Treatment-on-treated models:
 - » Passive Viewers: Students who logged activity by opening InScribe emails
 - » Active Viewers: Students who logged activity on the InScribe platform
 - » Posters: Students who posted on the InScribe platform

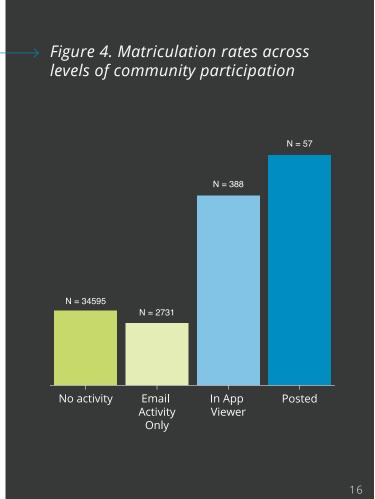
ACTIVE PARTICIPANTS ARE MORE LIKELY TO MATRICULATE

The average treatment effect on matriculation was null (OR = .97, p > .05), which fails to support Hypothesis 1. However, matriculation rates varied significantly across levels of participation within the treatment group (Figure 4). Whereas 13% of applicants matriculate on average, the matriculation rates for applicants who viewed the community (N = 388) and who posted in the community (N = 388) and 40%, respectively. This result is insufficient to make causal claims about the

treatment, but it suggests that students who actively participate in the community may be more serious about enrolling at WGU.

APPLICANTS PROGRESSED THROUGH ENROLLMENT AT SIMILAR PACES

WGU applicants have an interview with their EC before they become a student, which can be a major hurdle in the enrollment process. Using the sample of students with enrollment interview data (N = 9,077), we regressed the time between admission and enrollment interview. Differences between the treatment and control groups were negligible (b = .95, p > .05). This result was similar across the different levels of participation, which did not support Hypothesis 2. Participation in the applicant community did not appear to impact the pace at which applicants progress through the enrollment process.





Community Member Perspectives

In addition to the experiment, we collected feedback from everyone who played a role in the community: applicants, Chat Team members, and Alumni Ambassadors.

APPLICANT FEEDBACK

Labs administered a survey to all the applicants in the treatment group and a random sample of 4,000 applicants in the control group. Among these applicants, 88 in the treatment and 100 in the control group completed the survey (2% response rate). Details about the survey and descriptive statistics are reported in Appendix B and C, respectively.

Applicants With Community Access Reported Higher Satisfaction

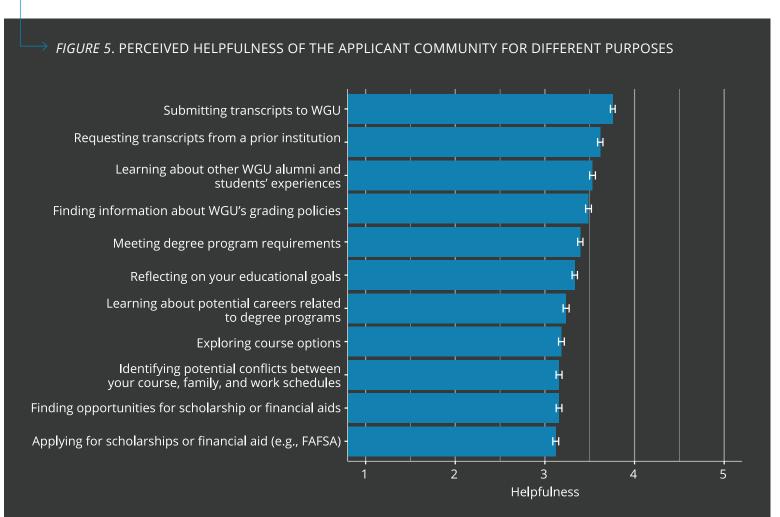
The Net Promoter Score (NPS) is an industrystandard for customer satisfaction. Students with access to the applicant community reported a slightly higher NPS than baseline. Overall, applicants reported high levels of satisfaction with the enrollment process.



