Student Retention Strategies
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Executive Summary

This bibliography provides an annotated list of higher education scholarly research and professional literature related to student retention practices within the online and face-to-face college classroom. These resources were primarily published within the last 5 years, with a few selected based on their content that were published within the last 10 years. Searches were conducted in the McLennan Community College Library research databases and Google Scholar using terms related to student retention, instructor presence, faculty facilitation, timely communication, encouragement, name learning, and instructor-student relationships. Many of the articles suggest fundamental practices that create a sense of belonging and rapport with the instructor, including engaging with students in non-academic settings, learning student names, providing timely and meaningful feedback, and facilitating discussion forums. Implications of rapport and belonging among students who are first-generation students or academically underprepared are discussed by Han (2020), Beckowski (2018), Dika (2012), Fjelkner-Pihl (2022), and Glynn-Adey (2021).

Instructor Presence or Facilitation of Learning

d'Alessio, M. A., Lundquist, L. L., Schwartz, J. J., Pedone, V., Pavia, J., & Fleck, J. (2019). Social presence enhances student performance in an online geology course but depends on instructor facilitation. *Journal of Geoscience Education*, *67*(3), 222–236. https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/8671057735

In what the authors refer to as a "natural experiment" over eight semesters, online instructors in geoscience compared student perceptions of peer and faculty relationships. They asked the question, "How much do actions by the instructor affect students' perceptions of social connections and human interaction?" Findings in this study indicated the importance of students perceiving that faculty knew their names, frequent communication via announcement postings, quick responses to emails, updated course materials, and ample feedback on work. The author notes, "Fewer students failed in the semesters in which students felt that they received more feedback."

Muljana, P. S., & Luo, T. (2019). Factors contributing to student retention in online learning and recommended strategies for improvement: a systematic literature review. *Journal of Information Technology Education: Research*, *18*, 19–57. https://doi.org/10.28945/4182

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/8154201026

Muljana and Luo conduct a systematic literature review covering institutional, faculty, and student factors relating to online student retention. According to the literature, students expected similar faculty-led engagement in online courses as compared to traditional face-to-face experiences. A sense of belonging and faculty facilitation of learning were contributors to student retention in studies published between 2010 and 2017. Negative factors impacting a sense of belonging included absent verbal and visual cues, feelings of isolation, sensing a lack of support, lack of equivalent engagement to traditional courses, low social presence, and little opportunity for student interaction. Outstanding factors related to faculty facilitation of learning included low instructor presence, the appearance of little time invested in facilitation of learning, lack of instructor addressing topic understanding, low interaction with faculty, ineffective communication from the instructor, and assignments not providing personal interaction with the instructor. The authors list the following faculty strategies: early intervention, active and timely communication, greater support for online faculty teaching, timely communication, greater support for faculty teaching online, and regular interaction between the instructor and students.

Communication (including email, social media, and text messaging)

Motz, B. A., Mallon, M. G., & Quick, J. D. (2021). Automated educative nudges to reduce missed assignments in college. *IEEE Transactions on Learning Technologies*, 14(2), 189-200.
https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9373909

Courses in which automated text message assignment reminders or traditional online announcements were compared. The study also compared students who received push notifications regarding announcement postings and automated text message reminders. An app was used for text messages and push notifications, called "IU Boost" (IU stands for Indiana University). The study noted that the automated text message reminders had greater impact on successful assignment completion and submissions than the notifications about posted announcements. I must note, that as of July 2022, Boost was no longer in use at Indiana University, but I was not able to determine if they opted for a new app or discontinued the intervention.

Nkhoma, C. A., Thomas, S., Nkhoma, M. Z., Sriratanaviriyakul, N., Truong, T. H., & Vo, H. X. (2018). Measuring the impact of out-of-class communication through instant messaging. *Education Training*, *60*(4), 318–334. https://doi.org/10.1108/ET-12-2017-0196

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/7493069017

Voluntary use of a "Remind" system for outside of class instant messaging communication was studied among students enrolled in core business courses at the Royal Melbourne Institute of Technology International University in Vietnam. The aim was to study the students' perceptions of course content quality using

an end of course survey. Out of 236 students, 216 opted into the use of the messaging system. The system allowed students to communicate directly with their instructors and receive short announcements sent by them to the whole group. Other modes of communication were still offered. Instructors sent reminders on a weekly or twice weekly basis regarding content in the LMS or deadlines. The study showed that students felt favorably towards the use of the IM system and perceived its benefit on their course performance outcomes, especially in receiving reminders before class and clarifying classroom materials or course information.

