



ELSEVIER

Contents lists available at ScienceDirect

## The Journal of Academic Librarianship

journal homepage: [www.elsevier.com/locate/jacalib](http://www.elsevier.com/locate/jacalib)

## Supporting and engaging students through academic library programming

Barbara E. Eshbach

Pennsylvania State University, York, United States

Lee R. Glatfelter Library, Penn State York, 1031 Edgecomb Avenue, York, PA 17403, United States

## ARTICLE INFO

## Keywords:

Library programming  
Student engagement  
PA Forward

## ABSTRACT

This article explores how the academic library can help foster conditions for both academic and social engagement on the college campus, with the ultimate goal of increasing student satisfaction, success, and retention. The background and varied definitions of student engagement are reviewed and the importance of engagement for student success is discussed. Finn's participation-identification model (1989) is adapted to show how the academic library can provide opportunities through library programming for meaningful engagement to take place. The model holds promise for documenting positive outcomes for library programming in light of already defined ways engagement is known to help with overall success and retention. Examples of successful programs are provided showing how this model can be put into practice.

## Introduction

Student engagement is a multi-faceted, well-researched, and often-discussed topic on college campuses. Although definitions of student engagement vary, the consensus is that engagement involves both academic and social components. [Hu and Kuh \(2002, p. 555\)](#) view it as “the most important factor in student learning and personal development during college”. As such, it is unrealistic to expect any one group to take full responsibility for all the dimensions involved in engagement. There are numerous mindsets and strategies available for students, administrators, faculty, and staff to improve student engagement in a holistic approach. The academic library, often considered the heart of the university, could play an important role in this approach, with the ultimate goal of improving student learning and success.

Given the documented importance of engagement, it would be beneficial for institutions to focus on ways to set the stage for this engagement to take place, creating an environment in which students are motivated to seize opportunities to become involved, both in and out of the classroom. This article explores how the academic library can contribute to such an environment. By providing opportunities for students to make connections with others on campus and participate in activities that foster effective learning practices, spark curiosity, and engage them both academically and socially, the academic library can have a positive impact on student learning and personal development. The library is in a unique position to bridge the academic and social pieces of the college experience. In institutions with available resources, academic libraries could capitalize on this role by providing these opportunities through meaningful co-curricular programs that

extend beyond the classroom. However, the library's role in student engagement could be considered in many ways, depending on the size of the budget, the staff, and the institution. At the very least, the library offers a space for student-faculty interactions to take place outside of the classroom. Finding ways to encourage these interactions and to merge the academic and social components of engagement could do much to help create a culture of learning on the college campus.

## Background and definitions of student engagement

Early research often focused more on the characteristics of students who were disengaged and dropped out of college, rather than on the characteristics of students who were engaged and retained. [Spady's \(1970, 1971\)](#) undergraduate dropout process model posited that students' interaction and integration within the academic and social systems of the institution led to their decision to stay or to withdraw. Vincent Tinto's often cited student integration model made its first appearance in 1975 as a “conceptual schema for dropout from college” and also included academic and social integration (p. 95). Developed as a theoretical model of dropout behavior, [Tinto \(1975, p. 96\)](#) argued that “it is the individual's integration into the academic and social systems of the college that most directly relates to his continuance in that college”, using the phrase *continuance in that college* to refer to what is now commonly known as retention. Although subsequently revised over the next several decades, the academic and social components of integration remained in his model. [Astin's 1975](#) theory of student involvement, which first appeared in his 1975 book *Preventing Students from Dropping Out*, [Pace's \(1984\)](#) quality of effort theory, and [Chickering](#)

E-mail address: [bee11@psu.edu](mailto:bee11@psu.edu).<https://doi.org/10.1016/j.acalib.2020.102129>

Received 20 September 2019; Received in revised form 15 January 2020; Accepted 17 January 2020

0099-1333/ © 2020 Elsevier Inc. All rights reserved.

and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education" are often cited as forerunners to the current conceptualization of student engagement.

Alrashidi, Phan, and Ngu (2016, p. 42) defined engagement broadly as "a positive and proactive term that captures students' quality of participation, investment, commitment, and identification with school and school-related activities to enhance students' performance". Hu and Kuh (2002, p. 555) based their definition of student engagement, "the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes" on the work of Astin (1993) and Pascarella and Terenzini (1991). Among the more important of these educationally purposeful activities, Hu and Kuh (2002, p. 555) include the amount of time students "interact with faculty members and peers related to substantive topics" and "use institutional resources such as the library".

Built on decades of research, *The College Student Report*, the survey instrument of the National Survey of Student Engagement (NSSE), has been used since 2000 to survey college students in order to assess the extent to which they engage in these types of educationally purposeful activities. NSSE identifies two critical features of student engagement, supporting the dual nature of engagement as the responsibility of the student and of the institution: "the amount of time and effort students put into their studies and other educationally purposeful activities" and "how the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning" (NSSE, 2019a).

Although student engagement has been a subject of research for decades with hundreds of books published on the topic, there is not a Library of Congress Subject Heading (LCSH) for *Student engagement*. Books on the topic of student engagement often use the subject headings *Motivation in education*, *Student adjustment*, or *Engagement (Philosophy)*. EBSCO's Comprehensive Subject Index, an expansion and adaptation of LCSH, uses the subject term *Student engagement*, but with clearly an academic focus, "Here are entered works on the level of meaningful involvement a student or learner has in their own education or training, including the amount of active participation the student puts forth in classroom activities, the student's motivation towards their own education, and willingness and effort put into their own educational pursuits" (EBSCO, 2019). The words and phrases used in this definition, such as *meaningful involvement*, *active participation*, *motivation*, *willingness*, and *effort* show the active nature of engagement as a multidimensional construct. Both the ProQuest Thesaurus and the ERIC Thesaurus use the term *Student participation*, with definitions that touch on both the academic and social aspects of participation. ERIC also uses the related term *Learner engagement*, defining it as "meaningful involvement by learners in their own education or training. Indicators may include active participation in instruction and other school activities, desire to succeed, willingness to expend effort to achieve, and persistence in the face of obstacles" (ERIC, n.d.). Finally, the PsycINFO Thesaurus has been using the subject term *Student engagement* since 2006 with the following definition, "degree to which students are interested and involved in learning, school or classroom activities, and/or school-related extracurricular activities" (PsycINFO, 2015).

While there is a lot of research on student engagement, there is not as much written connecting it to the academic library. Much of what is written focuses on academic engagement, especially in terms of information literacy, rather than social engagement. Kuh and Gonyea (2003) studied undergraduate students' experiences with the academic library to determine what role the library played in promoting student engagement in learning. Their results indicated "library experiences of undergraduates positively relate to select educationally purposeful activities, such as using computing and information technology and interacting with faculty members" (pp. 269–270). However, they concluded that "library experiences do not seem to directly contribute to gains in information literacy, to what students gain overall from

college, or to student satisfaction" (p. 267). Kezar (2006) stressed the unique and important, though often underused, role librarians play in student engagement by creating a supportive campus environment and enhancing academic challenge, working with faculty to create assignments that require students to engage with library resources in meaningful ways. Hensley (2006) suggested using the research process as the hook to engage students. "Teaching research ... to first-year undergraduate students can foster in them the desire to learn because research is an invitation to become someone most students want to be: thoughtful, aware, curious, creative, effective, and flexible" (Hensley, 2006, p. 56). Those sound like qualities of an engaged student.