Table 2. Net Promoter Score by group

Applicants Found Value Across Tactical and Aspirational Topics

Applicants were also asked to measure the perceived helpfulness of the community's varied purposes. Guidance on transcripts and experiences shared by alumni and students received the highest ratings.



Impact on EC Workload

From the student perspective, perhaps the most critical members of the enrollment team are the ECs, who interact with students individually to offer personalized support. Due to the intensive nature of this process, ECs can be overwhelmed by their workload.

Treatment did not have a statistically significant effect on the number of calls (p > .05) or call length

(p > .05). However, a similar pattern to matriculation was found for call length with active participants. Applicants who interacted with or posted on the applicant community tended to spend more time on the phone with their ECs (p < .01). They did not appear to call their ECs more often (p > .05). The survey also offered preliminary evidence that applicants using the community may be less likely to require additional support from ECs.

During the enrollment process, how frequently did you use each of these resources?	Control (n = 100)	Treatment (n = 88)	p	Scale
WGU website	4.40 (0.84)	4.41 (0.81)	.924	1 = Never
Your enrollment counselor	3.93 (1.09)	3.61 (1.02)	.048	2 = Rarely
WGU Applicants Connect Community		1.79 (0.99)		3 = Occasionally
WGU groups on social media (e.g., Facebook, Reddit)	2.17 (1.41)	2.12 (1.41)	.810	4 = A lot
				5 = A great deal

CHAT TEAM FEEDBACK

Labs interviewed the Chat Team, which became vital members of the community, for a retrospective of their experience with the platform. They offered their views on perceived success of the pilot community, as well as areas for improvement.

SUCCESSES

- There were many engaging conversations between students and alumni. Prior to this implementation, capabilities for this had been requested, but were lacking. Even the Chat Team participated in sharing their own WGU experiences with the community.
- By paying attention to frequently asked questions, the Chat Team developed comprehensive resources that received lots of engagement from students
 - » For example, the transcript FAQ was one of the most viewed posts on the platform.

AREAS FOR IMPROVEMENT

- There was minimal guidance on when and what to post, which could be attributed in part to being onboarded later in the implementation. There may be future opportunities for structuring when and how alumni engage with the community.
- Asynchronous posts were often less convenient than live chat for addressing student needs in the moment. Conversations often needed to be moved to a private channel, which indicates opportunities for additional integrations.
- Many applicants aren't willing to search through existing resources.

ALUMNI FEEDBACK

Labs also hosted a focus group with three members of the Alumni Ambassador team. Alumni reported their experiences and offered suggestions for how to improve the community.

SUCCESSES

- The goal of the community was clearly defined for alumni.
- Previously, WGU alumni have had difficulty with convening. Communities are spread across multiple platforms (LinkedIn, Facebook, Reddit), so it was encouraging to have a central location for interacting with applicants and each other.
- Available online communities tend to skew towards negative views and "wild tangents."
 Some alumni wanted a forum where they could share positive experiences.
- Alumni were happy to help reduce the workload for ECs.

"It felt good to write about the challenges we faced as students."

AREAS FOR IMPROVEMENT

- Alumni were sometimes overwhelmed by the number of transactional questions (e.g., transcripts). They were more interested in engaging with applicants about their personal experiences. The two purposes of the community -- both tactical questions and aspirational stories—could be communicated better to students.
- It was difficult to know if their posts had an impact on applicants.
- There was some frustration with their inability to help struggling applicants, like those who cannot get in contact with an EC or have been waiting on transcripts for a long time.

"Questions designed for enrollment counselors, not for alumni to answer"



Next Steps

Now that a virtual community has been integrated into the enrollment portal, the next steps for WGU and InScribe involve determining how to leverage the accumulated resources moving forward. Many lessons were learned from the implementation and can inform future versions of the enrollment process and applicant community.

Although there was not a causal effect of the community access enrollment metrics, increased matriculation rates for active users suggest potential for identifying students who are most likely to follow through with the enrollment process. Posting in the community could serve as a flag for reaching out to that student with personalized support.

