

#### FULL-LENGTH ARTICLES

# Retention Reimagined: Participatory Action and Positive Deviancy for University Student Success

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About half of U.S. university students who start their degrees never finish higher education retention is a pressing problem that has remained stagnant since the 1960s. This article highlights strategies for conducting research on undergraduate retention done by and with undergraduates themselves. This article's context is a participatory action research project that encompassed the creation of informative videos, paper resource guides, an innovative app, and a comprehensive video-making training course, all designed to empower students in navigating the complexities of college life effectively. We highlight the importance of prior research methods training for undergraduates and offer methods for seamlessly integrating such training into existing educational structures. To address the sensitivity of student retention issues, we introduce a positive deviancy framework as a valuable perspective. Furthermore, we stress the significance of increased participation during the data analysis phase of participatory research, advocating for hybrid, in-person, and online approaches. The article also reflects on the political and ethical challenges associated with conducting participatory research in higher education, drawing insights from existing literature and our own experiences.

Over the decades, student retention has remained a persistent concern for universities, researchers, and students themselves (Howell et al., 2021). The issue dates back to at least the 1960s when nearly half of university students failed to complete their academic journeys (Berger et al., 2012). Regrettably, this 50-50 retention statistic has only marginally improved over the past seven decades. The National Student Clearinghouse (NSC), which began tracking data in 2008, deems improvements in retention as "stalled"; presently, the completion rate stands at approximately 62% for college starters (National Student Clearinghouse, 2022). Recent studies have reinforced what colleges have observed locally: the pandemic's far-reaching social, educational, and economic consequences have significantly undermined student retention (Howell et al., 2021). Additionally, a looming demographic decline resulting from reduced birth rates during the Great Recession has further contributed to a decrease in the number of students entering U.S. institutions (Harvey, 2021). As a result, universities are facing considerable pressure to retain students and ensure the university's long-term sustainability.

In response to the persistent issue of student retention, universities have implemented various strategies. These initiatives can be broadly categorized into three areas: classroom innovations, improvements in university services, and addressing broader student social needs (Tight, 2020). To gauge the effectiveness of these interventions, institutions often rely on quantitative measures such as survey instruments, with the National Survey of Student Engagement (NSSE) being one of the most common (Fosnacht & Gonyea, 2018). While these institutional efforts and measurement tools play a crucial role, it is equally essential to foster innovative thinking alongside them. Often, these interventions have been conducted *for* students rather than *with* students, with limited emphasis on understanding students' own perspectives on what is needed. We contend that while outcome measurement and expertise in educational leadership are valuable, there should also be an active effort to seek holistic student perspectives and encourage their cooperation and collaboration. Students, as those with the most at stake in their educational journeys, have frequently been overlooked in the process of designing interventions and programs that could have a meaningful impact on their own futures (Degtjarjova et al., 2018). Therefore, a shift toward involving students directly in the decision-making process becomes crucial to address the complex issue of retention effectively.

In this paper, we aim to provide resources and approaches for conducting participatory research on student retention in higher education. We discuss a project in which students served as co-researchers (Altrichter et al., 2002), conducting interviews with successful peers to create informative videos that share college success strategies. Subsequently, students chose to develop a paper guide and an app-based resource navigation tool. Throughout the narrative, we explore the methodologies and rationales for employing participatory research in higher education. We also share the project's successful strategies and our personal experiences, providing links to additional valuable resources.

### **Understanding Retention and Dropout**

Terms for students leaving the university include attrition, withdraw, departure, stopout and dropout — one of the issues complicating the overall body of research on student persistence is that these terms are often not defined or are defined differently across studies (Xavier & Meneses, 2020). Individual students leave college voluntarily and involuntarily for a host of reasons ranging from poverty, loneliness, mental health, racism, academic struggles, and beyond (Braxton et al., 2004; Collins et al., 2018; Gourlay, 2017; Kirp, 2019). The causes of dropout are often overlapping; in many cases, one difficulty amplifies other problems — for instance, academic struggles in one class may take time from another class or financial difficulties may result in more employment hours and less time studying (Sosu & Pheunpha, 2019). Moreover, the COVID-19 pandemic has amplified many pre-existing difficulties and disparities (Howell et al., 2021).