Schlak (2018) reviewed much of the foundational literature on student engagement and used these works as a framework "to better articulate the value that student engagement ... can bring to the work of academic libraries" (p. 133). He also provided a literature review of library engagement, grouping the works into categories that included student learning, service learning, relationship building, library space, and innovative use of technology and programming. Despite the "loose usage and varying meaning" of student engagement in the library literature, he found the literature consistent in framing engagement as "a beneficial goal libraries should pursue," and concluded that it can be viewed "as an outcome of the library's efforts as well as a critical component of the library's contribution to the scholarly and culture life of its parent institution" (Schlak, 2018, p. 134).

### Connecting library programming with student engagement

What would it look like in practice for an academic library to pursue the beneficial goal of student engagement? Thinking in terms of engagement as a phenomenon that encompasses both academic and social aspects of the student experience, it is important to address what is meant by these terms and consider the unique role of the library in each of these dimensions. Academically engaged students are motivated, they want to do well in school, and they participate in educationally purposeful activities. Examples of these types of activities, derived from questions on *The College Student Report*, include coming to class prepared, having completed required readings and assignments; asking questions and contributing to class discussions; and talking about ideas from class with faculty members and others outside of the classroom (NSSE, 2019b). In short, academically engaged students are interested in learning. Academic engagement at its best would resemble Csikszentmihalyi's state of flow: students fully immersed in and focused on their studies without distraction, experiencing a sense of timelessness and the feeling of being "in the zone." Csikszentmihalyi described numerous characteristics necessary for flow to occur, several of which impact academic engagement. In order to experience flow, it is necessary for students to involve their skills in "overcoming a challenge that is just about manageable" (Csikszentmihalyi, 1997, p. 30), with a clear set of goals and immediate feedback. The balance between skill and challenge is important: "If challenges are too high one gets frustrated, then worried, and eventually anxious. If challenges are too low relative to one's skills one gets relaxed, then bored" (Csikszentmihalyi, 1997, p. 30). Socially engaged students are involved in the life of the campus outside of the classroom – they form a supportive network of friends on campus, they participate in extra-curricular activities, and they build relationships with faculty and staff. Some activities, such as participating in study groups and undergraduate research fairs, could be considered forms of academic engagement in a social context; both have been shown to be positively correlated to improved outcomes (Kuh, 2008). While all this may sound as if the responsibility for engagement rests solely with the student, it should not be construed that way. "Faculty and student affairs educators must foster the conditions that enable diverse populations of students to be engaged" (Quaye & Harper, 2015, p. 5).

How could the library foster conditions that help students become academically engaged? Although Kuh was not referring to the library in

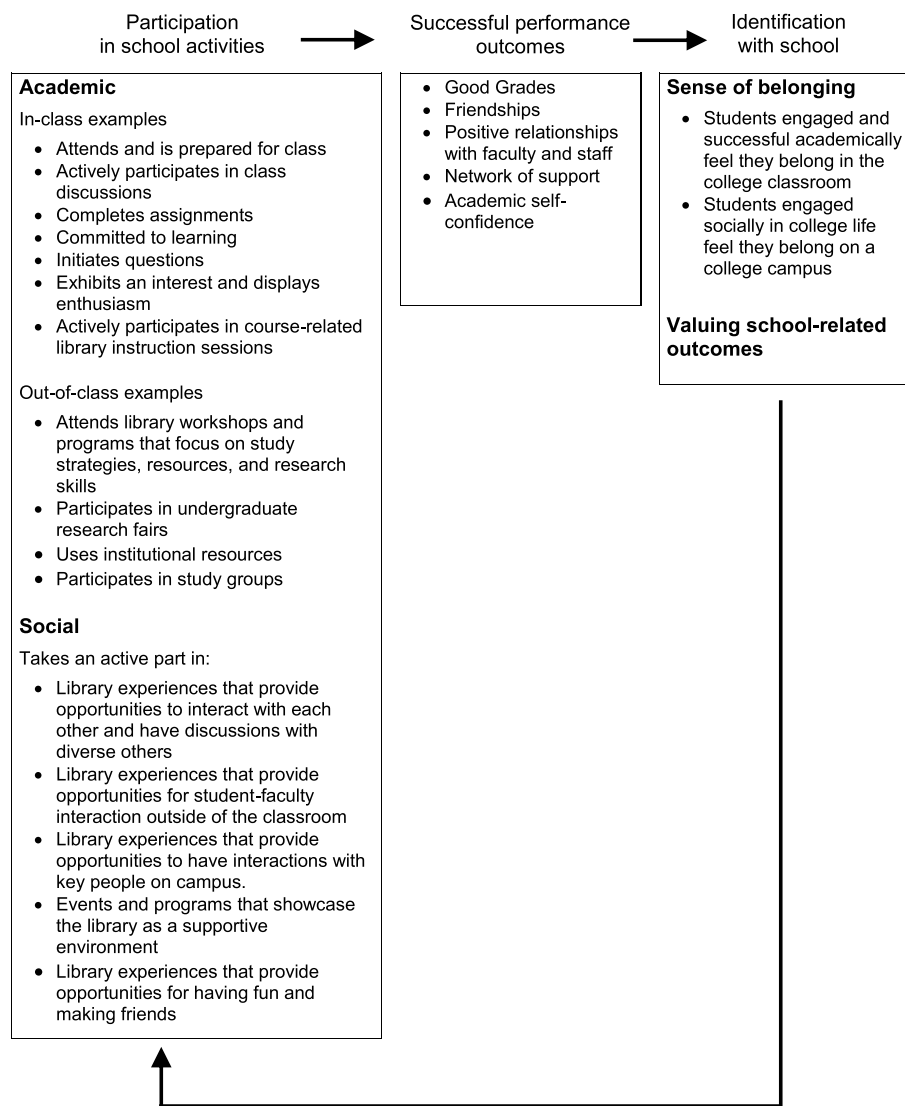


Fig. 1. Library integration into participation – identification cycle. Adapted from “Withdrawing from School,” by J. D. Finn (1989), *Review of Educational Research*, 59, p. 130.

his 2003 article “What We’re Learning about Student Engagement from NSSE,” a connection can be made. “Students can be surrounded by impressive resources and not routinely encounter classes or take part in activities that engage them in authentic learning” (Kuh, 2003, pp. 24–25). As such, it is incumbent upon academic librarians to work with faculty, as much as possible, to develop assignments that take advantage of the library’s rich resources in a meaningful way in order to increase academic engagement. Librarians are often already involved in the classroom through course-related instruction sessions, providing them with the opportunity to introduce students to library resources as well as the chance for them to connect and establish relationships with students. For those writing assignments requiring topic selection, librarians could capitalize on this opportunity and help students better engage with their assignments by providing them with examples of interesting topics to spark their curiosity and helping them discover topics of genuine interest. Library programs providing out-of-classroom experiences can be designed to help students develop skills and strategies that improve their academic competence and confidence, leading them to become more engaged in their coursework and improving the quality of their academic experience. These types of programs fall under the typical definition of co-curricular activities – those not-for-credit, ungraded activities that are separate from academic courses, but

complement learning taking place in the classroom. While these types of programs “often face challenges in demonstrating the correlation between their work and student success” (Kennedy-Phillips, Baldasare, & Christakis, 2015, p. 29), the “current research agrees that student engagement in co-curricular programming increases retention” (Burk, 2019, p. 19). These programs are clearly beneficial, both academically and socially, but since they are not required, it can also be challenging to get students to attend. The key here is to have a hook – something to motivate the students to come. This could be achieved by working with faculty to provide extra credit or to make the program a prerequisite for a particular assignment, or simply by making it fun and interesting enough that students will want to attend. By collaborating with faculty and knowing what is being taught, librarians can develop programs that complement classroom learning. Students will have more of a desire to engage deeply with the library’s resources if they feel they are relevant and if they are able to experience success and develop confidence using them.

