A Guide for Developing Your University's Retention Program

Retainology Consortium - Resource for Retention Professionals

Introduction

Implementing a successful retention program goes beyond building or purchasing an early-warning system. A successful Retention Program must start with understanding where you have been, where you are today, and where you plan to be in terms retaining your students. It also requires that someone in your institution be ultimately accountable for making sure that your institution's retention goals are well articulated to all constituencies, and the retention plan is properly implemented, managed, reported, assessed and refined. Finally, a successful retention program requires a budget. A budget that is associated with a program implies priority. Slogans such "***we have to do more with less***" or "***retention is everyone's responsibility***" are simply a way of saying, this is not a priority and no one will be held accountable for its failure.

To build a successful retention program your university should first answer the following questions:

1) **<u>Does your campus have a Retention Goal?</u>** If so, can you describe it? Is the goal realistic? Is there administrative and faculty buy-in and support for the goal? For example your campus Retention Goal might be to:
    a. Increase the retention of first year freshmen by 3% per year for the next 3 years.
    b. Increase the retention of underrepresented minorities by 5% in the next year.
    c. Increase the retention of STEM majors by 30% in the next 5 years.

    Having a goal is crucial; however the next step is to have a credible and detailed plan to achieve the goal.
2) **<u>Does your campus have a Retention Plan?</u>** If so, who has access to this plan? Where can this plan be found? Is the plan realistic? Do you have the personnel to carry out the plan? Are the roles specified in this plan? For example your Retention Plan may include:
    a. Study and understand the incoming freshman student body. Collect demographic, financial-aid, academic and other appropriate information about your incoming students. Predictive analytics (e.g.,
    b. Improve the admission criteria. (involve the retention director as well as the retention advisory committee in the process of developing and refining the admission criteria)
    c. Prior to the beginning of the academic year (or each semester), perform predictive analytics of the incoming freshman class to better identify each student's retention risk [4]. This analysis can also be used prior to admitting the students to recommend:
        i. conditional admission,
        ii. summer bridge programs,
        iii. specific First Year Experience (FYE) classes
        iv. restricted scheduling (limit the courses and credits that the student can take during their first semester or year, block schedule, etc.)
        v. placing students in cohorts to be monitored by various advisors,
        vi. etc.
    d. Implement a robust communication tool for sending automatic email (text messages, etc.) reminders to various constituencies (faculty, advisors, students and administrators) reminding them of actions that need to be taken [1]. These communications may include:

i. reminders sent to all faculty asking them to begin evaluating their students and submit their early warning risk data.

ii. reminders sent to specific faculty who have not yet submitted any risk data for their class. Emails should be informative[1] (e.g., tell the faculty what percentage of faculty have already provided their feedback, how many at-risk students have been identified, how many of those students have received intervention or have sought help, etc.)

iii. reminders sent to advisors, letting them know if any of their advisees have been identified as having elevated risk in any of their classes. An advisor can be defined more broadly to include athletic coaches, appropriate tutoring personnel, appropriate SI (supplemental instruction) personnel, appropriate financial aid personnel, appropriate counselling personnel, etc.)

iv. reminders sent to students letting them know that they have been flagged by one or more faculty and provide them with a link to the portal where they can view their specific risk information and given the opportunity to communicate with their faculty, their advisor, or connect to campus resources such as tutoring center, counselling center, financial aid office, etc.

v. reminders sent to administrators (chairs, directors, deans, vice presidents and presidents) and other stakeholders (such as counsellors working with specific populations) reminding them that their real-time and on-demand reports are available. Provide them with an administrative portal where they can easily obtain this information. The administrative portal should provides these constituencies with actionable data, intuitive reports, visualization tools, and effective communication tools so that they can make informed decisions and target their work and their financial resources more effectively.

e. Collect real-time early-warning risk data during the semester. Start this process no later than the first week of classes. (Early-warning and early-intervention is critical.) Risk data must be collected continually during the semester, and must be available (through appropriate portals) to advisors and others charged with campus retention activities.