Relatively little research in the area of higher education retention is participatory in nature. One study describes an attempt by an academic division to carry out a participatory action research study of student experiences — the authors report encountering IRB (i.e. Institutional Research Board, the ethical oversight committee) obstacles and a lack of institutional support (Rickard et al., 2018). In another year-long study of nine Australian students, the first-year students stated that they wanted more opportunities to foster connections and engagement with others and wanted more control and ability to co-create their learning (Rickard et al., 2018). More explanation of how participatory approaches could empower students and inform retention interventions is needed.

### **Conceptual Framework**

Students, the people most affected by dropout, often have the least opportunity to voice their perspectives. To address this gap, we aimed to introduce fresh thinking on how to tackle the issue of student dropout. The departure point for our research is the promotion of student agency — that is, that students, and human beings as a whole, thrive best when they exercise influence on their environment (Klemenčič, 2015).

#### Context

The research group included university administrators (Alex and Brook), a faculty member (Rebecca), and undergraduate students (Noah, Ciara, and Matthew). Because we run multiple work-study and cooperative education programs at our school, we wanted to use some of our student-employees and cooperative education students to tackle retention within our program and, more broadly, the university. Our structure was that the faculty and staff provided ethical, logistical, and methodological support, while the students themselves carried out the data collection and analysis and assisted with report writing. It is worth noting that the research was conducted in a small Midwestern university computer science program with a predominantly female student population (55%). This high percentage of females is remarkable given that the average U.S. representation of females in computer science is around 20% (McAlear et al., 2019). The group recognized that students who had successfully remained enrolled were likely to possess valuable insights into the challenges of college retention.

Our computer science program requires students to engage with research as first-year students in a two-part introduction to research methods course sequence and as seniors in a research capstone course. However, the program also encourages students to participate in research and technology development projects through a voluntary work-study program in which students can choose which project they would like to work on from several options. The student-authors, Noah, Ciara, and Matthew, volunteered to be on this particular project as a part of the work-study program. The staff-faculty group endeavored to involve students from start to finish as co-researchers, which meant that students were involved not only in data collection and writing, but also in report writing — Noah, an undergraduate, primarily drafted a section of this report (the "Sharing Out" section) with faculty scaffolding — and, notably, this writing is a final step in which participant involvement is frequently overlooked (Jackson, 2008).

### Procedures

One of the biggest benefits of participatory research is that research findings are often (but not necessarily) translated into action (Vaughn & Jacquez, 2020). Under the broad umbrella of participatory methodologies, we wanted to choose an approach that strongly emphasized this translation of findings into action. Given our focus on a tangible, helpful outcome, we choose participatory action research (PAR) (Bradbury Huang, 2010; Chandler & Torbert, 2003). PAR is a form of research where the group participates in studying the problem, trying possible solutions to the problem, and refining solutions until a satisfactory outcome is met.

### Training Undergraduates to Do Research

In a PAR project, where co-researchers participate throughout the planning, data collection, data analysis, reflection, and action stages, one of the key ingredients for success is training any co-researchers which will encourage them to participate throughout the whole study—the lay co-researchers need to know the fundamentals of research ethics, design, data collection and analysis (Clark et al., 2022). One of the things that was relatively unique about our setting, and that we had not much contemplated at the outset of our project, was that students in our program within our university all complete a twosemester research course sequence during their first year. So, our student-coresearchers were already trained in research fundamentals and all knew how to write and present a research report.

### Feasibility

Universal research training of undergraduates is not the norm in many institutions. Undergraduate student research training — particularly in traditional paradigms — is done ad hoc, and one of the downsides of this informal individual training is that it is time-consuming for faculty who are often not compensated for this training (Jones & Davis, 2014; Linn et al., 2015). Also, training may not occur due to the misconception that undergraduates simply do not want to research, but often, this assumption is incorrect (Madan & Teitge, 2013). In actuality, undergraduates often simply do not know what research is, or why they might want to become involved, so awareness-raising is required (Pierszalowski et al., 2021). Finally, faculty may be concerned that undergraduates may not follow through on their research obligations — students often have competing priorities or needs. People experienced in conducting research with undergraduates suggest recruiting a few extra students and designing the research to allow for flexibility (Hendricks, 2023).