How could the library foster conditions that help students become socially engaged? Social events in the library can provide opportunities for informative, relevant, and authentic learning experiences as well as activities that are purely social, for the purpose of having fun and connecting with others. Having social events in the library provides

opportunities to showcase the library as a welcoming environment – opportunities for students to meet, and hopefully make friends with, other students, and opportunities for students to interact with faculty and staff. These interactions, however small, widen a student's support system and can help create a sense of belonging, “considered a crucial ingredient for student success” (Ribera, Miller, & Dumford, 2017, p. 545). This sense of belonging may lead to increased involvement in other academic and social activities, creating a positive cycle of engagement. Through programs and events in the library, students can participate in other educationally purposeful activities, such as having discussions with diverse others – other races, other economic backgrounds, and others with religious beliefs and political views different from their own (NSSE, 2019b). Social events in the library also provide rich opportunities to collaborate with other departments on campus, such as advising and student affairs. As Swartz, Carlisle, and Uyeki (2007, pp. 117–118) point out, “because partnerships between the library and student services are not tied to the curriculum, there can be more flexibility and creativity in programming.”

Developing creative programs in an academic library is a non-traditional priority and, as such, there is little research on its effectiveness and contribution to student learning and success. Librarians often use the term programming synonymously with outreach. Responses from the 2018 Association of Research Libraries SPEC Survey on Outreach and Engagement question “Please briefly describe how outreach is defined at your library” resulted in five pages of varied definitions, many incorporating the terms activities, engagement, marketing, promoting, and services (LeMire, Graves, Farrell, & Mastel, 2018, pp. 13–17). Diaz's (2019) concept analysis highlighted the ambiguity of the term. In the narrowest sense, outreach is defined only in terms of providing information about the library's resources and services (through events such as tours, orientations, and open houses), while programming expands the idea of outreach to include connecting and engaging users with these resources and services in a meaningful way. Diaz's (2019, p. 191) working definition of outreach supports this broader view, with methods “designed to support shared institutional goals such as lifelong learning, cultural awareness, student engagement, and community engagement”. In this article, I define *academic library programming* as a strategic, intentional series of meaningful, educationally purposeful out-of-classroom experiences designed to encourage and promote student academic and social engagement.

Examples incorporating the library into the academic and social components of engagement are shown in Fig. 1, my adaptation of Finn's 1989 participation-identification model (p. 130). Although Finn's model deals with “dropping out” of school before completing 12th grade, components of the model also work with student engagement and retention in higher education. You can see the cyclical nature of this model; participating academically in the classroom and socially outside of the classroom can lead to successful outcomes (good grades, friendships) which leads to identification (sense of belonging) which cycles back to increased participation both in and out of the classroom. For students struggling academically, participating in the social aspect of college can provide a way for them to connect to and feel part of the campus environment (Finn, 1989, p. 132). This sense of belonging may then help motivate them academically, knowing that they will have to be successful in the classroom in order to remain part of the college campus environment.

While studies have shown that it is difficult to directly tie library interventions to student success (Robertshaw & Asher, 2019), adapting Finn's participation-identification model could help us consider academic library programming in light of already defined ways we know engagement helps with overall success and retention. As such, the model holds promise for documenting positive outcomes for library programming. Using Finn's model as a guide and thinking of “student engagement as an intangible asset that librarians assist in creating” (Schlak, 2018, p. 134), it could be beneficial for academic librarians to challenge themselves to find ways, such as those shown in Fig. 1, to

become an integral part of this cycle. Elements of Csikszentmihalyi's flow experience are inherent in Finn's model. “The flow experience acts as a magnet for learning – that is, for developing new levels of challenges and skills” (Csikszentmihalyi, 1997, p. 33). The cyclical nature of learning new skills and increasing challenges helps return students to the enjoyable state of flow. Student affairs professionals, librarians, teaching faculty, and academic administrators could work together to create a “united approach to engaging students” (Trowler, 2010, p. 43) and “create enough opportunities so that every student has a real chance to participate” (Kuh, 2009, p. 698).

Findings from the Association of College and Research Libraries' (ACRL) three-year action research Assessment in Action (AiA) program, while “not generalizable to all academic settings” (ACRL, 2017, p.1), support the idea that the academic library can help students become more academically and socially engaged. Five key areas identified in these findings demonstrated positive connections between the library and student learning and success:

1. Students benefit from library instruction in their initial coursework;
2. Library use increases student success;
3. Collaborative academic programs and services involving the library enhance student learning;
4. Information literacy instruction strengthens general education outcomes;
5. Library research consultations boost student learning (ACRL, 2017, pp. 1–2).

Library programming could be an effective way to address these five key areas. Numbers 1, 4, and 5 involve educationally purposeful activities with a strong connection to academic engagement. Numbers 2 and 3 speak to components of social engagement.

Promising evidence also supported additional areas of impact:

- The library contributes to improved student retention;
- Library instruction adds value to a student's long-term academic experience;
- The library promotes academic rapport and student engagement;
- Use of library space relates positively to student learning and success (ACRL, 2017, p. 2).

Programming in the academic library supports aspects of many of these key areas. Collaborating with faculty to develop meaningful programs enhances student learning. Including library resources, information literacy, and research skills into library programming can help build academic self-confidence and equip students to better engage academically. Any program that brings students into the library space demonstrates the value of the library as a supportive place. Students interacting with librarians during library programs and events can help build positive relationships that could lead to individualized research consultations. Together, all of these promote academic rapport and student engagement.

Tinto provides a powerful reason for academic libraries to become engaged in this type of programming. “The more students are academically and socially engaged with faculty, staff, and peers, the more likely they are to succeed in college. Such engagements lead not only to social affiliations and the social and emotional support they provide, but also to greater involvement in educational activities and the learning they produce” (Tinto, 2012, p. 7). This engagement is Finn's model in action.

First-year seminars are one way institutions have converted “decades of research on student development and success into meaningful practice” (Keup & Barefoot, 2005, p. 14). With goals paralleling those of first-year seminars, academic library programming can provide another option for such meaningful practice to occur, without the constraint of forced interaction. Keup and Barefoot (2005, pp. 14–15) summarized some of the commonly reported goals of first-year seminars, grounded

in solid research, in the following quote:

- Helping students achieve a felt sense of community (Boyer, 1987, 1990; Sanford, 1969)
- Encouraging the involvement of students in the total life of the institution (Astin, 1993; Pace, 1984; Pascarella & Terenzini, 1991)
- Achieving academic and social integration of students (Tinto, 1988, 1993)
- Generating a higher level of “student engagement” (Kuh, 2005), a term that connotes academic integration with the more affective notion of committed involvement.

Robertshaw and Asher's meta-analysis cautioned researchers against the overcollection of data, especially since their analysis showed the outcomes of the studies they reviewed did not produce findings that justified the risks involved. However, in the end, they still believed that “academic libraries are in a unique position to take a leading role in creating new models for student success because of their focus on providing safe and free environments for inquiry of all types to occur” (2019, p. 95).

### Connecting PA Forward with academic library programming

Recognizing the important role the library can play in student engagement and success, I decided to explore ways to become more involved in the academic and social life on campus. Reflecting on speculation that “whatever positive association we observe between library use or instruction and grade outcomes is as attributable to high-performing students being more likely to utilize these services than these interventions contributing to students' better performance” (Robertshaw & Asher, 2019, pp. 92–93), I chose academic library programming as a new model for student success; one with the potential to appeal to all students.