f. Once the at-risk students are identified, use a triage model to assign students to specific intervention programs, and use a case-management model to track each student to ensure desired outcome. This process should be fully documented to allow for future assessment and refinement. The nature of all communications, all recommendations, and all student interactions should be logged for future analysis and development of best practices. Failed cases must be further analyzed to potentially inform future student orientations, admission criteria discussions and standards, recommend modifications to the tutoring, SI, or other intervention programs.

g. Create actionable reports for various constituencies such as advisors and administrators. (Reports should be validated before they are widely distributed.

h. Create intuitive, one-click data visualization tools for administrators and others who need the data for understanding and reporting. [1, 4]

3) **Does your campus collect and archive overall as well as academic unit-level retention data for further analysis?** If so, who is responsible to collect this data? How this data is (in its raw or aggregated form) made available to campus stakeholders? Has this data been used to make any retention decisions during the past three years? Is such data (in its raw or aggregate form) accessible in real-time so that actions can be taken at appropriate times during the semester before early risk indicators (attendance issues, academic performance issues, etc.) turn into permanent negative results (e.g., Increase DFW rate), or is this data only available at certain reporting intervals?

4) **Does your campus have a retention director or coordinator?** If so, what is the name of the individual? Is this a full-time or part-time position? How long has this person been serving in this position? Who does this person

report to? Does this person have an advisory committee to work with? If so, what is the representation in the advisory committee? Does this person have a budget to implement any retention initiatives?

5) **<u>Does your campus know what to do when an at-risk student is identified?</u>** Is there an individual or a group of individuals who are charged with reviewing the real-time status of each student and follow up to ensure student's case is correctly categorized, treated and resolved? [1]
6) **<u>Does your campus have appropriate intervention programs to support your retention plan?</u>** Identifying at-risk students is only the first step in the process of improving your retention. In order to retain students your campus must quickly identify and categorize the underlying problem for each student and place them in the appropriate intervention program. Intervention programs can span the spectrum. Including academics, social, and financial outreach programs.
7) **<u>Does your campus have a timeline for implementing its retention goals and plans?</u>**

Is your institution ready to initiate a new Retention Initiative?

To test your university's readiness for embarking upon a new retention initiative complete the following informational units and discuss them with your campus constituencies.

Unit 1: Your Retention Goal and Budget

Institution Name:		
Retention Goal:		• Realistic? • Admin buy-in? • Faculty buy-in? • Timeline for implementing the goal.
Retention Budget:	• Total annual budget dedicated to new retention efforts • % spent on permanent personnel salary (if any) • % spent on retention activities and boots on the ground (e.g., tutors, mentors, SI, etc.) (if any) • Cost of new retention efforts per student, per year • Revenue loss based on current efforts (for example if the university Fall to Fall retention rate for a 1000 fulltime freshmen, each paying $10k in tuition is 85%, the remaining 15% (150 students) are not retained. If our future retention efforts are able to retain 10% of these 150 students, we will have approximately $150,000 in additional tuition next fall semester.	$____________ %____________ %____________ $____________ $____________
Retention Director	• Name: • Percent of time dedicated to retention: • Reports to: • Duties:	

Unit 2: Retention Plan

Retention Plan	Headed by	Reports to	Reporting Frequency
a) Study and understand the incoming freshman student body. Collect demographic, financial-aid, academic and other appropriate information about your incoming students			
b) Improve the admission criteria. (involve the retention director as well as the retention advisory committee in the process of developing and refining the admission criteria)			
c) Perform predictive analytics of the incoming freshman class before the semester starts to better identify each student's retention risk [4]. (This analysis can also be used prior to admitting the students to recommend conditional admits, recommend summer bridge programs, place students in cohorts to be monitored by various advisors, etc.)			
d) Send automatic email reminders to various constituencies (faculty, advisors, students and administrators) reminding them of actions that need to be taken[1].			
e) Collect real-time early-warning risk data during the semester. Start this process no later than the first week of classes. (Early-warning and early-intervention is critical.)			
f) Use a case-management model to follow each student's case to ensure it reaches a desired resolution status. This process should be fully documented to allow for future assessment and refinement. The nature of all communications, all recommendations, all student interactions should be logged for future analysis and development of best practices. Failed cases must be further analyzed to potentially inform future student orientations, admission criteria discussions and standards, recommend modifications to the tutoring, SI, or other intervention programs.			
g) Generate Actionable Reports			
h) Create intuitive data visualization (charts) for the most frequently used data used by campus decision makers.			