Vareberg, K.R., Luo, Z., Westerman, D., Bartels, M., and Lindmark, P. (2020). For a good class, email: Technologically-mediated out-of-class communication and instructional outcomes. *The Internet and Higher Education 47*, 100761. https://doi.org/10.1016/j.iheduc.2020.100761

In this study, Vareberg and his colleagues studied students' perceptions of instructor immediacy in computer medicated communications through a learning management system and other online communications tools used within an online course. The authors hoped to show that the perceived immediacy of the instructor would directly correlate with learning outcomes. While there was not a statistically significant correlation, there was direct impact on student motivation when instructors were seen as more available, relatable, or approachable in an online course. The authors state that "when students are more motivated, they have higher affective learning." Practical indicators of immediacy, according to this study, included referring to students by name and good response times to messages or questions.

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Vareberg, K.R., Vogt, O. & Berndt, M. (2023). Putting your best face forward: How instructor emoji use influences students' impressions of credibility, immediacy, and liking. *Education and Information Technologies* 28, 6075–6092. https://doi.org/10.1007/s10639-022-11421-w

Authors Varegerg, Vogt, and Berndt study the impact of using emojis in a course welcome email, gauging students' perception of instructor credibility, immediacy, and liking. While the use of emojis in communications will make faculty seem relatable and approachable, it did detract from their perceived credibility. Emoji use is a clever way of relating to students in early communications to build relationships, while credibility can be earned throughout the semester. The authors suggest carefully considering the type of emoji used in the context of the communication. The winking emoji seemed to be the icon with the most favorable reception. They noted, "Our results indicated instructors who use emojis in their opening message were perceived as closer, more caring, and more likable, but these benefits were in tension with decreases in competence and character."

Learning Names

Cooper, K. M., Haney, B., Krieg, A., & Brownell, S. E. (2017). What's in a name? The importance of students perceiving that an instructor knows their names in a high-enrollment biology classroom. *CBE life sciences education*, *16*(1), ar8. https://doi.org/10.1187/cbe.16-08-0265

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5332051/

Results of this study pertain more to traditional classrooms than to online courses, with suggestions that instructors use name tents in class to help them learn the students' faces and names. Through surveys and interviews, it was discovered that students place importance on their instructors knowing their names for several reasons. These reasons include feeling valued as a student, being more invested in the course, feeling more comfortable seeking help, improving their confidence in the course material, perceiving their instructor as caring, building a relationship with the instructor, creating a sense of community in the classroom, and signifying that letters of recommendation or mentoring are possible.

Han, E. H. (2020). What to learn from pandemic teaching? Our students' names. *Journal of Legal Education*, *69*(3), 816. https://jle.aals.org/home/vol69/iss3/16/

This article discusses the importance of both knowing and properly pronouncing students' names. In fact, failing to learn or pronounce a name correctly can be viewed as excluding someone or as a microaggression. Technology enables an instructor to associate a face with a name and pronounce it correctly. The author notes that instructors may still make mistakes, but they should approach this relationship building with humility and intentionality.

Holstead, C.E. (2019, 29 August). Want to improve your teaching? Start with the basics: Learn students' names. *Chronicle of Higher Education*. https://www.chronicle.com/article/want-to-improve-your-teaching-start-with-the-basics-learn-students-names/

Even though the title of this article relates to learning student names, it also discusses the importance of office hours and timely feedback. The author notes that students appreciate efforts by faculty to learn their names, especially in small-sized classes. In addition, students appreciate being recognized outside of class. Next, instructors need to be consistent with holding their office hours. Holstead notes, "Professors like to complain that students never show up for scheduled office hours. But when I surveyed students about this subject, many expressed frustration at professors who were not in their offices at the appointed hour or did not seem available outside of class." Finally, timely feedback should be real time and could be facilitated by in-class peer critique as a group. In

summary, this instructor feels that returning to the basics of learning names, responding promptly, and holding consistent office hours is what is most needed.