Penn State York is a suburban commuter campus of Penn State University, with an undergraduate population of roughly 900 students. Librarians at the campuses are employees of Penn State University Libraries, rather than their individual campus. The smaller campuses operate with a Head Librarian, one Reference/Instruction Librarian, one or two support staff, and work-study students. Our librarians work with faculty to develop meaningful assignments using library resources and to provide in-class library instruction designed to spark student interest. Library programming beyond this type of interaction can be challenging with the small number of campus library employees. When the idea of establishing an academic library program was initially conceived, it made sense to consider a focus around which to organize the experience so it would not be viewed as just a series of random events held in the library. The initial idea was to organize programs around common challenge areas faced by first-year students, such as academic, social, financial, time management, responsibility, and independence (Nelson, 2009). During attempts to pare this list down to a more manageable number and to consider what would make this a *library* program (set apart from other events and activities students can participate in on campus), it became obvious that these challenges could be framed in terms of the five literacies of PA Forward, a statewide initiative of the Pennsylvania Library Association. PA Forward, unveiled in 2012, is designed to “strengthen the state's libraries through education, advocacy and leadership” ([www.pafoward.org](http://www.pafoward.org)). The project is made possible in part by a grant from the Institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries, and the Commonwealth of Pennsylvania. The five literacies addressed in the initiative (basic literacy, information literacy, civic and social literacy, health literacy, and financial literacy) form a strong foundation for programming in an academic library, helping to communicate a vision of creating citizens who are able to participate in all aspects of society. By choosing interesting topics and related library resources, using eye-

catching and creative promotional materials, and developing engaging activities with informative handouts to go with them, the library was able to create a series of events clearly different from anything else being offered on campus. This academic library program was branded as ConnectED: A Penn State York Library First-Year Experience. This experience consists of a series of programs involving both academic content - giving students the opportunity to learn something, and social connections - providing time to meet and interact with others. While the events are open to all students, faculty, staff, and, in some cases, the community, it is important to make a special effort to target first-year students since there is “overwhelming evidence that student success is largely determined by student experiences during the first year,” (Upcraft, Gardner, & Barefoot, 2005, p.1). With only a few exceptions, the events are short and are held during the noon hour when no classes are scheduled. In two of the five years ConnectED has been in existence, the library was able to offer a financial incentive for participating. During those years, first-year students earned points for attending ConnectED programs and making connections with each other and with faculty, staff, and returning students using Connection Cards (<https://sites.psu.edu/connect-ed/connection-cards/>). At the end of the spring semester, the first-year student with the most points, who met the additional criteria of planning to return to the Penn State York campus for their second year and obtaining at least a 2.0 GPA, was awarded a monetary prize in the amount of the year they began at Penn State York (\$2014 in 2014 and \$2018 in 2018) to be used toward tuition for their sophomore year.

A ConnectED logo and advertising template were created (<https://sites.psu.edu/connect-ed/advertising-templates/>) to provide a consistent look to the promotional materials and help reduce the workload for the program. It was also helpful to develop several programming formats for the events. Certain formats, such as trivia events and games, are easy to plan and proved to be successful with several types of literacy programs. Using an audience response system (clickers) allows participants to remain anonymous, while buzzer systems such as Educational Insights' Eggspert® are useful for Jeopardy-style games. A customized PowerPoint was created for memory matching games. A “Speak Easy” format was promoted as an opportunity for conversation in a relaxed, informal setting for anyone wanting to improve their public speaking and learn something in the process. “Flash Forums” are conversations facilitated by a Penn State York faculty or staff member on a current event topic, designed to be held before the topic fades from the news. TED Talks are well-done, engaging, and short and can be found on any number of topics, serving as perfect openers for related discussions (<https://www.ted.com/talks>). Programming provides perfect opportunities for collaboration with students, faculty, community members, campus counselors, advising and career centers, student clubs and organizations, and other campus departments. Incorporating topic ideas, library resources, and research studies into your events and your advertising, as much as possible, offers opportunities to engage students both academically and socially and communicate that the library values intellectual activity and scholarship.

Assessing the impact of this type of programming can be a complex issue. We chose to approach assessment using the AiA strategy of focusing on the relationship between a single library factor (in our case - programming) and one aspect of student learning and success (increased engagement). While we used paper surveys to assess events during our pilot year, ACRL's new Project Outcome for Academic Libraries, launched in 2019, provides an easier method to assess your engagement efforts (<https://acrl.projectoutcome.org/>). Project Outcome is free for academic and research librarians and includes assessment surveys in seven service areas including events/programs, instruction, and teaching support. These types of assessment, given right after the event, provide a simple way to measure outcomes and capture feedback. In order to assess the longer-term benefits of ConnectED, I conducted follow-up interviews several years later asking students to reflect back on the program.

Our goal for engaging students academically is to provide out-of-classroom experiences that focus on a combination of library resources, research skills, and study strategies to help students develop academic strengths and self-confidence. Our goal for social engagement is to get students into the library – to meet and make connections with librarians, staff, and other students, in the hopes that the library becomes THE place on campus for them to come – to study, use our resources, and feel a sense of belonging on our campus. A few programs might touch on many of these aspects, but we do not attempt to focus on accomplishing all of these goals in every event. Some programs focus on improving the quality of the academic experience, others provide opportunities for interaction outside of the classroom, and some are designed solely to provide the time and the place to have fun and make friends. Providing and actively promoting numerous opportunities for students to become engaged can go a long way in increasing student satisfaction and success.

We partnered with a local bank to offer a few financial literacy programs and established a “Steps to the Library” promotion for health literacy, but during our first five years of the ConnectED program, we focused on basic literacy, information literacy, and civic and social literacy. The “Steps to the Library” promotion is an ongoing way to support “enhancing health,” one of the thematic priorities of Penn State University’s Strategic Plan (<https://perma.cc/3SPC-U98M>). We developed a series of 12 outdoor signs, each showing the number of steps from that point to the library, which we rotate throughout the academic year (<https://sites.psu.edu/connected/health-literacy-new/>).

In order to get a sense of what ConnectEd looks like in practice, several detailed examples of programs are provided in the following three sections. Suggested activities and resources for additional events are found in Figs. 2, 3, and 4. The primary value of these events is to engage students and showcase the library as a supportive environment with a diverse collection and comfortable areas for study, conversation, and connecting with other students and faculty.

### Basic literacy

“We envision a Pennsylvania with one of the highest literacy rates in the country, a trained and skilled workforce, and a growing economy, tax base, and population”.

- PA Forward Basic Literacy Rationale Fact Sheet

Any program involving reading and writing falls under basic literacy and a college campus is replete with opportunities for these types of events. Hosting a discussion in the library provides faculty members with an opportunity to share their newest book or article with the campus community as well as a chance for students to interact with faculty in meaningful ways outside of the classroom. While these events are relatively simple to organize since the faculty member provides the content, it is incumbent on librarians to do all they can to promote and run the event in a creative and engaging way. Faculty will appreciate seeing well-designed, eye-catching, and informative posters around campus advertising their event as well as related displays in the library. On the day of the event, having someone from the library introduce them with a well-researched and interesting introduction that includes a short personal anecdote demonstrates the collegiality between librarians and faculty. If possible, choose refreshments related to the theme. For example, when the Penn State York library hosted a professor’s talk on the botany of amber and plant exudates, we served orange and yellow Jell-O, creating the appearance of amber, with edible crickets “fossilized” in it (<https://sites.psu.edu/connected/crickets-in-the-library/>). The professor was surprised and delighted; students took photos of each other eating their crickets and all joined in applauding the professor as he tentatively swallowed his.

