

**IMPLEMENTATION OF AN EARLY ALERT WORKFLOW PROCESS IN  
HIGHER EDUCATION TO ENHANCE RETENTION AND STUDENT  
COURSE ENGAGEMENT**

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**ABSTRACT**

*This case study examines the implementation of an early alert intervention system designed to enhance retention and student course engagement at a large suburban, public two-year degree-granting college. The focus of the study was to investigate the work-flow process and labor requirements for operationalizing the in-house intervention protocol, utilizing a Success Coach model. This paper documents the intervention procedures and reports findings pertaining to faculty time commitment and participation, frequency and prevalence of raised alert flags, and labor requirements for conducting student outreach. Cost efficiency and effectiveness are discussed, as are alternative approaches for implementation, including the use of automation and commercially available early alert software solutions. Implications of findings for the operationalization of the success coach model are considered and suggestions for further investigation are discussed.*

## **Introduction**

Public two-year colleges in the United States operate in an era of heightened accountability for student performance outcomes and operational efficiencies. Established as an open-access gateway for economic and social mobility to an ever-increasing proportion of the American population, community colleges have been tasked with developing an effective and productive pathway for students while simultaneously delivering efficient, cost-conscious student services. In the state of Florida, this accountability effort has manifested itself in the form of a legislative performance-based funding model. A portion of the 28 Florida College System (FCS) institutions' annual operating revenues are withheld and pooled for redistribution to the top-performing colleges according to performance criteria, including student retention and graduation rates. The demand for increased accountability tied to funding has initiated a great deal of effort directed toward student retention by member institutions.

Student retention is a highly-researched topic; the research is also clear that student attrition cannot be attributed to any singular cause (Maher & Macallister, 2013; Beer & Lawson, 2017). Multiple factors influence student success, engagement, and retention, including the student's academic preparation and ability, personal and social challenges encountered, and the support systems within the educational institution itself. Because of the many facets surrounding the issue of student attrition, a growing momentum to develop programs and initiatives emerged, specifically focussing on student retention and engagement throughout all aspects of the student experience and across all categories of higher education institutions.

Many college retention programs are geared towards specific sub-populations of the student body such as first-year experiences and first-generation student-directed programs. Barefoot (2004) notes however, that while, "efforts to target special at-risk

populations are necessary, a decision to limit outreach to those populations may be, in fact, short-sighted” (p. 13). Retention efforts should be focused on retaining all students. Retention literature further suggests that while student engagement programs are important, identifying low academic performance and proactively intervening early can significantly reduce student attrition (Bentham, 2017; Dumbrigue, Moxley, & Najor-Durack, 2013; Lotkowski, Robbins, & Noeth, 2004; Thomas, 2002). These studies have motivated many higher education institutions to pursue academic early alert strategies in order to retain students.

Academic Early Alert, as a process, is generally focused on the identification of students who encounter challenges with participation, assignment completion, or performance within a particular course or in multiple courses. Whether a student encounters social or academic challenges, any impact on course performance is likely to show in the grades and participation of that individual. The early alert process most commonly involves tasking an instructor with reviewing student performance within the first half of a course (Hudson Sr., 2005; Tampke, 2013). The goal of Academic Early Alert is to engage the student in a dialogue and to provide intervention and guidance with sufficient advance notice, so that performance is enhanced and positive course outcomes are increased (Hudson Sr., 2005; Tampke, 2013). An early alert communication can originate from the faculty member, or it can be delivered via a third-party practitioner such as an advisor, teaching assistant, or academic coach (Cartnal & Hagen, 1999).

### **Why Early Alert?**

Over the past 15 years, research has demonstrated promise for early alert systems to enhance student retention and academic performance (Hudson Sr., 2005; Jayaprakesh, Moody, Lauria, Regan, & Baron, 2014). According to Kuh (2008), the

interest in early alert engagement and processes is growing, forcing institutions to engage in educational practices associated with high levels of learning and development. Institutional effort has been dedicated to enhancing student life opportunities that promote the establishment of academic, social, or professional networks for students.