RECOMMENDATIONS

While the applicant community already provides a unique window into the types of students -- both active viewers and posters -- who matriculate at higher rates, there remain several areas of potential enhancement. These include:

- Address bottlenecks in the enrollment process. To realize the full potential of an applicant community, determine how it can be integrated with the logistics of getting applicants through the enrollment process. Processing transcripts in a timely manner remains a major challenge for many applicants.
- Design pathways and signposts that direct support. The enrollment portal can be improved with signposts that direct students toward asking individual questions on private channels and general questions on the applicant community.
- Distinguish between logistical and experiential conversations. In addition to separating private and public conversations, WGU and InScribe can better clarify the two separate purposes of the community, which will improve the experience for both moderators and applicants. One Alumni Ambassador suggested that fielding fewer "support" questions would be the key to their future participation.
- Enable more integrations. One of the challenges encountered by the Chat Team was having to transition students from public to private channels. This challenge could potentially be solved with more technical integrations with the InScribe platform (e.g., live chat).
- Open the community. Communities can take a long time to develop, with the benefits arising from the accumulation of resources and development of relationships over time. One way to speed the process would be to open the community to potential applicants (like Live Chat on the WGU website).

Following the conclusion of this study, the applicant community continues to be maintained, albeit with less support. Applicants and matriculated students have continued to engage with each other, offering insight into each other's experiences. This offers a window into the future of peer-to-peer support, moderated for quality by WGU personnel.

REFERENCES

- Alt, A. W. (2020). Fostering belonging: Improving academic outcomes among first-generation students through a pre-matriculation intervention [Doctoral dissertation]. Bowling Green State University.
- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education*, 75(3), 203-220.
- Kirby, T. A., Tabak, J. A., Ilac, M., & Cheryan, S. (2020). The symbolic value of ethnic spaces. Social Psychological and Personality Science, 1948550620913371.
- Means, D. R., & Pyne, K. B. (2017). Finding my way: Perceptions of institutional support and belonging in low-income, first-generation, firstyear college students. *Journal of College Student Development*, 58(6), 907–924.
- Scholz, U., Doña, B. G., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. European Journal of Psychological Assessment, 18(3), 242-251.
- Sun, N., Rau, P. P.-L., & Ma, L. (2014).
 Understanding lurkers in online communities: A literature review. Computers in Human Behavior, 38, 110–117.

Appendix A: Methodology

STUDY DESIGN

The InScribe platform was integrated into the WGU enrollment process for a limited sample of students whose application to WGU was accepted between August 28 and October 31, 2020. Data collection stopped on the day that 4,000 students were assigned to the platform, although the platform remained open for use in the subsequent months. After receiving a letter of acceptance to WGU, applicants received an email instructing them to sign in to their enrollment portal. Here, they created a single sign-on (SSO) account. This event triggered an algorithm that systematically directed 10% of the students to an alternative version of the enrollment portal with the InScribe platform (named WGU Applicants Connect). Aside from the addition of the community platform, everything was equivalent between the enrollment portals. All students were assigned an enrollment counselor (EC) as their primary contact.

Applicant participation in the InScribe platform was optional. Students were encouraged to access the platform through email notifications and prominent links in the enrollment portal. Applicants could access the InScribe platform from multiple entry points, including the home page and topic-specific subpages. Applicants were also logged as having participated in the platform for viewing emails from InScribe with community content. After the goal of 4,000 applicants was reached on October 31, the platform remained open for the subsequent two months. Enrollment data was pulled from the WGU data warehouse on January 5, 2021. Students who received access to the platform after October 31 were excluded from analysis. Due to the nature of the enrollment process, applicants are sometimes removed from the database, in which case outcome data are unavailable. The final sample included 3,545 applicants assigned to the treatment group and 34,226 applicants assigned to the control group.

VARIABLES

Treatment assignment (or adherence, in the case of treatment-on-treated analysis) was the primary independent variable. The primary dependent variables were (1) matriculation and (2) time between admission (pending transcript) and the enrollment interview. Applicants for which outcome data were unavailable were excluded from analysis. Some cases were excluded for database errors or exceptional circumstances, such as students who returned to an earlier stage of the enrollment process following an enrollment interview.