Yet, not all programs have the resources — such as political good will, acceptance of student agency, or curricular space — to devote multiple courses to undergraduate research training. The faculty author, Rebecca, was in a unique position in that she is a founding member of the academic program where the research took place and is its current program director. She felt it was important that undergraduates have a say in both what was studied and how

the program is run, and she thus pushed for undergraduate research training courses and an emphasis on project-based learning through the program curricula. The faculty author also was able to use work-study funds to compensate student researchers for their time. However, even without expansive resources, there may be ways to integrate undergraduate training in research methods through science, humanities, or writing courses — for instance, offering students project-based learning where they engage in parts of research, assigning scientific literature as readings, or inviting faculty to discuss their own research in class are all practical ways to connect students with research (Madan & Teitge, 2013).

### Inclusion

We also assert that our process of universal methods training and open invitation to participate promoted diverse voices. Because our students all knew what research was, the nature of the invitation to join us in research was understood. The typical informal selection process for these types of faculty research mentorship opportunities is troubling. The chosen students are often the ones who have social capital and know what research is and why they should become involved, while promising less-advantaged and non-traditional students are frequently overlooked (Pierszalowski et al., 2021). For instance, one of the undergraduate researcher co-authors on this paper (Noah) stated that before his research training, he had not been aware that undergraduates could even do research. Talking about how he became involved, he reflected that: "[the fact that I could do research] was a pleasant surprise...I was first nervous about taking part...but quickly [research] became a personal interest of mine. An incredible opportunity."

# Giving Voice

Students have been shown to gain a voice through undergraduate research because they develop deep understandings of the problems around them and identify steps to create change (Sattler et al., 2022). Moreover, undergraduate student writing can be a means to meaning-making, agency, and identity formation — the kind of writing that we have done in this article — and writing about the experiences of oneself and one's peers has been identified as particularly beneficial (Eodice et al., 2019).

# **Building** Competencies

Tangibly, undergraduates who do research may develop a variety of skills such as data literacy and communication (Nolan et al., 2020). When it comes to retention, studies have shown that students who engage in undergraduate research consistently achieve higher GPAs than those who do not participate in research, even when controlling for initial, university-entry GPA (Fechheimer et al., 2011). Finally, research participation can lead to student-faculty coauthorships and have a transformative impact on students' future careers and paths to graduate school, particularly if research is done early in a student's academic journey (Little, 2020).

# Methods

# **Positive Deviancy**

We used an asset-based approach to carry out our participatory action research project. Asset-based approaches involve studying the behaviors of individuals who have demonstrated resilience and success in challenging circumstances, and then disseminating their strategies to others (Pascale et al., 2010). We chose to use an asset-based approach, rather than its opposite, a deficit-based approach, was that retention could be a delicate topic, politically. We felt that emphasizing how to succeed over how not to fail may be a better rallying point for our broader community. An asset-based framework has three characteristics: 1) Identifying who might have a solution to the problem at hand, such as people who have thrived, so-called positive deviants (PDs); 2) Providing a structure to collect data from the PDs; and 3) Designing interventions in which the PD's solutions can be spread and widely applied (LeMahieu et al., 2017).

# **Identifying PDs**

To illustrate what this approach looked like in practice, we will walk through our process. First, we put together a working group that could identify the PDs. To recruit PD students willing to share their stories, the student coresearchers drew on their social connections across campus using a mixture of purposeful and snowball sampling (Goodman, 1961; Patton, 2002). After a training session on research participation recruitment, the student coresearchers identified peers and older students who had persisted and reached out to these additional potential participants to describe the goals of the project and outline participation expectations. As experts in their own communities, the student co-researchers were encouraged to reach out to prospective PDs using approaches that felt natural to them, such as Snapchat's instant messaging feature and text messaging. In the end, the student co-researchers recruited 14 second- to fourth-year positive deviant students — those who had excelled in navigating the challenges of college retention.

# **Interviewing PDs**

The group's next step was to develop and implement a structure that would allow for understanding the positive deviants' strategies for success. The student co-researchers video-interviewed the PDs themselves. The student coresearchers brainstormed a list of 10 interview questions and, with help from the faculty member, developed a finalized interview guide. In total, 14 PDs were video-interviewed. An interesting observation was that four of the PDs stated they preferred to be interviewed in a group of two — a request that was easy to accommodate. As can be seen in the videos, there are two pairs of students who answer questions together. It may be that interviewing undergraduates in small groups (or using other data collection approaches) may be more comfortable for some students. Though participatory and action researchers tend to be open to a broad assortment of data collection tools, most often in research methodology, a dichotomy between an individual interview and a focus group with several or more participants is posed — one or the other is often selected to align with the goals and needs of a particular study (Guest et al., 2017; Namey et al., 2016). It is interesting that when given a choice, unsolicited, quite a few students wanted a third option: to be paired. Why being co-interviewed seemed to matter so much to students merits further consideration. We just honored the choice at the time and, regrettably, did not extensively explore the preference. In the future, pairing undergraduates rather than doing individual or group data collection may merit further exploration.