Few studies have been dedicated to the examination of the efficiencies of process, workflow, labor, and costs associated with early alert initiatives. The early alert systems evaluated in the literature, while varied in design, are strongly focused on student performance and are predominantly concerned with factors associated with class attendance (Bowen, Price, Lloyd, & Thomas, 2005; Richie & Hargrove, 2005) or academic performance (Geltner, 2001). The literature provides inconsistent recommendations regarding appropriate timing of early alert intervention and the persons who should be responsible for implementation. Some researchers have suggested that faculty members provide direct outreach or mentoring to assist with student retention (Bean, 2005; Sabina, Curry, Harris, Krumm, Vencill, 2016; Stromei, 2000; Umbach & Wawrzynski, 2005); others have noted that faculty members may not have the time, skills, or experience to provide academic intervention or support (Lau, 2003; Tinto, 1987; Wild & Ebbers, 2002).

Many studies demonstrate that students respond positively to ongoing feedback from faculty about their academic performance (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Tagg, 2003); therefore, faculty involvement and persistence in an early alert effort can be critical to its success. Yet, when faculty are not engaged in providing direct outreach to students, intervention can still be effective when managed through college support departments (Drake, 2011; Frost, Strom, Downey, Schultz, Holland, 2010; Tinto, 1999). Regardless of the person responsible for outreach, the research on

student retention is clear: students who are able to name someone on campus who cares about their academic success and accomplishments are more likely to be retained (Achilles, Byrd, Felder-Strauss, Franklin, & Janowich, 2011).

### **Problem Statement**

This paper describes a pilot study of an early alert initiative from initial practical discussion to implementation at a large suburban community college in Florida. While the overall aim of the early alert initiative was to exert a positive influence on student retention and course engagement, the focus of the current study was to examine the workflow process and labor requirements needed to implement the initiative. The workflow process was created to enhance student course engagement by means of targeted outreach, while minimizing any additional labor burden placed upon the faculty. This pilot study was designed to leverage existing, non-automated internal college communication tools and computing resources to simulate the labor and workflow of running an early alert system prior to the adoption of a commercially available, fully automated, electronic early alert system.

While a wide array of research has been conducted on student engagement, motivation and retention, little analysis exists on the operational efficiencies of workflow processes used to implement early alert initiatives. This pilot study was conducted to help clarify the scope and workflow of an Academic Success Coach role, and the overarching process of operating an early alert initiative within an Academic Affairs unit at a large suburban community college.

The following research questions guided this case study:

*Q1: What labor and workflow processes are required in a community college early alert system that utilizes an Academic Success Coach?*

*Q2: Which flag types are most frequently utilized in a community college early alert system utilizing a success coaching model?*

### **The Florida Context**

Florida is an interesting state in which to investigate early alert programs because of the open-access nature of its public two-year colleges in the state. Research has shown that many incoming students are academically underprepared for the rigors of college-level coursework (Bailey & Jaggars, 2016), a situation exacerbated in Florida by the passage of SB 1720 in 2013, which established an exemption for recent high school graduates to waive placement testing and developmental education requirements. The repercussions of this legislation were that students who would normally be placed in developmental education for academic remediation were now immediately thrust into more academically rigorous college-credit coursework. Providing students with the option to avoid developmental education created the potential for reduced student performance outcomes despite the pervasive climate of accountability standards and performance-based funding. One potential solution for confronting these challenges in the midst of an elevated accountability landscape was to develop a process for identifying students who demonstrated academically at-risk behaviours using an early alert system.