Unit 3: Key Stakeholders

Name	**Title**	**Responsibility / Qualification**	**% of their time dedicated to retention (based on 40 hour work week)**	**Reporting (As to their Retention efforts, who does this person report to and how often)**	**Annual Budget dedicated to retention**
	Director of Retention				
	Provost / VCAA				
	Institutional Research				
	Student Success Office				
	Counseling Office				
	Admissions Office				
	Freshman College Advisor (undecided students)				
	Major Advisor				
	Financial Aid Advisor				

Analyze the Responsibility column to see if all Retention Plan objectives are covered in the Responsibilities column. If they do not, either the retention plan has been adjusted or responsibilities must be expanded (along with % time dedicated to retention). Alternatively, additional individuals must be added to the list of stakeholders to cover the responsibilities.

Unit 4: Data Collection Plan

What is to be collected	Source of data	Frequency of collection	Where can the data be obtained	Who Collects the data
Past retention statistics	Office of institutional Research	Each year or in real-time	Web site or other location where the data is accessible.	Institutional Research Office
Early warning data				
Resource utilization (e.g., tutoring, SI, etc.)				

How the data is made available to the university constituencies?

Unit 5: Intervention Programs

Intervention Program	**Description**	**Headed by**	**Target population to be served**	**Reporting (to who, how often)**	**Annual Budget**
Tutoring					
SI					
FYE					
Financial Counseling					
Emotional Counseling					
Academic Counseling (Time management, note taking, etc.)					

Unit 5: Early Warning Tools

An effective early warning tool is essential to the success of your retention initiative. Your options are to build your own system, buy a commercial product, or join a consortium that provides this software tool to your campus. We recommend the later. Review the following document for details about selecting an early-warning and retention tool, also read the next section to become familiar with the ***Retainology*** Consortium.

https://retain.iusb.edu/retain/public/Guide_For_Evaluating_Early_Warning_and_Retention_Software.pdf

More about Re-tain-ology Consortium

University retention initiatives that seek to identify and support at-risk students span the spectrum. These initiatives include activities such as freshman experience, peer mentoring, supplemental instruction, and tutoring. Additionally, due to the development and availability of sophisticated software and analytical tools for early identification of at-risk students, universities have been able to more accurately target these vulnerable populations for early intervention. One such system developed at Indiana University [1, 2] is known as IU-RETAIN. The development of the system was initiated in 2005, and it has been successfully implemented at Indiana University South Bend since the fall of 2007. This software tool is now available to academic institutions of higher education through the Retainology Consortium.

The Retainology Early-Warning and Retention Software [2, 3] offers the following (shown in figure 1):

1) Tools for **predicting** student risk prior to the start of each semester.
2) A simple and user-friendly **faculty portal** for collecting performance and attendance data from faculty.
3) A powerful and intuitive **advisor portal** which allows the advisors to quickly and easily select and communicate with their students based on specific risk conditions.
4) A **student portal** that allows the students to become involved as stakeholders in their own success and retention.
5) An extensive **administrative portal** which provides administrators and their delegates access to actionable data and reports, bringing the information and decision making to every administrative level, especially those closest to the student.