# A Hybrid Approach to Data Analysis

The pandemic, for us and many participatory researchers, required flexibility and a shifting of plans (Dorhout, 2023). Researchers had to prioritize what parts of our research were feasible or needed in person, and try to shift parts of the research to online modalities (Dorhout, 2023). We did most of the project in person but conducted portions of the data analysis online and asynchronously. In fact, we found that a hybrid model of participant involvement offered new ways for participants to be more deeply involved in the research. In the subsequent sections, we give more detail as to how we went about this participatory process, and why we made the choice points that we did.

First, undergraduates conducted all of our interviews in person and recorded them on video. Undergraduate researchers then transcribed all of the interviews using Temi (<u>https://www.temi.com</u>). Then, having carried out data collection, the student co-researchers adopted a modified participatory theme analysis approach (Best et al., 2022; Jackson, 2008) to collaboratively identify themes and categorize key quotes from the transcribed interview data. First, during an in-person meeting, they passed the transcripts of each interview around the circle so that each researcher had an opportunity to read each interview and highlight quotes that were deemed most important. Participants also brainstormed what themes the quotes could fit under. The transcripts were then collected and the important quotes were typed onto individual virtual sticky notes on a platform called Padlet (<u>https://padlet.com/</u>). A labeled column was also created for each theme. Next, one undergraduate researcher sorted all of the sticky notes into categories. Each researcher could then view the first researcher's work and drag any sticky notes back to the "unsure" category. Sticky notes that were placed back into the "unsure" category were discussed with the group until a consensus around each item could be reached. It may have been better to simply meet live on a videoconference and categorize each item in real time — the first person's categorization may indeed have had disparate influence — but we relate our experience to point out that the traditional in personal thematic analysis (Braun & Clarke, 2006), can be facilitated with groups online without the learning curve associated with qualitative software (such as Dedoose or MaxQDA).

# Overcoming the Data Analysis Hump

While hybrid data collection and analysis were necessary because of the pandemic, in retrospect, the usefulness of a hybrid approach is quite apparent. Namely, we were able to include our undergraduates in the data analysis phase, and the data analysis phase is one of the phases where research participants, even in participatory designs, may be the least included (Nind, 2011). Time and place constraints may be at the heart of some of the difficulty. Reports of projects that include participatory data analysis often include designs where participants need to be in the same place for quite a few hours (Best et al., 2022) or even multiple days (Jackson, 2008). This may not be feasible in the context of undergraduate students, particularly without significant funds to compensate participants. Also, in general, there is relatively little guidance for group data analysis within the literature (Flicker & Nixon, 2015), so it may be reasonable to say that while the logistics of participating in all phases of participatory research could be improved, perhaps the area with the most room for growth is participant inclusion in the data analysis phase.

## Dealing with Time and Place

There has been much stated about making participatory (primarily community-based participatory) research meetings and sites accessible to participants — factors such as time of day, comfortability, and accessibility of the site all need consideration (Sattler et al., 2022). In the context of US.. undergraduates, their schedules vary widely, because they typically take a variety of classes spread out throughout the day and schedules are individualized for each person.

Saliently, many of the lessons learned in the COVID-19 pandemic, like how to do research at a distance, may have relevance in terms of making participatory research projects less dependent on real time, in-person meetings. For instance, one group of authors, Sattler et al. (2022), catalog strategies that worked for socially-distanced research during the pandemic. The authors point out that online maps, video conferencing, statistics and survey software, and drawing platforms all can be harnessed and adapted for many different approaches and phases of participatory research. The authors also point out that many of their successes took place in a context where a face-to-face relationship had been previously built. They also state that moving parts of their projects online did seem to widen participation in many cases, but at the same time, in the online paradigm, spontaneous interactions were lessened and relationships with stakeholders and participants tended to be shallow.

# Sharing Out

After analyzing the data, the student co-researchers proceeded to create videos centered on each identified theme, intending to share these videos with new students. The videos were composed of the interview participants themselves, talking in a montage. A playlist of all the videos and a screenshot can be seen in Figure 1.