### **Methods**

To pilot the early alert initiative, a position was created for an Academic Success Coach at the target college to conduct outreach to students. Faculty identified cases in which individual students demonstrated academic performance or behavioural

challenges. These cases were referred to the Academic Success Coach utilizing a spreadsheet saved on a secured cloud drive that was shared between the Academic Success Coach and the three faculty members participating in the pilot study. After a faculty referral, the Academic Success Coach initiated contact and invited students to engage in a dialogue about their experiences and challenges with coursework. Additionally, the Success Coach made recommendations for enhancing academic performance, proposed strategies relevant to the student's challenges, or made referrals to other internal (college-based) or external (community-based) resources appropriate to the students' situations.

Five general education course sections were selected for inclusion in the pilot study, including two sections of Intermediate Algebra, two sections of English I, and one section of General Psychology. The pilot initiative included three faculty members (one for each discipline) and represented a total initial enrolment of 137 students.

### **Implementation and Workflow Process Development**

Faculty were asked to report students to the Academic Success Coach during weeks 4 and 8 of the semester via scheduled surveys (although individual manual flags could be raised at any point throughout the term). The online spreadsheet included a number of warning flag options as well as an option for faculty to provide kudos to students who showed improvement or demonstrated strong performance. One week prior to the scheduled surveys, the Academic Success Coach sent an email notification to faculty indicating the survey's deadline and providing instructions to ensure ease of accessibility for the faculty. Faculty were given a one-week timeline for completing each survey.

Once the surveys were completed, the Academic Success Coach attempted to contact the student with an initial email. If the student responded, the Success Coach

continued to engage with the student until a resolution of the particular concern was reached. If the student did not respond to the initial email, the Success Coach phoned the student within 48 hours. Contact attempts for non-responsive students ended two weeks after the initial contact email. If students were unavailable, a message would be left with the students urging them to contact the coach as soon as possible to ensure success in coursework.

### **Labor Tracking**

The Academic Success Coach used an electronic time-keeping system for recording overall work hours and manually documented the time commitment required to:

- Send initial contact emails/kudos messages following raised flags;
- Make phone calls following student non-response to initial emails;
- Respond to student emails;
- Update spreadsheets for data collection and tracking of flags and outcomes.

The labor data collected for each of these four actions was analyzed and reported on the basis of average time spent per function for each of the reporting periods (week 4 survey, week 8 survey, and manual flags). Additionally, total faculty labor hours deployed for the pilot study were recorded. Together, this labor analysis informed the scalability of the project, potentially identifying a total number of course sections that could be supported using the Academic Success Coach model.

### **Results**

The results of the types and quantities of raised flags as well as the associated labor burden for raising and fielding such flags were computed and are reported below. These analyses were based on frequencies of flags raised within each of three reporting periods: 1) week four scheduled progress survey, 2) a week eight scheduled progress survey, and 3) manual flags. The scheduled progress surveys were planned to occur at

strategically important times within the semester and were implemented to encourage faculty utilization of the early alert system. The manual flag option was implemented to afford faculty the opportunity to raise flags for students at the moment of observation, rather than waiting for the arrival of a scheduled progress survey.

### **Analysis of Raised Flags**

Each faculty member completed the Week 4 Survey for all five sections of the classes included in the pilot study. The Academic Success Coach compiled the survey results. A total of 35 flags were raised by the faculty during the Week 4 Survey. Of the 137 students enrolled in the five sections under study, 29 students (21.2% of the initial enrolment) received flags (6 students received more than one flag). Of the 35 flags input by faculty, 23 (65.7%) were Warning flags and 12 (34.3%) were Kudo flags.

Table 1

#### *Frequencies of Early Alert Flags by Type*

<b><u>Flag Type</u></b>	<b><u>Week 4 Survey</u></b>	<b><u>Week 8 Survey</u></b>	<b><u>Manual</u></b>
Low Quiz/Test Score	9	22	2
Low Participation	11	26	14
Tutoring Referral	3	13	8
In Danger of Failing*	0	11	6
<u>Kudos</u>	<u>12</u>	<u>44</u>	<u>3</u>
<u>Totals</u>	<u>35</u>	<u>116</u>	<u>33</u>

*Note: "In Danger of Failing" flag was not available during the week 4 Survey.*

Similarly, all three faculty completed the Week 8 Survey for all five sections included in the pilot study. During the Week 8 Survey, a total of 116 flags were raised by the faculty. Of the 137 students initially enrolled, 81 students (59.1% of initial

enrollment) received flags (27 students received more than one flag). Of the 116 flags that were raised, 72 (62.1%) were warning flags and 44 (37.9%) were kudos flags.