Basic literacy events, such as marathon reads, common reading programs, book clubs, and “blind date with a book” promotions are engaging forms of collection-based activities. Marathon reads—in

which students, faculty, staff, alumni, and community members read a novel aloud from start to finish—are the epitome of a basic literacy event. In addition to those participating, many come just to relax and listen to the story. Our library held a marathon reading of *Harry Potter and the Sorcerer’s Stone*, one of the most frequently challenged books in the United States ([www.ala.org](http://www.ala.org)), to celebrate the freedom to read during Banned Books Week. The event took 9 hours and involved 27 readers. The local newspaper covered the event and interviewed several of the readers, including a first-year international student from China. The event was held during his first month in the country and, although he was concerned that his pronunciation might not be exact, he thought the event was great, providing a wonderful opportunity for him to meet new people and to practice his English. Based on the success of this event, a faculty member suggested reading Dickens’ *A Christmas Carol* to celebrate the holiday season. Students and faculty gathered around the flickering flames of the laptop’s Yule log video throughout the day to read, listen, and drink hot chocolate.

If your college or university sponsors a common reading experience, the library is a perfect venue to hold related events such as book discussions, faculty-led talks on themes or topics from the book, and student-led activities. Partner with a faculty member or a poet laureate from your institution or community and hold poetry readings in the library. Bring basic literacy to life by hosting a Human Library™ event, where “real people are on loan to readers” (<http://humanlibrary.org/>). Most importantly, be aware of what is happening in the classroom and make sure faculty know that the library is a willing partner for providing authentic learning experiences. For example, when an English professor teaching a “Literature of Fantasy” course found out the father of one of her first-year students had played the role of the creature in a Washington, DC production of *Frankenstein: The Modern Prometheus*, she worked with the library to host an event which we called “Connect with the Creature: A Conversation with the Actor.” Promoting basic literacy can be as simple as adding the tag line “What I’m reading” to the end of your email signature and including the title of your current book or article.

### Information literacy

“We envision a Pennsylvania where citizens know how to use online resources and current technology to improve their education, to enhance their job skills, and to fully participate in a digital society”.

- PA Forward Information Literacy Rationale Fact Sheet

Of the five PA Forward literacies, information literacy is the one most often associated with the academic library. The goal of ConnectED programming in terms of information literacy is to provide opportunities to expose students to a wide variety of research and resources in an engaging and innovative way outside of the classroom. Many undergraduates are overwhelmed with the resources of an academic library and need the chance to develop confidence using them in order to be successful with course assignments, where so much more is at stake. Programs that open their eyes to the fact that research, conducted on almost every aspect of life, can be interesting and thought-provoking goes a long way in helping them realize that it is possible to use their curiosity to get started on a project by choosing a topic that will engage them throughout the whole research process. Following are examples of scaffolded programming, beginning with simply introducing different types of sources, moving on to guiding students from a citing source to the original research, and ending with looking at a scholarly journal article in depth and actually replicating small parts of the research study.

Our “Thinking about Thinking: It’s More Fun than You Think” program began with a discussion about metacognition, a word most of the students attending had not heard of before. However, they were familiar with the concepts we talked about, such as thought suppression, wishful thinking, perception, worry, and the relationship between

language and thought. Students completed the Penn State Worry Questionnaire, a 16-item Likert-type scale designed to measure worry (<http://www.midss.org/sites/default/files/pswq.pdf>), scored their responses, and talked about the differences between thinking about problems and worrying about them. We did a short activity to demonstrate the difference between pattern seeking and creativity. The main activity during this event was the Metacognition Memory Match, a Concentration-style game using PowerPoint, with terms and concepts from the discussion and a small prize awarded to the winner.

An event like this provides an opportunity to share information from a variety of sources, helping illuminate practices from the ACRL *Framework for Information Literacy for Higher Education* (<http://www.ala.org/acrl/standards/ilframework>). We used information from Wikipedia about the mind game known as The Game to learn about ironic processing. Other concepts and terms were included on a colorful and informative handout which included properly-cited references from a book, a peer-reviewed scholarly journal article, and a science periodical. One of the benefits of this type of event is having students realize that things they are familiar with and that are part of their everyday lives are being studied and researchers put a name to these things. Everyone attending admitted to experiencing times when they repeatedly thought about negative feelings (rumination), when they first learned about something and then it suddenly seemed to appear everywhere (frequency bias or The Baader-Meinhof Phenomenon), and when they tried to suppress certain thoughts, only to realize they ended up thinking about them more (ironic process theory). Hopefully, the next time they need to think of a topic for an assignment, they will remember some of these concepts.

This simple program provided an authentic learning experience for the students, as well as a chance to socialize and meet new people. Although the program was not structured as a formal lesson to teach students the differences between types of sources, it clearly demonstrated exploring and using different types of sources for different purposes. It was apparent that using Wikipedia to learn about The Game was entirely appropriate, while books provided authoritative

background information and examples of perception and creativity, and scholarly peer-reviewed journal articles discussed the development and validation of the Penn State Worry Questionnaire.

Subsequent information literacy activities can build on the use of different sources for different purposes by showing what researchers can do with a topic. TED Talks serve as perfect openers for many academic library programs since they are well-done, engaging, short, and cover hundreds of topics. Talks involving science and health topics must be supported by peer-reviewed research, providing an opportunity for students to follow up on information provided in the talk to find original scholarly sources or primary data. Our first of several such events began with viewing Sunni Brown's talk "Doodlers, Unite!" ([https://www.ted.com/talks/sunni\\_brown](https://www.ted.com/talks/sunni_brown)). The handout for this event, decorated with doodles and interesting fonts, included quotes with APA citations from blog posts, books and book chapters, newspaper articles, and peer-reviewed scholarly journal research articles. We chose the subject of doodling since it presented an unexpected topic, one that students would not image to be a focus of research. As such, we were able to show them that even something they might regard as trivial can be viewed in terms of human psychology, neuroscience, and even mathematics. We followed up on some of the ideas presented in the TED Talk to discover the research the presenter referred to; scholarly articles on topics such as children's artistic development, the educational benefits of doodling, and the impact of doodling on problem-solving and information processing. During the activity portion of the event, students created drawings using the Zentangle® Method (<https://zentangle.com/>) which were displayed in the library showcase for the rest of the semester. The Zentangle approach, created by Rick Roberts and Maria Thomas, is a form of structured doodling in which you begin with a small square of paper, add a dot in each corner, connect the dots to create a border, separate the area inside the border into sections, and fill in each section with shading and patterns (<https://zentangle.com/>). At the end of the event, we had a random drawing and the winner received a doodling notepad.