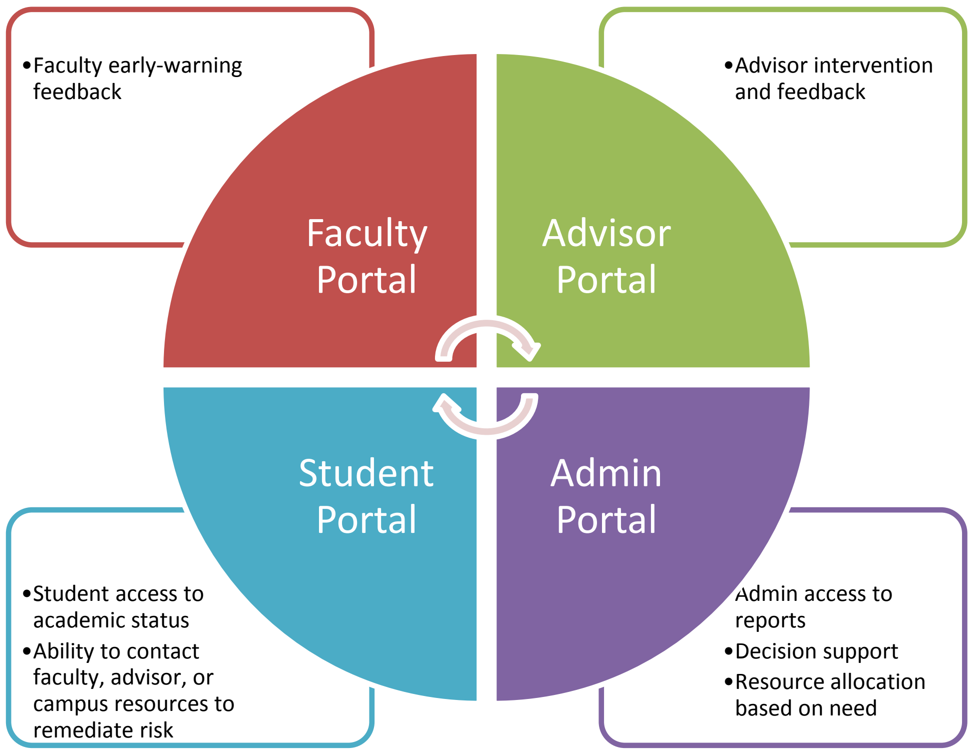

Figure 1 - Retainology Early Warning and Retention Software

Conceptual Model for Retention

The conceptual model for Retainology (shown in Figure 2) incorporates student profile data, as well as other available data (e.g., student self-assessment, or data extracted from course management systems), to develop an analytical prediction engine for risk assessment. The predictions, as well as the early-warning data reported by the faculty, are aggregated and made available to advisors and others who are charged with communication and outreach to students.