Faculty had the option to raise manual flags (not included within scheduled faculty surveys) throughout the entire semester. A total of 33 manual flags were raised for 23 individual students (16.8% of initial enrolment) over the course of the semester (10 students received more than one flag). Of the 33 flags that were raised, 30 (90.9%) were warning flags while three (9.1%) were Kudos flags.

Faculty identified and flagged a larger proportion of the students in the Week 8 Progress Survey (59.1%) than in the Week 4 Progress Survey (21.2%). Additionally, faculty utilized the option to raise manual flags less often when compared to scheduled faculty surveys. More than 90% of the manual flags were raised as warning flags, indicating that kudos were used much less frequently than during the scheduled progress surveys (66% and 62% respectively in week four and week eight). This finding suggests that faculty posted manual flags when they observed a student with a particular challenge or poor performance in the course.

### **Analysis of Labor Expenditure**

The Academic Success Coach and faculty roles were analyzed in this study for total labor expenditure as well as task-specific labor commitment. The Academic Success Coach position for the pilot study was a part-time staff member whose responsibilities entailed conducting outreach to students identified by faculty, referring students to college or community resources as needed, collecting and reporting utilization and outreach data, and communicating with faculty regarding student communications. The Academic Success Coach position was created for the explicit purpose of minimizing additional faculty work-load and to serve as a dedicated staff member who possessed comprehensive knowledge of college and community resources.

During the week 4 and 8 scheduled faculty surveys, faculty raised a total of 35 flags for 29 unique students. The Academic Success Coach drafted and sent initial contact emails to the 29 identified students; the communications were customized based upon the specific flags that were raised by the faculty. Additionally, initial contact emails were followed up with a telephone call within 48 hours to all contacted students. An 80% response rate by students (n = 23) was reported based on the ASC's initial contact email and follow-up phone call. The Academic Success Coach also engaged in additional email and telephone communications with students as necessary. The total time commitment to facilitate communication for the 29 students identified in the Week 4 Progress Survey was approximately 12 total labor hours (approximately 25 minutes per student) as indicated in Table 2.

Table 2

*Academic Success Coach Labor Hours by Task*

<b><u>Task</u></b>	<b><u>Week 4 Survey</u></b>	<b><u>Week 8 Survey</u></b>	<b><u>Manual Flags</u></b>
Initial Email	2.5	7.5	2.5
Phone Calls	5.0	5.0	2.0
Response to Students	2.5	3.5	1.25
<u>Data Recording</u>	<u>2.0</u>	<u>4.0</u>	<u>1.75</u>
<u>Totals</u>	<u>12.0</u>	<u>20.0</u>	<u>7.50</u>

*Note: labor values reported in hours of time spent on task.*

Similarly, during the Week 8 Progress Survey, faculty raised a total of 116 flags for 81 unique students. The Academic Success Coach drafted and sent initial contact emails to the 81 identified students, customized according to the specific flags raised by the faculty, and followed by a telephone call within 48 hours. A 68% response rate was recorded from the students (n = 55) who received the initial contact email and a phone

call. The total time commitment to facilitate communication for the 81 students identified in the Week 8 scheduled survey was approximately 20 total labor hours (approximately 15 minutes per identified student).