ANALYSIS

We estimated two sets of models for testing the hypotheses: (1) logistic regression with matriculation regressed on treatment and (2) linear regression with time to enrollment interview regressed on treatment. We estimated ITT and multiple TOT variations of the model.

HYPOTHESIS 1

Hypothesis 1 predicted that students with access to InScribe would be more likely to matriculate than students in the control group. We tested this hypothesis with a logistic regression model of matriculation on the treatment (N = 37,771).

Table A1. Matriculation regressed on treatment

Model	N _{Treatment}	Odds ratio (95% CI)
Treatment	3,545	0.97 (0.88, 1.08)
Email activity only	2,731	1.09 (0.98, 1.21)
In app viewer	388	3.29*** (2.65, 4.07)
Posted	57	4.45*** (2.59, 7.52)

*p < .05; **p < .01; ***p < .001

HYPOTHESIS 2

Hypothesis 2 predicted that students with access to InScribe would complete their enrollment interview sooner than students in the control group. Time to enrollment interview was calculated as the number of days between the admission decision (pending receipt of transcript evaluation). This analysis included the sample of applicants who were logged as having completed an enrollment interview (*N* = 9,077). Note that a handful of matriculated students were missing data on this stage of the enrollment process.

Table A2. Time to interview regressed on treatment

Model	N _{Treatment}	Coefficient (95% CI)
Treatment	838	0.95 (-0.68, 2.58)
Email activity only	567	1.00 (-0.68, 2.68)
In app viewer	229	-1.55 (-4.61, 1.52)
Posted	32	-0.97 (-9.07, 7.12)

Appendix B: Survey

DATA COLLECTION

WGU Labs distributed the survey to 7,545 students who were accepted to WGU between August 28 and October 31, 2020. All students in the treatment condition (n = 3,545) and a random sample of 4,000 students in the control group received an invitation. A total of 192 students, i.e. 2.5% of the sample responded.

The survey was hosted on Qualtrics and delivered on January 5, 2020. Students received the following invitation sent to their university email accounts.

Hello \${m://FirstName},

You're receiving this email because you started the enrollment process at WGU sometime in the past six months.

WGU Labs has been testing new features on the WGU enrollment portal. We're trying to understand how students engage with the enrollment process and what features are most useful for making progress. We could use your help!

We are looking for volunteers to complete an online survey that should take no more than 10 to 15 minutes to complete. Your responses will remain confidential.

Please click the following link to complete the survey in the next two weeks.

\${I://SurveyLink?d=Take the Survey}

or copy and paste the URL below into your internet browser:

\${I://SurveyURL}

Please feel free to reach out with any questions.

Thank you,

Jonathan Huck Research Scientist WGU Labs

Students were prompted with informed consent prior to instructions for beginning the survey. This research was approved by WGU's institutional review board.

MFASURFMENT

The survey included psychological scales designed to measure belonging and self-efficacy, along with indicators of satisfaction and engagement. The survey involved skip logic, such that applicants only responded to certain items if they had previously indicated that those items were relevant to them. Aside from Net Promoter Score, all measures were scored on a 5-point Likert scale. Estimates of internal consistency (a) were excellent for the psychological scales.

SATISFACTION

Item	Scale
Overall, how satisfied are you with your enrollment experience at WGU?	1 = Very dissatisfied 2 = Dissatisfied 3 = Neither 4 = Satisfied 5 = Very satisfied
How likely are you to recommend WGU to a friend or colleague?	0 = Not at all likely 10 = Extremely likely

ENGAGEMENT

Item	Scale
During the enrollment process, how frequently did you use each of these resources? 1. WGU website 2. Your enrollment counselor 3. WGU Applicants Connect Community	1 = Never 2 = Rarely 3 = Occasionally 4 = A lot 5 = A great deal
WGU groups on social media (e.g., Facebook, Reddit)	
5. Other (Please specify:)	

QUALITY OF INTERACTIONS

Each of the following items were displayed when the student responded "Rarely" or more frequently to the corresponding item on the engagement scale.