Encouragement

Alcott, B. (2017). Does teacher encouragement influence students' educational progress? a propensity-score matching analysis. *Research in Higher Education: Journal of the Association for Institutional Research*, *58*(7), 773–804. https://doi.org/10.1007/s11162-017-9446-2

This British educational study indicates that students have a greater chance of continuing their studies into higher education if encouraged by teachers. The greater difference in enrollments correlated to the level of education a student's parents held, with lower parental educational levels among the students responding more to encouragement than students with higher parental levels of education. The author writes, "By indicating that teacher encouragement is influential in students' progress to higher education, my findings substantiate the notion that students' participation in formal education is at least partially dependent on the social cues they receive that legitimize their progress. In addition, my findings support the claim that students respond differently to such cues according to social class."

Kwon, K., Park, S. J., Shin, S., & Chang, C. Y. (2019). Effects of different types of instructor comments in online discussions. *Distance Education*, *40*(2), 226–242. https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/8259041811

This article reports on the effects of distinct types of instructor comments in a facilitated online discussion forum within a graduate level instructional design course. Instructors posted replies to students' initial discussion postings by providing praise, requesting elaboration, posting differing perspectives, or by choosing not to comment (as a control). Perspective widening or offering differing opinions contributed to knowledge construction. Requesting elaboration created more interactive discussions. Offering praise did not affect knowledge construction or increasing forum activity. Furthermore, praise-based comments do not provide directions for the student to take in posting additional content. This study reveals the importance of instructor presence in online discussions with the type of messaging considered.

Relationship Building and Rapport

Beckowski, C. P., & Gebauer, R. (2018). Cultivating deeper life interactions: faculty-student relationships in a nonresidential learning community. *Journal of College Student Development*, *59*(6), 752–755. https://doi.org/10.1353/csd.2018.0070

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/7945213421

In this study, the quality of interactions with faculty and within a learning community are studied. The program involved collaborative teaching among faculty among first-year students who were identified at-risk in writing skills based on SAT Verbal scores. The learning community addressed more than academic preparedness, seeking to mentor students who also had school-life balance challenges related to commuting, off-campus jobs, and family hardships. Developmental writing courses were taught by a team of 3 faculty. The courses were provided as blocks with access to classrooms between classes, providing a highly visible way of accessing the partnering faculty. The Learning Community program also offered a leadership retreat, day trips, and group dinners.

Demir, M., Burton, S., & Dunbar, N. (2019). Professor–student rapport and perceived autonomy support as predictors of course and student outcomes. *Teaching of Psychology*, 46(1), 22-33. https://doi.org/10.1177/0098628318816132

https://journals.sagepub.com/doi/pdf/10.1177/0098628318816132

In this 2019 study carried out with psychology courses at Northern Arizona University, instructor-student rapport and autonomy support were analyzed for impacts on course outcomes. Surveys administered to 17 classes for 13 professors were distributed and the results compared with student grades. The surveys asked questions related to rapport, learning climate, and professor teaching effectiveness. The results showed that while both rapport with and established by the instructor and support for student autonomy were related to student outcomes, only autonomy support indicated a statistically significant relationship to expected and actual course grades. Rapport was related to course attendance, ratings of the professor, and perceived amount learned.

Dika, S. L. (2012). Relations with faculty as social capital for college students: evidence from Puerto Rico. *Journal of College Student Development*, *53*(4), 596–610. https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/5277923477

The authors note that the results of this study, which looked at the National Survey of Student Engagement responses at one Puerto Rican institution, may not be entirely applicable to all other mainland US institutions. However, the article indicates that the quality of relationships with faculty for first-generation college students is of importance over quantity of interactions, especially for students who are at-risk and have lower achievement scores.

Fjelkner-Pihl, A. (2022). "Ok—I need help from somewhere": 'The educational value of multiplex student relationships in a commuter college.' *Innovative Higher Education*, *48*(1), 83–104. https://doi.org/10.1007/s10755-022-09611-y

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/9757456800

Commuter student peer relationships in a cohort of business students at a Swedish university was the focus of this study, looking at the formation of

multiplex relationships among students. Multiplex relationships are defined as relationships based on multiple layers, such as being classmates, group partners, and old high school friends or co-workers and classmates. Using orientation week activities held by the student union, the authors studied how commuter students formed these complex relationships for support academically and emotionally. The study's major finding indicates faculty are essential to facilitating and monitoring student-student relationship building. The orientation week activities were not inclusive of immigrant, introverted, or religious students. The author suggests the following, "to mitigate the negative effects of homophily on knowledge development and creativity, and increase access to information, students should be given ample opportunities to work together on low-stakes assignments in class or to discuss questions related to their high-stakes assignments with representatives from other groups."