Faculty raised a total of 33 flags manually (not within a scheduled faculty survey) for 23 unique students. The Academic Success Coach drafted and sent initial contact emails to the 23 identified students, followed by a telephone call within 48 hours. There was a 60% response rate ( $n = 14$ ) from the students who received the initial contact email and phone call. The total time commitment to facilitate communication for the 23 students identified in the manual flags was approximately 7.5 total labor hours (approximately 20 minutes per identified student).

### **Faculty Time Commitment**

Faculty were engaged in an initial orientation meeting to discuss the timeline of the Early Alert initiative, the procedures for identifying students and raising flags, and to discuss the survey tool. Each of the five faculty members participated in the scheduled surveys during week 4 and week 8, and two faculty raised manual flags during the term (see table 3).

Table 3

*Faculty Labor (in Minutes) by Reporting Period*

Faculty	Week 4 Survey	Week 8 Survey	Manual Flags
	<u>Time   Flags</u>	<u>Time   Flags</u>	<u>Time   Flags</u>
English*	20   8	15   7	25   31
Mathematics*	30   13	90   84	10   2
Psychology	15   17	30   25	0   0

*\*Time and flag data represent the total for two sections of English and Mathematics.*

For the week 4 Progress Survey, a total of 35 flags were raised by the three instructors, with each instructor reporting a consistent time commitment of approximately 15 minutes or less per section for completing the entire Week 4 survey. During the week 8 Progress Survey, however, there was an increase in the number of flags raised (116 in total). The instructors reported a range of time commitments, from a minimum of less than 10 minutes each for the two sections of English I, to approximately 30 minutes for the section of Psychology; the Intermediate Algebra faculty member reported a high of approximately 45 minutes per section for each of the algebra sections. The variation in time commitment during the week 8 progress survey was related both the number of flags raised in each section as well as the extent to which instructor comments were included. Additionally, a total of 33 flags were raised as manual flags (not during a scheduled survey). Faculty reported spending, on average, less than 15 minutes for each section to raise manual flags during the pilot study.

Overall, by leveraging the Academic Success Coach position and organizing the faculty workload within scheduled faculty surveys for identifying students and raising flags, the total faculty time commitment for the semester was less than three hours per

section over the course of the semester. Considerable variation existed in the number of flags raised by each instructor; this finding was the result of the differences between the quantity of flags raised by each instructor and the level of detail provided within the flag comments. Differences in student performance within the selected disciplines may also be partially accountable for the variation, though further investigation would be required to verify this result using a larger sample of course sections. Twenty minutes per flagged student was the approximate time requirement of the Academic Success Coach.

### **Conclusions and Discussion**

The results of this study indicate that by leveraging an Academic Success Coach, faculty labor commitment can be minimized while still delivering intervention outreach to at-risk students. Only three labor hours of faculty time were required to include a course section in an academic early alert initiative. Approximately 20 minutes were required for the Academic Success Coach to conduct outreach for each identified student. In the authors' opinion, the pilot study's finding of 20 minutes of outreach time per raised flag, on average, would not be operationally scalable to a college-wide implementation effort without additional outreach personnel. Automated messaging and the strategic use of live outreach based on selected flags only (such as tutoring referrals and low participation/attendance) could significantly reduce time and labor, potentially rendering college-wide scalability feasible. Commercially available, automated systems are also a potential solution to the problem of labor expenditures, but such applications come with sizeable costs and significant implementation and integration requirements that must also be considered.

Another important consideration that must be addressed is the scope of an early alert intervention. This particular pilot study included a section of General Psychology,

two sections of English I, and two sections of Intermediate Algebra -- courses that are considered to be “core curriculum courses” or “general education courses” at many higher education institutions. Based on a core course analysis conducted by the state-wide college system auditors, the target college underperformed based on the state average in each of the 2014-2017 academic years for the percentage of students successfully completing core math with grades of C and above (Florida College System, 2018). Undergraduate students who are likely not to succeed in gateway general education courses can be predictably identified and offered support (Benford & Gess-Newsome, 2006). Based on institutional screening and internal study, a strategic selection of specific courses for inclusion could further add efficiency and effectiveness to an early alert intervention effort.