Item	Scale
1. How satisfied are you with the quality of information on the WGU website? How satisfied are you with the quality of interactions with? 2. WGU website 3. Your enrollment counselor 4. WGU Applicants Connect Community 5. WGU groups on social media (e.g., Facebook, Reddit) 6. Other (Please specify:)	1 = Very dissatisfied 2 = Dissatisfied 3 = Neither satisfied nor dissatisfied 4 = Satisfied 5 = Very satisfied

ENROLLMENT TASKS

Item	Scale
During the enrollment process, to what extent have you done each of the following? 1. Meeting degree program requirements 2. Reflecting on your educational goals 3. Exploring course options 4. Finding opportunities for scholarships or financial aid 5. Applying for scholarships or financial aid (e.g., FAFSA) 6. Identifying potential conflicts between your course, family, and work schedules 7. Finding information about WGU's grading policies 8. Learning about potential careers related to degree programs 9. Learning about other WGU alumni and students' experiences 10. Submitting transcripts from a prior institution	1 = Never 2 = Rarely 3 = Occasionally 4 = A lot 5 = A great deal

EASE OF GETTING HELP

Each of the following items were displayed when the student responded "Rarely" or more frequently to the corresponding enrollment task.

Ite	m	Scale
easy 1. 2. 3.	goals Exploring course options Finding opportunities for	1 = Very difficult 2 = Difficult 3 = Neither difficult nor easy 4 = Easy 5 = Very easy
5.	scholarships or financial aid Applying for scholarships or financial aid (e.g., FAFSA)	
6.	Identifying potential conflicts between your course, family, and work schedules	
7.	Finding information about WGU's grading policies	
8.	Learning about potential careers related to degree programs	
9.	Learning about other WGU alumni and students' experiences	
10	. Submitting transcripts to WGU	
11	. Requesting transcripts from a prior institution	

HELPFULNESS

For students with access to WGU Applicants Connect, each of the following items were displayed when the student responded "Rarely" or more frequently to the corresponding enrollment task.

Item	Scale
During the enrollment process, how helpful was the WGU Applicants Connect Community for? 1. Meeting degree program requirements 2. Reflecting on your educational goals 3. Exploring course options 4. Finding opportunities for scholarships or financial aid 5. Applying for scholarships or financial aid (e.g., FAFSA)	1 = Not helpful at all 2 = Slightly helpful 3 = Moderately helpful 4 = Very helpful 5 = Extremely helpful

- 6. Identifying potential conflicts between your course, family, and work schedules
- 7. Finding information about WGU's grading policies
- 8. Learning about potential careers related to degree programs
- 9. Learning about other WGU alumni and students' experiences
- 10. Submitting transcripts to WGU
- 11. Requesting transcripts from a prior institution

BELONGING (α = .91)

Adapted from Kirby et al. (2020)

Ite	n	Scale
may at W agre the and	ow is a list of statements that may or not be true about your experience /GU. Please indicate your level of eement with each statement using responses provided. Think carefully respond honestly as there is no ong" answer.	1 = Not at all 2 = Only a little 3 = To some extent 4 = Rather much 5 = Very much
1.	How similar do you feel to other students at the WGU?	
2.	How much do you feel welcome in the WGU community?	
3.	How connected to your peers do you feel at WGU?	
4.	How comfortable do you feel contributing to discussions with peers at WGU?	
5.	How much do you feel the WGU community values your contributions?	
6.	How comfortable do you feel asking questions in the WGU community?	
7.	How comfortable do you feel asking for help from WGU staff?	
8.	How much do you feel like you are supported by the WGU community?	

SELF-EFFICACY (α = .98)

Adapted from Scholz et al. (2002)

Iten	1	Scale
	se respond to the following ements as you anticipate your time GU.	1 = Strongly disagree 2 = Somewhat
	I can always manage to solve difficult problems if I try hard enough.	disagree 3 = Neither agree nor disagree 4 = Somewhat
	It is easy for me to stick to my aims and accomplish my goals.	agree 5 = Strongly agree
	l am confident that l could deal efficiently with unexpected events.	0,70
	Thanks to my resourcefulness, l know how to handle unforeseen situations.	
	l can solve most problems if l invest the necessary effort.	
	I can remain calm when facing difficulties because I can rely on my coping abilities.	
	When I am confronted with a problem, I can usually find several solutions.	
	If I am in trouble, I can usually think of a solution.	
	l can usually handle whatever comes my way.	
	l get along with people who l interact with.	