Flanigan, A.E., Akcaoglu, M., Ray, E. (2022). Initiating and maintaining student-instructor rapport in online classes. *The Internet and Higher Education 53*, 100844. https://doi.org/10.1016/j.iheduc.2021.100844

At Georgia Southern University, nineteen college instructors teaching online in education, arts and sciences, and health sciences participated in videoconferencing interviews to discuss the ways in which they establish and maintain instructor-student rapport in asynchronous online courses. The research conducted by the authors revealed that not only do instructors fill pedagogical, administrative, and technological roles, but also social roles in providing an effective online experience. The interview questions, based on a theory by Webb and Barrett, addressed instructor behaviors of connecting, common grounding, information sharing, attentiveness, and courtesy. The first three behaviors were undertaken to establish rapport, while the last two behaviors were for maintaining rapport. Practically, instructors relied upon sharing their human-side early in the course by sharing information about themselves personally. One respondent commented that this connection must be attempted early in the semester, or the opportunity passes. Second, sharing information and content organization that is clear, well-designed, and unambiguous establishes rapport with students, even creating videos as a way of disseminating information about the course. Students will trust the instructor more if they feel comfortable with the way that information is shared in the online course. Patience is also suggested as students are getting acclimated, even if the answers to their questions are in the syllabus. A final way to establish rapport is to note areas in which the instructor has something in common with a student and point out that common ground. For maintaining rapport throughout the course, the authors identified uncommonly attentive and courteous behaviors as common among the interviewees. Attentiveness and courtesy included reaching out personally during the course to check in, providing flexibility as appropriate, and maintaining availability for one-on-one meetings with students.

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Holstead, C.E. (2022, 1 September). Why students are skipping class so often, and how to bring them back. *Chronicle of Higher Education.* Retrieved September 22, 2023, from https://www.chronicle.com/article/why-students-are-skipping-class-so-often-and-how-to-bring-them-back

This article discusses Holstead's findings after surveying students on why they often miss class and what motivates them to attend class. Her reflections on their responses indicate that requiring attendance is important, students need to feel connected to their instructor and to fellow students, and the course should not rely too heavily on online materials. The author suggests providing peer interactions and providing small group discussion time. Holstead also suggests using a conversational tone and style in the syllabus and course announcements to express instructor personality and accessibility.

Parnes, M. K. F., Suárez-Orozco, C., Osei-Twumasi, O., & Schwartz, S. E. O. (2020). Academic outcomes among diverse community college students: what is the role of instructor relationships? *Community College Review*, *48*(3), 277–302. https://doi.org/10.1177/0091552120909908

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/8546589265

This study confirms the importance of student-faculty relationships on student success and GPA, while also discussing the reasons that part-time students struggle more with developing relationships compared to full-time students. The study found no difference between first generation or first-time-in-college students in comparison with returning students regarding the importance and development of relationships with instructors. Parnes notes, "Part-time students could benefit from interventions designed to foster stronger relationships with instructors, which, in turn, increase their academic engagement and success." The authors did find that a student's natural tendency to seek help or previous experience with supportive adults did affect their development of supportive relationships in college. One suggestion from the study is the need for colleges to support and encourage faculty to make time to invest in students, even considering this as part of the annual or periodic faculty evaluation process.

Xiong, S. (2022). The role of faculty in faculty–student engagement: disaggregated analyses by ethnicity for Southeast Asian American college students. *Journal of College Student Development, 63*(4), 461-466. https://doi.org/10.1353/csd.2022.0039

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/9863815646

This study, carried out among Southeast Asian American community college students, use data from the Community College Success Measure (CCSM) institutional needs assessment. Questions on this assessment looked at the

variables of faculty creating a sense of belonging in class, knowing key information about their students, offering validation to students, creating engagement in and outside of class, and welcoming interaction with students about class related and non-academic topics. The author writes, "This study shows that when SEAA students perceived that faculty knew important information about them, they reported increased engagement with their faculty members."