### **Recommendations for Future Research**

Additional research on early alert systems could focus on a variety of applications, centered not only on student performance outcomes, but also on operational efficiency. Such areas for investigation might include: 1) institutional core curricula, 2) courses in specific programs with lower than average retention numbers, 3) courses taught by adjunct and contingent faculty versus full-time faculty, 4) developmental education courses exclusively, 5) single academic departments or divisions, 6) an experimental study comparing coaching or non-coaching, or 7) a combination of several of these considerations.

Financial considerations are critical for higher education institutions in the era of heightened accountability for student performance outcomes. The results of this pilot study indicate that part-time positions specifically tasked with student retention may be a viable solution despite the additional labor costs. Automated software solutions exist, but can be costly, both in terms of licensing contracts and the labor costs for

configuration and implementation. Institutions committed to early alert initiatives are encouraged to seek innovative solutions to leverage existing internal technology and staff to enhance effectiveness and efficiency of early alert initiatives. Conducting a cost-benefit analysis in future studies could prove helpful to inform institutions of gains in student performance outcomes per capital outlay associated with different implementation strategies.

Hiring personnel who are entrusted with the personal information of students and with delivering a critical service to potentially at-risk students is critically important. More research should be conducted to examine the appropriate educational background and professional and interpersonal skills necessary to fulfil the role of a Success Coach, and to weigh the costs and benefits to support a higher credentialed, more costly staff or faculty member.

After implementation of a carefully designed workflow and the acquisition of appropriate staffing to support early alert, the true link to success lies in the hands of the faculty and the students. Faculty participation is crucial, not only in execution, but also in planning and development. A participatory faculty can help to shape an intervention to ensure the intended rigor of the courses while increasing the likelihood that students who are facing challenges will be appropriately identified and assisted. The increased use of adjunct and contingent faculty members, the evolving nature of higher education, the increased accountability for student outcomes, and the challenging fiscal climates all work together to influence the need to develop effective and cost efficient student and faculty support initiatives.

## References

- Achilles, W., Byrd, K., Felder-Strauss, J., Franklin, P., & Janowich, J. (2011). Engaging students through communication and contact: Outreach can positively impact your students and you. *MERLOT Journal of Online Learning and Teaching*, 7(1), 128-133.
- Bailey, T., & Jaggars, S. S. (2016). *When college students start behind*. The Century Foundation. Retrieved from: <https://tcf.org/content/report/college-students-start-behind>.
- Barefoot, B. O. (2004). Higher education's revolving door: Confronting the problem of student drop out in US colleges and universities. *Open Learning: The Journal of Open, Distance and e-Learning*, 19(1), 9-18.
- Bean, J. P. (2005). Nine themes of college student retention. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 215-243). Westport, CT: Praeger.
- Beer, C., & Lawson, C. (2017). The problem of student attrition in higher education: An alternative perspective. *Journal of Further and Higher Education*, 41(6), 773-784.
- Benford, R., & Gess-Newsome, J. (2006). Factors affecting student academic success in gateway courses at Northern Arizona University. Center for Science Teaching and Learning, Northern Arizona University. ERIC Doc. No. ED495693.
- Bentham, C. (2017) Faculty perspectives and participation in implementing an early alert system and intervention in a community college (Unpublished doctoral dissertation). University of Central Florida, Orlando, FL.