Events in which students replicate small parts of a research study

<p><b>Silent Reading Party: Be Alone with Your Book . . . Together</b></p> <p><b>Activity</b> Provide light refreshments and invite the campus to get together in a cozy part of the library to read. That's it! <a href="https://bookriot.com/">https://bookriot.com/</a></p> <p><b>Library Resources for Advertising &amp; Discussion</b> Gilbert, J., &amp; Fister, B. (2011). Reading, risk, and reality: College students and reading for pleasure. <i>College &amp; Research Libraries</i>, 72(5): 474-495.</p>
<p><b>Picture Books: Past, Present, Future</b></p> <p><b>Activity</b> Organize a panel discussion. Invite a combination of students, faculty, and staff to discuss picture books - what they liked as a child (past) and what they enjoy as an adult (present). If possible, include someone in the process of (or thinking about) writing or illustrating a picture book (future).</p> <p><b>Library Resources for Advertising &amp; Discussion</b> Handy, B. (2017). <i>Wild things: The joy of reading children's literature as an adult</i>. New York, NY: Simon &amp; Schuster.</p>
<p><b>Never Judge a Book by its Movie</b></p> <p><b>Activity</b> Create a display of books from your collection that have been made into movies; include the movies if they are part of your collection. Prior to the event, promote a contest asking students to create a poster for their favorite book made into a movie. Organize a discussion and include voting for the best poster.</p> <p><b>Library Resources for Advertising &amp; Discussion</b> Dean, D. A. (Ed.) (2018). <i>Novels into film: Adaptations and interpretations</i>. Hackensack, NJ: Salem Press.</p>

Fig. 2. Examples of additional basic literacy events

<p><b>The IKEA Effect</b></p> <p><b>Activity</b> Students put together a simple IKEA cabinet, discussing one section of the research article “The IKEA Effect: When Labor Leads to Love” during each step of the construction. At the end of the event, a random participant wins the completed cabinet, with items from IKEA to put into it.</p> <p>During this event, students learn the components of a research article and the purpose for each of them.</p> <p><b>Library Resources for Discussion &amp; Advertising</b> Norton, M. I., Mochon, D., &amp; Ariely, D. (2012). The IKEA effect: When labor leads to love. <i>Journal of Consumer Psychology</i>, 22(3): 453-460. doi:10.1016/j.jcps.2011.08.002</p>
<p><b>On the Edge of Your Seat: The Psychology of Scary Movies</b></p> <p><b>Activity</b> Create a display of horror films from your collection and schedule this event around Halloween. Invite a psychology professor to discuss the factors that make these films appealing to some viewers.</p> <p><b>Library Resources for Discussion &amp; Advertising</b> Bartsch, A., Appel, M., &amp; Storch, D. Predicting emotions and meta-emotions at the movies: The role of the need for affect in audiences’ experience of horror and drama. <i>Communication Research</i>, 37(2): 167-190. doi:10.1177/009365020356441</p>
<p><b>Superstition Speak Easy</b></p> <p><b>Activity</b> See “Superstition Speak Easy: A Library First-Year Experience Event” in <i>The First-Year Experience Cookbook</i> (2017) published by ACRL for details of this activity.</p> <p>Especially appropriate to hold on a Friday the 13th.</p> <p><b>Library Resources for Discussion &amp; Advertising</b> Damisch, L., Stoberock, B., &amp; Mussweiler, T. (2010). Keep your fingers crossed: How superstitions improves performance. <i>Psychological Science</i>, 21(7): 1014-1020. doi:10.1177/0956797610372631</p>

Fig. 3. Examples of additional information literacy events.

<p><b>To Tell the Truth</b></p> <p><b>Activity</b> Create a display of Pinocchio figures and photos. Print the ALA Libraries Transform poster “Because Not Everything on the Internet is True” poster from <a href="http://www.ilovelibraries.org/librariestransform/sites/default/files/because-not-everything-on-the-internet-is-true-table-tent.png">http://www.ilovelibraries.org/librariestransform/sites/default/files/because-not-everything-on-the-internet-is-true-table-tent.png</a></p> <p>Invite a political science professor to talk about the public’s perception of politicians. Prepare a list of statements made by politicians and see if participants can separate fact from fiction.</p> <p><b>Library Resources for Discussion &amp; Advertising</b> Baiaus, S. &amp; Loriaux, S. (Eds.). <i>Sincerity in politics and international relations</i>. New York, NY: Routledge.</p>
<p><b>Annual Library GV1312 Night</b></p> <p><b>Activity</b> Some great games to play, just for fun, during an after-hours game night in the library: Bunco; Left, Right, Center; Apples to Apples; Bring Your Own Book Game</p> <p>Have a mix of small and large group games.</p> <p><b>Note:</b> GV1312 is the Library of Congress Classification for board games</p> <p><b>Library Resources for Discussion &amp; Advertising</b> Gobet, F., de Voogt, A., Retschitzki, J. (2004). <i>Moves in mind: The psychology of board games</i>. New York, NY: Psychology Press.</p>
<p><b>Connecting with the Past</b></p> <p><b>Activity</b> Invite a university or museum archivist to bring some interesting artifacts to share. Depending on the collection, the event could be held in conjunction with Women’s History Month, LGBT Pride Month, or other commemorative observances.</p> <p><b>Library Resources for Discussion &amp; Advertising</b> Johnson, G. (2006). Introducing undergraduate students to archives and special collections. <i>College &amp; Undergraduate Libraries</i>, 13(2): 91-100. doi:10.1300/J106v13n02_07</p>

Fig. 4. Examples of additional civic and social literacy events.



really embody one of the goals of the ConnectEd program: to make research fun, interesting, and accessible while meeting and making connections with others. With the right preparation, even articles that at first glance seem far too intimidating and impossible for undergraduate students to relate to, such as the one chosen for our “Trivia with a Twist” event, can provide an innovative and enjoyable experience for students. What made this event especially entertaining was the complexity of the article’s title, “States of Curiosity Modulate Hippocampus-Dependent Learning via the Dopaminergic Circuit” (Gruber, Gelman, & Ranganath, 2014). None of the attendees imagined they could have fun with an article containing this many unfamiliar scientific terms, until they found out the authors used trivia to address their research questions. We developed our own set of trivia questions and replicated parts of their studies using PowerPoint slides rather than functional magnetic resonance imaging. Results from the authors’ studies revealed that memory and learning are improved when one is curious about something and that curiosity can even improve memory for “incidental material learned during states of high curiosity” (Gruber et al., 2014, p. 486). We talked about how these results could have a positive impact for education. If a professor begins a lecture with an interesting question, one that students are curious about and want to know the answer to, and waits until the end of the lecture to provide that answer, the students are more likely to remember the material covered in the lecture during this state of heightened curiosity. Simple prizes related to our trivia questions were given out during the event including a Pez dispenser, Hershey’s Kisses, Wrigley’s gum, and playing cards.

### Civic and social literacy

“We envision a Pennsylvania where citizens have the knowledge and skills they need to improve their lives, to participate and contribute effectively to their communities, and to connect with one another through discourse”.

- PA Forward Civic and Social Literacy Rationale Fact Sheet

Academics often encourage students to join the scholarly conversation, but in order to do so, students need to acquire enough subject knowledge to develop informed opinions. Creating programs in the library to bring together students, faculty, and staff to talk about issues related to their disciplines will not only increase students’ knowledge but will also help them grow into self-motivated learners.

Our local state representative launched our ConnectEd programming in the 2014 pilot year and continued to host kick-off events during the next two years, speaking to students about the importance of civic engagement. We provided him with the article “Civic Learning and Engagement” from *Change: The Magazine of Higher Learning* (Kanter & Schneider, 2013) and numerous quotes about civic engagement, asking him to incorporate some of the material into his talk. Our Facebook page leading up to the event and a handout provided to students the day of the event featured these quotes as a way to make it easier for students to enter into the conversation. As a result of attending this event, one of our international students decided to become involved in the local community and became an active member of the representative’s youth council.

Our representative also provided us with copies of the United States Constitution, which we used as invitations to our WE ARE the People Constitution Day Trivia Event. Educational institutions receiving Federal funding are required to hold educational program pertaining to the United States Constitution on September 17 of each year and this trivia event, now in its sixth year, has become an annual celebration on our campus. The questions come from the civics portion of the U.S. Naturalization Test, which is appropriate since the actual designation of the day is Constitution Day and Citizenship Day. Participants use clickers to anonymously record their answers to the 20 questions in the PowerPoint presentation, keeping track of their scores in an effort to

match or beat the national pass rate, currently 90% (<https://www.uscis.gov/us-citizenship/naturalization-test/applicant-performance-naturalization-test>). Participating in this activity can be an eye-opening experience for students as they realize that naturalization applicants need to know this information in order to become U.S. citizens. We award random prizes during the event and participants do not have to answer correctly to win. After several years of low attendance, we partnered with the Student Government Association, holding the event at the beginning of their first meeting of the semester.