Figure 1. An example screenshot of the videos created. The videos can be viewed on YouTube (<u>https://youtube.com/playlist?list=PLB2dyVFiDwkN8QbBBCOm8iaSbr1aewG8V</u>).

### Theme and Video 1: Adjusting to College Life

In this theme, several students expressed the initial sense of awkwardness and difficulty of establishing themselves in a new college environment. They described feeling like "the odd person out" among peers who already seemed familiar with one another. Making friends on campus was often described as "scary" and overwhelming while adjusting to new schedules was challenging. However, amidst these fears and challenges, new opportunities emerged.

Students consistently expressed that as time passed, they experienced an improvement in their ability to adjust to college life and establish friendships. One student even offered reassurance to their peers, stating "making friends... it's not as hard as it seems" (Student 3). Students found that joining sports teams, attending on-campus events, participating in first-year orientation programs, engaging in dormitory life, and utilizing the campus' closed social media app were effective ways to meet new people and forge meaningful relationships.

### Theme and Video 2: Time Management

Students also described the challenges they experienced with time management. The new-found freedom to create their own daily schedules proved difficult for many. As one student recounted, "Being on my own is really hard...because my parents would always be able to help me [with time management] in high school. But here I...like to hang out with friends and procrastinate homework" (Student 8). One student, describing the level of rigor and workload in college classes, articulated, "The classes themselves, aren't...super difficult. It's just managing all of them together and all of their times and all their assignments" (Student 9).

Students were able to develop effective time management strategies to cope with the challenges they faced. One student shared, "I make... a to-do list for all my classes and then I put it in order based off of... the due dates" (Student 3). Another student shared how they learned to divide large assignments into smaller pieces to make the workload more manageable and to avoid "overworking" themselves (Student 4). Interestingly, students also learned valuable time management strategies from their peers. One student expressed how they benefited from a friend's guidance, explaining that they learned how to use Google calendars and set reminders for homework (Student 13). Another student shared that in order to balance their academic and social life they tried to find "friends that are in my classes... I can... study with them and still be with people" (Student 8).

#### Theme and Video 3: Helpful Resources

Students also shared several resources they found helpful while transitioning into college life. While some students utilized first-year orientation and campus tours as a major source of locating campus resources, other students found resources because they "self-explored" and spoke with students and staff on campus (Student 13). Many students sought academic support from various resources on campus, such as the Learning Center (a tutoring center). One student said, "You can... get that one-on-one time with somebody, so you can... do better in whatever the thing that you're having the problem with" (Student 1). The Learning Center provided students with a platform to discuss their academic weaknesses and seek support. Faculty office hours also played a crucial role in assisting students with their college adjustment. A junior emphasized the usefulness of office hours, explaining, "I go to them frequently and that's when I always get help on homework, if I don't understand the lesson" (Student 5).

In addition to traditional resources, students also leveraged social media platforms for both social and academic support. The university's closed social media app, Mount Roar!, played a significant role in this regard. Students utilized the app to identify their classmates, establish connections, seek clarification, and stay updated on campus events. A student shared, "I use the Mount Roar! app to see who was in my classes and to be able to reach out and message them saying, 'Hey, do you understand this assignment?" (Student 4).

### Theme and Video 4: Academic Advisors

Several students experienced confusion and stress when selecting classes during their first year of college. One student stated, "I wasn't a hundred percent sure what path to go down" (Student 7). Reflecting on his experience, a sophomore student shared, "I was in over my head at the beginning. I knew what my major was, but I didn't know what classes really entailed... until I met my advisor" (Student 14). This student's experience resonated with others who also relied on their academic advisors for guidance. Furthermore, students expressed a sense of genuine support and investment from their advisors. For example, one student shared, "I met my advisors... it was super helpful because they're very... active and they really want to see you succeed" (Student 4). The one-on-one time between student and advisor seemed to be a necessary tool for students not only in their transitional period but also throughout college. Reflecting on his experience, a junior shared, "Sitting down with my advisor... is definitely necessary if I want to be successful" (Student 10).

#### Outcomes

Herein, we describe types of outcomes from the project: the immediate local dissemination of the videos and the development of spin-off products.

### Dissemination from Students to Students

We presented the videos to incoming computer science freshmen during their first semester. The student co-researchers attended the freshmen cohort seminar for their major and shared the videos, providing an explanation of the larger project. Additionally, we shared the videos with first-year students via text messaging for future reference. While the videos themselves contain useful resource navigation, we aim to create a culture of undergraduate research as a valuable norm within our program — we want students to see others like them doing research. We are planning future studies to document the development of researcher identity development within our student cohorts.