- Bowen, E., Price, T., Lloyd, S., & Thomas, S. (2005). Improving the quantity and quality of attendance data to enhance student retention. *Journal of Further and Higher Education*, 29(4), 375-385.
- Cartnal, R., & Hagen, P. F. (1999). Evaluation of the early alert program, spring 1999. San Luis Obispo, CA: Cuesta College. (ERIC Document Reproduction Services No. ED 441541).
- Drake, J. K. (2011). The role of academic advising in student retention and persistence. *About Campus*, 16(3), 8-12.
- Dumbrigue, C., Moxley, D., & Najor-Durack, A. (2013). *Keeping students in higher education: Successful practices and strategies for retention*. London, UK: Routledge.
- Florida College System. (2018). FCS core courses interactive report. Retrieved on March 18, 2018 from M. Lisa Valentino.
- Frost, R. A., Strom, S. L., Downey, J., Schultz, D. D., & Holland, T. A. (2010). Enhancing student learning with academic and student affairs collaboration. *The Community College Enterprise*, 16(1), 37.
- Geltner, P. (2001). The characteristics of early alert students, fall 2000. (ERIC Document Reproduction Services No. ED463013).
- Hudson Sr., W. E. (2005). Can an early alert excessive absenteeism warning system be effective in retaining freshman students? *Journal of College Student Retention: Research, Theory & Practice*, 7(3), 217-226.
- Jayaprakash, S. M., Moody, E. W., Lauría, E. J., Regan, J. R., & Baron, J. D. (2014). Early alert of academically at-risk students: An open source analytics initiative. *Journal of Learning Analytics*, 1(1), 6-47.

- 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., Kinzie, J. L., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). What matters to student success: A review of the literature (Vol. 8). Washington, DC: National Postsecondary Education Cooperative.
- Lau, L. K. (2003). Institutional factors affecting student retention. *Education*, 124(1), 126-136.
- Lotkowski, V. A., Robbins, S. B., & Noeth, R. J. (2004). The Role of academic and non-academic factors in improving college retention. ACT Policy Report. *American College Testing ACT Inc*.
- Maher, M., & Macallister, H. (2013). Retention and attrition of students in higher education: Challenges in modern times to what works. *Higher Education Studies*, 3(2), 62.
- Richie, S. D., & Hargrove, D. S. (2005). An analysis of the effectiveness of telephone intervention in reducing absences and improving grades of college freshman. *Journal of College Student Retention: Research, Theory & Practice*, 6(4), 395-412.
- Sabina, L. L., Curry, K. A., Harris, E. L., Krumm, B. L., & Vencill, V. (2016). Assessing the performance of a cohort-cased model using domestic and international practices. In *Contemporary Approaches to Dissertation Development and Research Methods* (pp. 256-272). IGI Global.
- Stromei, L. K. (2000). Increasing retention and success through mentoring. *New Directions for Community Colleges*, 2000(112), 55-62.

- Tagg, J. (2003). *The learning paradigm college*. Bolton, MA: Anker Publishing Company.
- Tampke, D. R. (2013). Developing, implementing, and assessing an early alert system. *Journal of College Student Retention: Research, Theory & Practice, 14*(4), 523-532.
- Thomas, L. (2002). Student retention in higher education: the role of institutional habitus. *Journal of Education Policy, 17*(4), 423-442.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA journal, 19*(2), 5-9.
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education, 46*(2), 153-184.
- Wild, L., & Ebbers, L. (2002). Rethinking student retention in community colleges. *Community College Journal of Research & Practice, 26*(6), 503-519.

## Appendix

### Success Coach Communication

- Attendance/Low Participation

A flag has been raised in [Course Name] by your instructor regarding attendance/participation concerns. Below is my contact information. Please call me as soon as possible to discuss available resources that can assist you. I want to work together with you to achieve your goals for this course. I look forward to hearing from you soon!

- Missing/Late Assignment

Hi [First Name], your instructor has indicated that you are currently missing or have late assignments in [Course Name]. Your instructor and I both care about your performance in this course.

Below is my contact information. Please call me as soon as possible to discuss available resources that can assist you. I want to work together with you to achieve your goals for this course. I look forward to hearing from you soon!

- Low Quiz/Test scores

Hi [First Name], your instructor has indicated you have been receiving low quiz or test scores in [Course Name]. It may not be too late to improve your overall grade in this class.