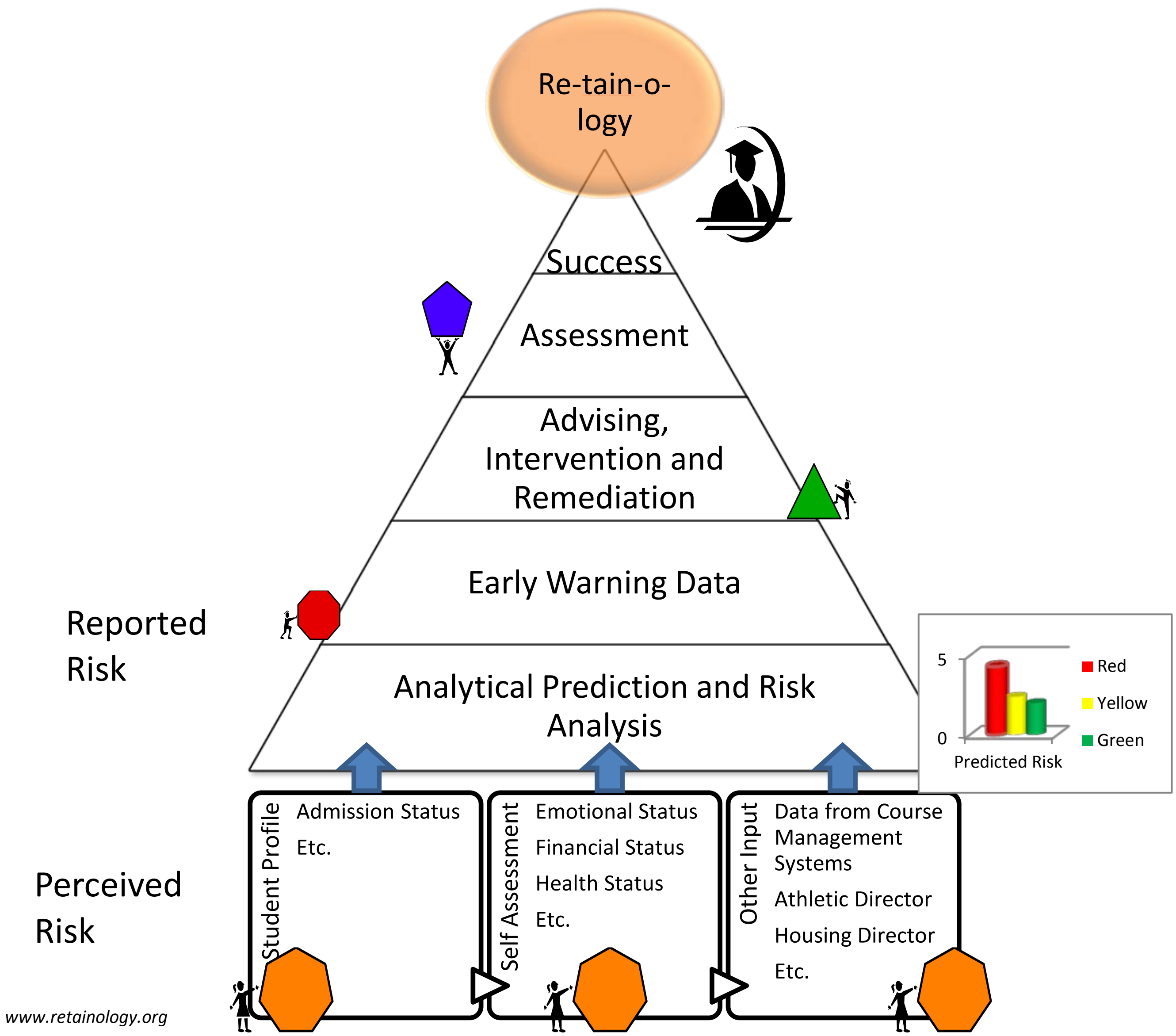

Figure 2: Conceptual Retention Model

Student themselves are part of the conceptual model. Both at-risk as well as students with no risk indicators can view their academic status at any time. Furthermore, at-risk students can complete a voluntary self-assessment survey which can further aid the process of formulating proper support for students. Finally, administrators are part of the model and are able to view real-time actionable reports that helps them make decisions about staffing, budget allocation, and other day to day decision making.

References

[1] Indiana University South Bend, Retention System (2011). IU-RETAIN early-warning and student retention web site, https://retain.iusb.edu, accessed on 11-11-2012.

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[4] Hakimzadeh, H., Azarbod, C., Batzinger, R. (2011). "Re-tain-o-logy: A Comprehensive Model for the Development of Early-Warning and Student Retention Systems", 20th International Conference on Software Engineering and Data Engineering (SEDE 2011), Las Vegas, Nevada, June 20-22, 2011.

[5] Berger, J. B., Lyons, S. (2005). Past to present: A historical look at retention. Chapter I, in Seidman, A., *College student retention: Formula for student success*. Praeger Press.

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Retainology

Retainology is the cross section of sciences, methodologies, and technologies used to identify at-risk students, and help them succeed academically. The Retainology Consortium was founded in 2012 by Dr. Hossein Hakimzadeh. Dr. Hakimzadeh is an Associate Professor of Computer Science and Director of Informatics at Indiana University South Bend. His research interests include database systems, object-oriented systems, and software engineering.

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