#### Spin-off Projects and Initiatives

The student co-researchers were motivated to expand on the findings of the video project and assist other students by implementing additional spin-off initiatives that could have positive impact on retention. They aimed to create a paper and web-based research guide that would serve as a comprehensive goto, featuring various campus resources. Additionally, they intended to utilize social media platforms to promote these resources and services. Moreover, they embarked on the development of a navigation chatbot to further assist students. In one of the first spinoffs of this project, the student co-researcher group brainstormed and undertook the creation of a student resource guide, where student support resources and services, such as tutoring centers, food pantries, financial aid, and mental health supports, were all contained in a singular guide to distribute to students. Furthermore, the students are currently working on the development of a campus map app named "Lost Lions." QR codes placed throughout the campus will provide access to the app which, in turn, will offer contextualized walking directions to different campus resources.

As a spin-off, the program's Instagram account, overseen by a student social media manager, intentionally features various free applications relevant to student study skills and success. This deliberate approach to reaching students and offering support through social media builds on our research's findings, which emphasize the importance of scheduling tools.



Figure 2. Prototype of Lost Lions, an app that uses videos to help students navigate campus.



Figure 3. Example of a student-made Instagram post highlight a time management tool.

The faculty researchers involved in the project were highly impressed with the academic and professional growth experienced by the student coresearchers. As part of the project, the student co-researchers acquired video editing skills, which had a significant impact on their development. In fact, one of the student co-researchers, who played a key role in video editing, developed a workshop on video editing. We presented this workshop to local students and also shared it via Zoom with students from an international partner institution. Furthermore, we offered a project-based learning special course on video editing in collaboration with this international partner institution. Some of the student co-researchers served as peer experts in this course. Concurrently, there has been a notable increase in interest in the school's video editing club, with several computer science students enrolling this semester. The student resource project culminated in the students having the opportunity to present their research at a state-level student research showcase. Moreover, they were selected to participate in a panel discussion focused on the application of humancentered design in STEM higher education. This recognition and involvement in such events further highlighted the utility and impact of their work.

Another spin-off is the development of our artificial intelligence system to flag students who display overlapping conditions associated with drop out (infrequent logins, infrequent messages, low grades, attendance issues) and then to text students with resources that may help address some root causes of socio-academic difficulties. We currently have student advisory and working groups on this project. One of the major ethical concerns about AI is its lack of democracy — that is lack of transparency and involvement of stakeholders in which data is used and how the data is analyzed (Braunschweig & Ghallab, 2021). Community-engaged research may represent an ethical path forward, but implementation of community-engaged research is still a gap in the field (Murphy & Taylor, 2023). The availability of trained and experienced students has made ethically and community-engaged AI projects more possible and has aided us in making more explicit that technology can be a means to help people. As mentioned earlier, the researchers are part of a computer science program that is strikingly over 50% female. Literature suggests that women, along with other non-traditional populations, are often attracted to computer science not solely because of the subject itself, but rather because they see technology as a means to solve problems or assist others (Boucher et al., 2017; Mark, 2018). We intend to investigate how having more trained undergraduate researchers can make ethical, community engaged projects more feasible, and also how research training can help tap into students' motivations to help people and actual implementations of technologically complex projects.

#### Limitations and Reflections

In reflection, we also acknowledge that the staff and faculty authors had quite a lot invested in student retention as whole, as part of their jobs was to improve student retention rates and this project's organization and initial idea came from a faculty member. Particularly, in the direction and planning of the project, students perhaps were not included as true partners to an optimal extent (Zimmerman et al., 2015) because the project did originate from staff and faculty. In the end, there is not one easy answer to the practicalities of power sharing other than to shine light on it through open reflection and dialog (Mason & Boutilier, 1996). We are still reflecting on how to facilitate earlier student involvement. It is true that while a student's individual life would be greatly impacted by their dropout, we acknowledge that the general issues of dropout across the student body are primarily the responsibility of the university administration, not any particular group of students or individual student. Also, on an individual level, it may be reasonable to think students generally do not expect to become a dropout statistic or they would not be attending in the first place. Finally, empowering students to prevent dropping out becomes a conundrum when we cannot necessarily fully foresee or talk

to students who drop out. We do not have easy answers, but the exploration of power-sharing in higher education retention initiatives needs further exploration, both for us locally and in the literature in general.