Timely Feedback and Grading

Channing, J., Christian, G., Patterson B., and King M. (2023, 13 April). Transforming the learning experience through ungrading. *NISOD Innovation Abstracts,* NISOD, 45(7). Retrieved September 23, 2023, from https://www.nisod.org/archive_files/abstracts/pdf/XLV_7.pdf

Ungrading is the practice of assessing students using "co-constructive dialogue and feedback" and "moves away from objective systematic grading systems." While it does not disregard the need for letter or numerical grades at the closing of a course, it suggests using alternatives that focus on the learning process. After reviewing the literature on ungrading, Channing offers several suggestions for moving towards an ungrading perspective in course assessment, including providing more feedback to students, utilizing individual conferencing, facilitating feedback among peers, providing flexible dates, utilizing check-ins, and highlighting exceptional work as a model.

Espasa, A., Guasch, T., Mayordomo, R. M., & Martinez-Melo, M. (2022). Prior experience with online feedback: its influence on students' engagement. *Distance Education*, *43*(3), 444–465. https://doi.org/10.1080/01587919.2022.2088480

Utilizing an online survey at the Universitat Oberta de Catalunya in Barcelona, 1,766 undergraduate students were surveyed regarding their previous experience with online feedback in online education. The study aimed to look at the kind of feedback students received and how it influenced their engagement. Questions centered around frequency of feedback, type of feedback (corrective or informative), timing of the feedback (during an assignment or upon grading), and opportunity for revision or resubmission. While the authors note that students may need some training in locating feedback, as it is tied to grading in the learning management system, there was a higher level of engagement when the feedback was corrective. Most respondents indicated that feedback was rarely given during the assignment. The few students who received feedback prior to submission and grading reported higher levels of engagement with it. The authors suggest "a form of corrective feedback that provides feedback beyond just the grade and administered during the learning process, that is, with a formative function and with the possibility of revision, could be a valid practice for a given learning situation."

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Orwat, J., Kumaria, S., Spira, M., Boyle, L., & Besinger, A. (2018). Class participation as a pedagogical tool in social work education. *Social Work Education*, *37*(3), 361–377. https://doi.org/10.1080/02615479.2017.1401601

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Within the context of social work education, the authors address the difficulties in assessing student participation in a course, including unclear objectives or evaluation criteria. The literature-based research article proposes a reflective model of assessing class participation, utilizing self-assessment, goal setting, continuous self-evaluation, problem solving, midterm review, and final review. The authors note that these suggestions are better applied in a master's level program; however, the article was included within this bibliography to highlight the difficulty in grading class participation and the need for students to form new habits regarding participation at any level.

Office Hours

Cafferty, P. (2022). Quick fix: The artistic office hour promotes personal student-faculty interactions. *College Teaching*, *70*(3), 364–367. https://doi.org/10.1080/87567555.2021.1952401

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/9567906621

The author, an instructor in biology at Emory University, writes about an online non-academic activity to promote student engagement and relationship building. During COVID, in addition to regular office hours, Cafferty held online coloring sessions through video conferencing. The creative activities, related to the academic field, were either carried out online using software or attendees would work on their own project during the videoconferencing hour. Activities included crossword puzzles, coloring sheets, free drawing, and origami. The author writes, "Personal conversation occurred during every Artistic Office Hour, but never arose during regular office hours." The Artistic Office Hours were attended by 26% of students and the attendance for regular office hours increased from 10% to 28%. Students that did not attend more commonly reported the reason as scheduling conflicts and very few declined due to lack of interest. The author stated an intention to continue the creative office hour for online and face to face courses.

Glynn-Adey, P. (2021). Public space office hours. *College Teaching*, *69*(3), 180–181. https://doi.org/10.1080/87567555.2020.1845599

https://mclennancommunitycollegelibrary.on.worldcat.org/oclc/9402629943

A mathematics professor at the University of Toronto provides his observations after moving office hours from his office to an outdoor café on campus, near his classroom. Some of the course content lent itself well to group discussions, with

math concepts being demonstrated with a deck of cards. While the instructor moved the office hours to support students by making him more accessible and visible, he also observed gains for English language learners or students from marginalized communities who were more likely to attend these office hours with some of their cultural peers.