Below is my contact information. Please call me as soon as possible to discuss available resources that can assist you. I want to work together with you to achieve your goals for this course. I look forward to hearing from you soon!

- Tutoring Referral

Hi [First Name], your instructor has raised a flag indicating that perhaps you might benefit from tutoring or other resources to assist you in your course. Below is my contact information. Please call me as soon as possible to discuss available resources that can assist you. I want to work together with you to achieve your goals for this course. I look forward to hearing from you soon!

## **ABOUT THE AUTHORS**

Mr. Joe Huston currently serves as the Director of the Academic Success Center at Seminole State College of Florida in Sanford, Florida. Huston joined the Academic Success Center in February 2008 as the instructional leader for mathematics and science. His involvement with the Academic Success Center has included staff management, development and training; strategic planning and program review; grant writing; program development and implementation; and service on various campus committees. Huston has a background in financial and personnel management and has taught mathematics in classrooms at the high school and college levels. His professional interests include retention and success strategies for developmental education, learning theory, and the development of electronic resources to supplement classroom learning. Mr. Huston is currently completing his Ed.D. in Higher Education at the University of Central Florida.

Ms. Kiara Sabina is an Academic Success Coach at Seminole State College of Florida in Sanford, Florida. Sabina earned an MS in Higher Education and Student Affairs, focusing on College Student Development with a cognate in Counseling Psychology from Oklahoma State University, and a BS in Psychology from Point Park University in Pittsburgh, Pennsylvania. Sabina's most recent research focuses on comparative and international issues in education, specifically looking at higher education climate and culture in Vietnam, and organizational culture and school partnerships in Belize. Ms. Sabina has a passion for community college students and student engagement, and hopes to serve in an administrative capacity at the community college level. She plans to pursue her Ph.D. in the near future, focusing on the intersection of Industrial and Organizational Psychology and Higher Education.

Dr. M. Lisa Valentino holds a bachelor of science in psychology from the University of Kentucky, a master of arts in psychology from Clark University, and a doctorate in Higher Education Administration from the University of Florida. Dr. Valentino began her professional career as an adjunct faculty member in psychology at Seminole Community College – now Seminole State College of Florida. She served as a full-time faculty member at Seminole for 15 years before becoming the Oviedo Campus Dean/Provost. She currently serves as Associate Vice President for Academic Services at Seminole State and is responsible for strategic management of the College's academic support areas including the library, academic tutoring, the Faculty Center for Teaching and Learning, and Curriculum, Articulation, Credentialing, and Academic Scheduling. She co-chairs the Early Alert Intervention steering team and serves as the Academic Affairs representative for labor relations with the College's faculty unions. She continues to teach an online introductory psychology class each term. Dr. Valentino received the Seminole Community College Foundation's Faculty Excellence Award. In addition, she was inducted into the Florida Community College Activities Association's Hall of Fame for her work as State Brain Bowl Advisor.

Dr. Lou Sabina is a Visiting Assistant Professor in the School of Education at Stetson University in DeLand, Florida, serving since fall 2016. Prior to this assignment, Sabina was an Assistant Professor of School Leadership at Oklahoma State University. He is a former faculty member and program director of 2+2 partnerships at Edinboro University of Pennsylvania. Sabina has served as an elementary school administrator and a high school business, mathematics, law, economics, and computer science teacher. Sabina has an extensive publication

record, with articles authored or co-authored in the *Journal of Emergency Management*, *Journal of School Leadership*, *Journal of Education Finance*, *Journal of Global Education and Research*, and *Administrative Issues Journal*. Sabina's primary areas of research interest are school succession planning, 2+2 partnerships, community college student engagement, rural education, international education, and school finance. Sabina is the editor of the *Nina B. Hollis Journal for Social Justice: Voices of Reform* at Stetson University and is actively involved in NEFA, AERA, and UCEA. At Stetson, he teaches educational leadership courses in school finance, systems planning, and data management.