All students were prompted with the following open-ended questions:

- What has been most satisfying about your enrollment experience?
- What change would have the biggest impact on improving the enrollment experience?

Students granted access to WGU Applicants Connect were prompted with the following open-ended questions.

- If you visited the WGU Applicants Connect Community, please describe the most significant experience you had with the community.
- If you have any additional comments or feedback on the WGU Applicants Connect Community, please share them below.

Appendix C: Descriptive Statistics

Table C1. Descriptive statistics for survey (N = 188)

Mean (SD)

ltem	Control	Control	P
Overall, how satisfied are you with the following at WGU?	4.28 (1.08)	4.09 (1.14)	0.247
How likely are you to recommend WGU to a friend or colleague?	8.49 (2.26)	8.69 (2.20)	0.533
During the enrollment process, how frequently did you use each of these resources?			
WGU website	4.40 (0.84)	4.41 (0.81)	0.924
Your enrollment counselor	3.93 (1.09)	3.61 (1.02)	0.048
WGU Applicants Connect Community	N/A	1.79 (0.99)	N/A
WGU groups on social media (e.g., Facebook, Reddit)	2.17 (1.41)	2.12 (1.41)	0.810
Other	1.46 (1.11)	1.51 (1.22)	0.807
How satisfied are you with the quality of information on the WGU website?	4.34 (0.74)	4.34 (0.77)	0.982
How satisfied are you with the quality of interactions with ?			
Your enrollment counselor	4.38 (1.02)	4.11 (1.10)	0.110
WGU Applicants Connect Community	N/A	3.74 (0.97)	N/A
WGU groups on social media (e.g., Facebook, Reddit)	3.71 (0.89)	4.03 (0.85)	0.101
During the enrollment process, to what extent have you done each of the following?			
Meeting degree program requirements	4.35 (1.04)	4.35 (0.88)	0.968
Reflecting on your educational goals	4.44 (0.81)	4.28 (0.84)	0.218
Exploring course options	4.18 (0.97)	3.98 (1.06)	0.200
Finding opportunities for scholarships or financial aid	3.56 (1.25)	3.40 (1.27)	0.392
Applying for scholarships or financial aid (e.g., FAFSA)	3.33 (1.55)	3.36 (1.49)	0.903
Identifying potential conflicts between your course, family, and work schedules	3.71 (1.20)	3.56 (1.28)	0.404
Finding information about WGU's grading policies	3.41 (1.37)	3.23 (1.39)	0.416
Learning about potential careers related to degree programs	3.48 (1.49)	3.52 (1.39)	0.874
Learning about other WGU alumni and students' experiences	2.76 (1.40)	2.73 (1.36)	0.888
Submitting transcripts to WGU	3.74 (1.19)	3.53 (1.34)	0.293
Requesting transcripts from a prior institution	3.63 (1.32)	3.44 (1.37)	0.378
During the enrollment process, how easy was it to get help with?			
Meeting degree program requirements	1.67 (0.92)	1.67 (0.89)	0.997
Reflecting on your educational goals	1.65 (0.97)	1.88 (0.90)	0.113