One limitation of our research, at least in a positivistic paradigm, is its lack of generalizability. In simple terms, what is true in our program, at our Midwestern small private university, may not be true in other contexts. While generalizability may not be at the forefront of the mind for the readers of this journal, certainly readers who might aim to carryout similar participatory projects on retention in their universities may face generalizability questions from their own broader university community (Rickard et al., 2018). For many in our universities, participatory methods represent a shift in paradigm. Much of engagement research and programming done within institutions is topdown, with surveys conducted by administration and programs invented by staff members, and thus the majority of student retention initiatives are aimed at broad institutional change and not individual student needs (Degtjarjova et al., 2018). Therefore, in traditional paradigms, quantitative measurability of outcomes tends to be emphasized.

Yet in making the argument for participatory methods, we can point out that most experts would agree that the student population and associated student needs are increasingly heterogeneous (Tight, 2020). Also, dropout is often a sequence of events and a story of overlapping and mounting difficulties - time, space, and sequencing are vital to understanding the departures (Willging & Johnson, 2019). Yet, as we mentioned in the introduction, a great deal of student engagement research is done in the context of primarily quantitative instruments such as the National Survey of Student Engagement (NSSE). NSSE does assert that their survey is generalizable and an adequate measure of the means with a university population. In other words, NSSE claims their survey paints an accurate average picture (National Survey of Student Engagement, 2013). To what extent this type of averaging is actionable or helpful has been questioned, however, as higher education students have diverse preferences, cultures, learning styles, and study a vast area of topics (Zeng et al., 2023). But even if the usefulness of homogenization and standardization of diverse groups is taken as a given, participatory (or at least qualitative), person-centered research in student engagement and retention is still much needed in parallel due to the complex nature of dropout.

Perhaps one of the strongest arguments for participatory approaches is that surveys generate quantitative averages but do very little to equip students to understand their own problems and find solutions. We would encourage other researchers to consider carrying out participatory research studies in their own contexts to help establish that participatory research is a helpful and transferable approach (Leavy, 2017) for not just understanding students' experiences or best practices, but also as a tool to build individual resiliency and university community capacity for dealing with student problems (Nolan et al., 2020). Though we involved students, students are rarely involved in drop-out prevention initiatives. This may be because faculty and administrators tend to perceive the university as a place where work is done — and indeed, the university is in fact a place where work is done and students who leave are no longer visible, needed work. However, the student perspective may be different as the university can be a place where students live and have many of their friend groups (Biancani & McFarland, 2013). Social network research has shown that peer groups can impact higher education student achievement (Biancani & McFarland, 2013). Perhaps, instead of taking an out-of-sight, outof-mind approach to students who dropout, institutions may consider ways to proactively create a student culture of dropout awareness and communityengaged prevention. Prior to this project, we had not really thought about how to dialog with students when their peers depart college, but it is clear that departures are noted and that ignoring departures may not be helpful.

#### Conclusions

In this article, we overview a project in which students created a by-students, for- students collection of videos on strategies for navigating college life. There were spin-offs of the video project as well; students also created paper and webbased resource guides, a video-making training course, and navigation app. In terms of methodological significance, we highlighted the benefit of students' active participation due to prior research methods training in our program. We suggest strategies for integrating research into existing structures. Second, we address the discomfort surrounding student retention issues and discuss how our project used positive deviancy to focus on successful strategies instead of failure prevention. Finally, we emphasize the need for enhanced attention to data analysis in participatory research and advocate for creative, hybrid, inperson, and online approaches inspired by lessons learned from COVID-19. The article also reflects on the epistemological challenges of conducting participatory research in higher education institutions based on literature and personal experiences.

Participatory action research (PAR) presents a distinctive and potentially transformative approach for investigating student engagement in universities. However, it is not frequently utilized in this context due to the entrenched dominance of traditional research methodologies. This dominance often results in resistance towards embracing newer, more collaborative methods such as PAR. To address this challenge and promote the wider adoption of PAR in university research, it is crucial to emphasize the value of reporting experiences and narratives that highlight both successes and failures. By doing so, we can begin to break down these barriers and clear the path for a more extensive integration of PAR in the field of higher education research.

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Retention Reimagined: Participatory Action and Positive Deviancy for University Student Success



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