Our Night Against Procrastination has also become a regular event. Held around the fifth week of classes each semester, we keep the library open one night until midnight, 3 hours after our normal closing time. Hourly breaks, snacks, and door prizes are provided and both librarians are on hand to offer reference assistance. The event is held early in the semester, encouraging students not to wait until the last minute to work on major projects. It is also the time of the semester when students begin studying for mid-terms.

Certain times of the year lend themselves to hosting an event. We invited students to come in costume to watch and discuss Dr. Phillip Zimbardo’s TED Talk “The Psychology of Evil” ([https://www.ted.com/talks/philip\\_zimbardo\\_on\\_the\\_psychology\\_of\\_evil?language=en](https://www.ted.com/talks/philip_zimbardo_on_the_psychology_of_evil?language=en)) on Halloween. One of our international students took our invitation to “dress up” literally, arriving in a suit and tie.

Several civic and social literacy events came about as a result of faculty suggestions and collaborations with other departments on campus. In November 2014, a campus history professor asked if he could present a program about the upcoming midterm elections. Since he would be offering his predictions on key races nationwide and his last name is Price, we titled the event *The Price is Right?* We handed out a list of all the elections he would be talking about and students marked his predictions. Follow-up publicity after the event informed participants of the accuracy of his prognostications. The event was well attended and such a success we repeated it for the November 2018 midterm elections.

Collaborating with the Advising and Career Development department and the Women’s History Month committee, we organized an event titled “What’s My Line” which featured a panel of Penn State York women discussing their interesting and circuitous career paths. Attendees were given an entry blank at the beginning of the event listing the names of the panel members and, in random order, jobs each of them had held at one point in time, such as Army captain, tax preparer, and horse groomer. After making their guesses as to which panel member held which job, the entry blanks were collected. At the end of the event, a drawing was held and the first entry selected with the correct answers won a prize. With multiple departments collaborating, we were also able to offer pizza and other refreshments.

Students attending ConnectED events began making suggestions for programs and these turned out to be quite successful. One regular attendee was a member of the campus veterans group and asked if we could help organize and promote a panel discussion for Veterans Day. The event, titled “Connecting with our Veterans”, was very well attended. International students were also regulars at ConnectED events. The majority of our international students are from China and most of them adopt American nicknames. However, during our ConnectED events, we made a point to learn their Chinese names. After talking about the difficulty many of us had pronouncing nonnative names, we worked with some of these students and developed our first Speak Easy called “Pleased to Meet You.” The event was set up in a speed-dating format, where we took the time to meet and learn about several of our international students. We also discussed some of the ideas presented in the article “Strangers in Stranger Lands: Language, Learning, Culture” (Hong, Fox, & Almarza, 2007). We were delighted when several months later this core group of international students asked if we would help them with the campus’s first Chinese New Year celebration. We created an activity based on the animals of the Chinese Zodiac, offering a prize to the student who was able to connect with someone from each of the

12 Zodiac signs. These students shared with us the importance of their Chinese Mid-Autumn Festival, held in the fall when the moon is brightest and fullest. Since this is a time traditionally spent with family, we wanted our Chinese students, so far from home, to join their Penn State York family to celebrate with traditional moon cakes and riddles. The following fall we held the event outside from 7:00–9:00 p.m. and, although it was a cloudy evening and we could not see the moon, the astronomy professor was there to provide fun moon facts. One of our library student workers organized an event, which we promoted through ConnectED as a social event, just for fun. Our reference librarian hosted this “Geek Off” Jeopardy-style game and participants were thrilled with their Star Wars, Lord of the Rings, and Marvel prizes.

## Conclusion

Kuh and Gonyea stated, “students’ experiences with academic libraries should make direct or indirect contributions to desired outcomes of college” and then posed the question, “In addition to information literacy, are there other outcomes that library experiences could and should foster?” (Kuh & Gonyea, 2003, p. 257). I believe academic library programming could address many other outcomes such as improved retention rates, contributions to student academic success, increased civic engagement, social integration into the campus community, positive student-faculty interactions, balanced academic and social engagement, and multi-cultural awareness. Most likely, many of these desired outcomes will parallel the priorities of your institution. The challenge is designing library experiences in a way that students will take advantage of them in order to achieve these outcomes. While this may represent a change for many academic libraries, change is nothing new. Library collections have expanded beyond the walls of their buildings, students’ use of the library has changed, and broadening library services beyond the traditional reference and instruction to include meaningful student engagement opportunities could prove to be an extremely beneficial change.

Reflecting on the ConnectED program over the past five years in terms of our original goals of engaging students both academically and socially, we succeeded in holding 56 events involving a total of 961 participants. Many events brought new groups of students into the library and evaluations were overwhelming positive. TED Talks, replicating research events, and collaborations with faculty proved to be our most successful formats. Students look forward to our popular Night Against Procrastination, held every semester, which involves both academic and social components. Overall, the library has become a more popular destination on campus. As the campus begins a new strategic planning cycle, we are working toward having our library programs become an integral part of the student experience.

Since “peers and faculty members exert the most influence on students’ academic and social concepts” (Skipper, 2005, p. 36), our academic library programming focuses on providing opportunities for these interactions to take place. During the years we offered the scholarship, first-year students were given time during each event to make connections with others attending, documenting them on their Connection Cards, which were turned in at the library to earn points. The winner of the 2014 scholarship was a first-generation college student, born and raised in Haiti. During our follow-up interview, he told me, “When I first got here, I didn’t know anybody and I pretty much stayed within my comfort zone until I heard about the ConnectED program” (F. Desse, personal communication, April 03, 2018). In addition to attending all of our ConnectED events during his first year at Penn State York, he embraced the Connection Cards, telling me that the cards gave him the motivation to engage in conversations. The scholarship played a major role in his participation, but he also wanted to “come to the events, learn, stay focused, and try and meet people because that was what the program was about” (Desse, 2018). He credits ConnectEd with helping him integrate into the Penn State York campus, where he completed all of his undergraduate work, was an active member of several clubs and

organizations, a member of the soccer team, and winner of three campus awards. His experience demonstrates the importance of the library taking advantage of that narrow window of opportunity during a student’s first year to help him or her make connections and create momentum for academic success. Most academic libraries take advantage of this window of opportunity already by holding “innovative orientation activities to ensure the ever-important first impression of the academic library is a positive one, which is necessary in order for subsequent engagement to be successful” (Snavely, 2012, p. 3).

Successful subsequent engagement can only happen if you provide and promote enough meaningful “opportunities so that every student has a real chance to participate” (Kuh, 2009, p. 698). Promoting your programming as part of the college experience is essential to integrating it into the campus community. Begin by treating each conversation you have with a student as an opportunity for personalized engagement. While there are many “big” experiences students can have in college such as undergraduate research, study abroad, internships, and community leadership, smaller, more accessible engagement experiences can also provide great value. As one of our international students wrote in a letter to me at the end of our pilot year, “You may not notice, but ConnectED for me especially, is the KEY to engage in my new life. Through events I got to know how people communicate here and how open you people are to internationals like me ... Moreover, you and your ConnectEd make me feel attached to this place” (Z. Li, personal communication, May 8, 2015). During our follow-up interview three years later, he told me “I am still so grateful about ConnectED and everything you have done for me, honestly. It opened a door, or to be precise, gave me a little taste of the benefits of interacting and connecting with people. ConnectED was really a good start for me, as someone who had been used to doing almost everything alone for his whole life, to enjoy the perk of ‘socializing’ with other great people. I am now connected with a lot of amazing faculty members, mentors, staff, and fellow students, which is only making my life better and better” (Z. Li, personal communication, September 2, 2018). He serves as an inspiring example of student success, satisfaction, and retention – the ultimate goals I hoped to achieve.