Exploring course options	1.78 (1.03)	1.80 (0.89)	0.869
Finding opportunities for scholarships or financial aid	2.02 (1.17)	2.24 (1.12)	0.251
Applying for scholarships or financial aid (e.g., FAFSA)	1.90 (0.92)	2.24 (1.10)	0.052
Identifying potential conflicts between your course, family, and work schedules	1.98 (0.99)	1.99 (0.83)	0.951
Finding information about WGU's grading policies	1.64 (0.80)	1.95 (0.93)	0.039
Learning about potential careers related to degree programs	1.50 (1.00)	1.00 (0.00)	0.391
Learning about other WGU alumni and students' experiences	1.90 (0.96)	2.03 (0.97)	0.423
Submitting transcripts to WGU	1.64 (0.84)	1.77 (0.89)	0.333
Requesting transcripts from a prior institution	1.76 (0.84)	1.87 (0.91)	0.429
During the enrollment process, how helpful was the WGU Applicants Connect Community for?			
Meeting degree program requirements	N/A	3.39 (1.33)	N/A
Reflecting on your educational goals	N/A	3.33 (1.34)	N/A
Exploring course options	N/A	3.18 (1.45)	N/A
Finding opportunities for scholarships or financial aid	N/A	3.16 (1.44)	N/A
Applying for scholarships or financial aid (e.g., FAFSA)	N/A	3.12 (1.47)	N/A
Identifying potential conflicts between your course, family, and work schedules	N/A	3.16 (1.50)	N/A
Finding information about WGU's grading policies	N/A	3.49 (1.46)	N/A
Learning about potential careers related to degree programs	N/A	3.24 (1.51)	N/A
Learning about other WGU alumni and students' experiences	N/A	3.53 (1.46)	N/A
Submitting transcripts to WGU	N/A	3.76 (1.20)	N/A
Requesting transcripts from a prior institution	N/A	3.62 (1.35)	N/A
Belonging			
How similar do you feel to other students at the WGU?	3.60 (1.16)	3.30 (1.20)	0.112
How much do you feel welcome in the WGU community?	4.24 (1.11)	4.12 (1.05)	0.492
How connected to your peers do you feel at WGU?	2.82 (1.41)	2.63 (1.25)	0.361
How comfortable do you feel contributing to discussions with peers at WGU?	3.31 (1.46)	3.37 (1.31)	0.775
How much do you feel the WGU community values your contributions?	3.67 (1.31)	3.46 (1.18)	0.287
How comfortable do you feel asking questions in the WGU community?	4.01 (1.16)	3.61 (1.16)	0.027
How comfortable do you feel asking for help from WGU staff?	4.44 (0.98)	4.37 (0.86)	0.612
How much do you feel like you are supported by the WGU community?	4.13 (1.15)	4.13 (0.98)	0.983
Self-efficacy			
I can always manage to solve difficult problems if I try hard enough.	4.31 (1.02)	4.24 (1.10)	0.702
It is easy for me to stick to my aims and accomplish my goals.	4.11 (1.04)	4.01 (1.05)	0.562
I am confident that I could deal efficiently with unexpected events.	4.02 (1.04)	4.04 (1.01)	0.923
Thanks to my resourcefulness, I know how to handle unforeseen situations.	4.02 (1.04)	4.07 (1.04)	0.797
I can solve most problems if I invest the necessary effort.	4.26 (1.05)	4.28 (1.04)	0.884
I can remain calm when facing difficulties because I can rely on my coping abilities.	4.05 (1.02)	4.08 (1.03)	0.851
When I am confronted with a problem, I can usually find several solutions.	4.14 (0.96)	4.15 (0.96)	0.943
If I am in trouble, I can usually think of a solution.	4.19 (0.94)	4.19 (0.95)	0.991
l can usually handle whatever comes my way.	4.15 (1.02)	4.19 (0.97)	0.808
I get along with people who I interact with.	4.42 (0.90)	4.26 (0.94)	0.258



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The **Accelerator at WGU Labs** works with early-stage education technology startups. As an accelerator born out of Western Governors University (WGU) — the nation's largest nonprofit, online university — its mission is to advance the academic, social, and career success of learners by lowering education costs, increasing learner access, and improving learner outcomes, all with a particular focus on those who are underserved and/or at-risk.

InScribe is a digital student support platform using a combination of community input and artificial intelligence which can be integrated into a school's existing ecosystem. This platform aims to support student success by providing a single location spanning across the common support silos found in higher education, allowing on-demand connection and collaboration with instructors, mentors, and peers. InScribe is designed to increase student engagement and retention by 1) enabling students to build connections in the learning community, 2) helping students receive the support they need quickly and efficiently, 3) increasing satisfaction in the student's educational experience.

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