## Notes

If you are curious about the trivia questions, and the answers, please see the ConnectED website, (<https://sites.psu.edu/connected/trivia-questions-and-answers/>).

For another example of an event replicating a research study, see the chapter “Replicating Research on a Small Scale Using a Scholarly Journal Article as the Main Ingredient” in the forthcoming ARCL publication *The Critical Thinking About Sources Cookbook*, edited by Sarah E. Morris.

## Funding sources

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## CRedit authorship contribution statement

**Barbara E. Eshbach:** Conceptualization, Methodology, Writing - original draft, Writing - review & editing.

## Declaration of competing interest

None.

## References

Alrashidi, O., Phan, H. P., & Ngu, B. H. (2016). Academic engagement: An overview of its definitions, dimensions, and major conceptualisations. *International Education Studies*,

- 9(12), 41–52. <https://doi.org/10.5539/ies.v9n12p41>.
- Association of College and Research Libraries (2017). *Academic library impact on student learning and success: Findings from Assessment in Action team projects*. Retrieved from [http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/findings\\_y3.pdf](http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/findings_y3.pdf).
- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1993). *What matters in college: Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Burk, A. (2019). Student retention models in higher education: A literature review. *College and University*, 94(2), 12–21.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3–7.
- Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. New York, NY: Basic Books.
- Diaz, S. A. (2019). Outreach in academic librarianship: A concept analysis and definition. *Journal of Academic Librarianship*, 45(3), 184–194. <https://doi.org/10.1016/j.acalib.2019.02.012>.
- EBSCO (2019). Comprehensive subject index term: Student engagement. (Retrieved from Academic Search Complete database).
- ERIC. (n.d.). Thesaurus term: Learner engagement. Retrieved from <https://eric.ed.gov/?ti=Learner+Engagement>.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117–142. <https://doi.org/10.3102/00346543059002117>.
- Gruber, M. J., Gelman, B. D., & Ranganath, C. (2014). States of curiosity modulate hippocampus-dependent learning via the dopaminergic circuit. *Neuron*, 84(2), 486–496. <https://doi.org/10.1016/j.neuron.2014.08.060>.
- Hensley, R. B. (2006). Ways of thinking: Doing research and being information literate. In C. Gibson (Ed.), *Student engagement and information literacy* (pp. 55–67). Chicago, IL: Association of College and Research Libraries.
- Hong, L., Fox, R. F., & Almarza, D. J. (2007). Strangers in stranger lands: Language, learning, culture. *International Journal of Progressive Education*, 3(1), 6–28.
- Hu, S., & Kuh, G. D. (2002). Being (dis)engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education*, 43(5), 555–575. <https://doi.org/10.1023/A:1020114231387>.
- Kanter, M., & Schneider, C. G. (2013). Civic learning and engagement. *Change: The Magazine of Higher Learning*, 45(1), 6–14. <https://doi.org/10.1080/00091383.2013.748606>.
- Kennedy-Phillips, L. C., Baldasare, A., & Christakis, M. N. (Eds.). (2015). *Measuring co-curricular learning: The role of the IR office*. San Francisco, CA: Jossey-Bass.
- Keup, J. R., & Barefoot, B. O. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of the First-Year Experience*, 17(1), 11–47.
- Kezar, A. (2006). Librarians enhancing student engagement: Partners in learning that build bridges. In C. Gibson (Ed.), *Student engagement and information literacy* (pp. 16–32). Chicago, IL: Association of College and Research Libraries.
- Kuh, G. D. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change: The Magazine of Higher Learning*, 35(2), 24–32. <https://doi.org/10.1080/00091380309604090>.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683–706. <https://doi.org/10.1353/csd.0.0099>.
- Kuh, G. D., & Gonyea, R. M. (2003). The role of the academic library in promoting student engagement in learning. *College & Research Libraries*, 64(4), 256–282. <https://doi.org/10.5860/crl.76.3.359>.
- LeMire, S., Graves, S. J., Farrell, S. L., & Mastel, K. L. (2018). *Outreach and engagement (SPEC Kit 361)*. Retrieved from Association of Research Libraries website: [https://publications.arl.org/SPEC\\_Kits](https://publications.arl.org/SPEC_Kits).
- National Survey of Student Engagement (2019a). About NSSE: What is student engagement? Retrieved from <http://nsse.indiana.edu/html/about.cfm>.
- National Survey of Student Engagement (2019b). *The College Student Survey*. [Measurement instrument]. Retrieved from [http://nsse.indiana.edu/html/survey\\_instruments.cfm](http://nsse.indiana.edu/html/survey_instruments.cfm).
- Nelson, V. (2009, July). College parents can help freshmen overcome first semester challenges [blog post]. Retrieved from <https://perma.cc/4PFM-SB9U>.
- Pace, C. R. (1984). *Measuring the quality of college student experiences: An account of the development and use of the College Student Experiences Questionnaire*. Los Angeles, CA: Higher Education Research Institute.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco, CA: Jossey-Bass.
- PsycINFO (2015). PsycINFO 2015 thesaurus term: Student engagement. (Retrieved from ProQuest database).
- Quaye, S. J., & Harper, S. R. (Eds.). (2015). *Student engagement in higher education* (2nd ed.). New York, NY: Routledge.
- Ribera, A. K., Miller, A. L., & Dumford, A. D. (2017). Sense of belonging and institutional acceptance in the first year: The role of high-impact practices. *Journal of College Student Development*, 58(4), 545–563. <https://doi.org/10.1353/csd.2017.0042>.
- Robertshaw, M. B., & Asher, A. (2019). Unethical numbers? A meta-analysis of library learning analytics studies. *Library Trends*, 68(1), 76–101. <https://doi.org/10.1353/lib.2019.0031>.
- Schlak, T. (2018). Academic libraries and engagement: A critical contextualization of the library discourse on engagement. *The Journal of Academic Librarianship*, 44(1), 133–139. <https://doi.org/10.1016/j.acalib.2017.09.005>.
- Skipper, T. L. (2005). *Student development in the first college year: A primer for college educators*. Columbia: National Resource Center for the First-Year Experience and Students in Transition, University of South Carolina.
- Snively, L. (Ed.). (2012). *Student engagement and the academic library*. Santa Barbara, CA: Libraries Unlimited.
- Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, 1(1), 64–85. <https://doi.org/10.1007/bf02214313>.
- Spady, W. G. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2(3), 38–62. <https://doi.org/10.1007/bf02282469>.
- Swartz, P. S., Carlisle, B. A., & Uyeki, E. C. (2007). Libraries and student affairs: Partners for student success. *Reference Services Review*, 35(1), 109–122. <https://doi.org/10.1108/00907320710729409>.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89–125. <https://doi.org/10.2307/1170024>.
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. Chicago, IL: The University of Chicago Press.
- Trowler, V. (2010). *Student engagement literature review*. Retrieved from Higher Education Academy website: <https://www.heacademy.ac.uk/knowledge-hub/student-engagement-literature-review>.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2005). *Challenging and supporting the first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.