

THE ORIGIN AND FUTURE OF SEM

23rd Annual Strategic Enrollment Management Conference



Executive Summary

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Table of Contents

Session Title	Speaker(s)	Page
The Game Changers	Tristan Denley , <i>Vice Chancellor, Academic Affairs, Tennessee Board of Regents</i> Stan Jones , <i>President, Complete College America</i> Elaine Maimon , <i>President, Governors State University</i>	3
The Alpha and Omega of SEM: Supporting Student Success	Tricia Seifert , <i>Assistant Professor, Ontario Institute for Studies in Education, University of Toronto</i>	5
New Models for Students: System Redesign	Zakiya Smith , <i>Strategy Director, Lumina Foundation</i>	7
Meeting the Diversity Goals of Your Institution: Navigating the Supreme Court Guidance on Race and Ethnicity in Admissions Post-Fisher	Michael V. Reilly (Moderator) , <i>Executive Director, AACRAO</i> Art Coleman , <i>Managing Partner and Co-Founder, EducationCounsel LLC</i> Pamela T. Horne , <i>Associate Vice Provost, Enrollment Management and Dean of Admissions, Purdue University</i> Michele Sandlin , <i>Managing Consultant, AACRAO Consulting</i> William E. Sedlacek , <i>Professor Emeritus of Education, University of Maryland, College Park</i>	9
Extending SEM Into Integrated Planning and Advising Services: Helping Students Get On—And Stay On—Track	Josh Jarrett , <i>Chief Learning Officer and Co-Founder, Koru</i>	11
Using College Scheduler to Ease Registration and Hit Your Enrollment Goals	Dr. Kevin Pollock , <i>President, St. Clair County Community College</i> Robert Strazzarino , <i>Founder and CEO, College Scheduler LLC</i>	13
Biographies		15

The Game Changers

Speakers: **Tristan Denley**, *Vice Chancellor, Academic Affairs, Tennessee Board of Regents*
Stan Jones, *President, Complete College America*
Elaine Maimon, *President, Governors State University*

Overview

Complete College America has identified several “game changers” that produce dramatic increases in completion rates. One of the most powerful is Guided Pathways to Success (GPS). Students see their entire program of study laid out semester by semester, and early warning systems trigger just-in-time student advising.

This approach has worked well in institutions including Austin Peay State University and Governors State University. Students make fewer costly mistakes that lead to excess credits and increased time-to-graduation. Institutions become more cost-effective and productive because they can plan faculty needs and course availability months or years in advance.

Context

The panel discussed how game-changing approaches are dramatically improving student success and completion.

Key Takeaways

- **Access to higher education is important, but it is meaningless if students do not complete degrees.**

Historically, American higher education has focused on access. However, completion has often been overlooked.

- In 1998, people in the upper income quartile had a 77% chance of getting a four-year college degree. Yet, the likelihood of people in the lowest income quartile earning a four-year degree was 7%. In 20 years, those numbers haven't changed significantly.
- The freshman class was more representative of the country this year than ever before. But the spring graduating class showed that about half of incoming students drop out and most of those are minorities.

Higher education must continue its commitment to access, but must also realize that completion is equally important.

- **To address the completion agenda, colleges and universities need game-changing tactics that are evidence-based and can scale.**

Complete College America began its work on the completion agenda four and half years ago, with support from six foundations including the Gates Foundation, Lumina, Ford, Carnegie, and Kellogg.

The organization focuses on five evidence-based game changers, which can scale to benefit many students.

1. *Performance funding.* Most states incent enrollment, but they should also incent completion and benchmarks.
2. *Co-requisite remediation.* Rather than thinking about remediation as a pre-requisite, it is considered a co-requisite. More students start college-level work with support and more time on task.
3. *Full-time is 15.* Most full-time students take just 12 credit hours, which puts them on a five-year plan for graduation. A full-time schedule must be redefined as 15 credit hours.
4. *Structured schedules.* Students benefit from block schedules, cohorts, and more holistic and structured programs.
5. *Guided Pathways to Success (GPS).* These pathways are designed to lead students to make more informed and deliberate decisions. They provide default choices that are in students' best interests, given their educational goals.

- **GPS addresses common challenges to completion.**

Many students take too many credits, spend too much money, and still don't graduate. Reasons for excess credits include poor student choices, transfer problems, unavailable courses, and degree requirements. These can all be directly addressed by Guided Pathways to Success (GPS).

With GPS, the goal is to provide default pathways for students to work through their curriculum. Behavioral economics shows that too much choice leads to indecision or poor decisions. The “choice architecture” provided by GPS optimizes for success and minimizes student mistakes.

“Research in many disciplines suggests that people want and appreciate direction, even if it's a default choice designed by informed professionals. This is the case in higher education.”

— Stan Jones

There are six essential components to GPS:

1. *Default pathways.* If a student wants to pursue a degree in psychology, for example, he or she is given an academic map that is the default schedule.
2. *Informed choice.* Students have choices, but need permission to diverge from the default pathway.
3. *Meta-majors.* These are broad clusters of majors, such as STEM, health sciences, social sciences, or business. Students must choose a meta-major in their first year which enables them to build a common core toward their degree. Once in a meta-major, students narrow their study to a major.

4. *Academic maps.* These clearly show the path to graduation semester by semester.
5. *Milestone courses.* Prerequisites are designated for each semester and must be taken in a recommended sequence. Schools guarantee that courses are available in the sequence designed in academic maps.
6. *Intrusive advising.* If students don't complete milestone courses on schedule, fall behind two or more courses on their academic map, or have a 2.0 GPA or less, they must see advisors before registering for classes.

▪ **Schools using GPS are closing the achievement gap.**

Schools that have adopted GPS see higher graduation rates, more on-time graduates, and fewer lost credits, which saves time and money. Examples include:

- *Georgia State University uses degree maps and intrusive advising.* Graduation rates are up 20% in the past 10 years and are higher for Pell students, African Americans, and Hispanic students.
- *Florida State University, since starting degree maps, has cut the number of students graduating with excess credits in half.* Graduation rate increased to 74%.
- *Arizona State University's eAdvisor system increased retention and success.* For the first time, full-time freshman retention rates climbed to 84%.
- *In CUNY's ASAP Program, students are grouped into cohorts with consolidated block schedules.* This approach doubled graduation rates for associate's degrees. Over half of the fall 2007 cohort (55%) earned associate's degrees in three years.
- *Tennessee Colleges of Applied Technology also uses a highly structured, block schedule program.* More than 75% of students graduate at a rate three times higher than their peers, even though students are slightly poorer and older. Certificate program graduates have job placement rates of 80% or higher.

▪ **Online preference engines empower student choice.**

Austin Peay State University found that when navigating through a degree, students often get lost because they don't know whom to ask for help or what questions to ask. To address this, Austin Peay created a choice architecture to empower student choice, faculty advice, and administrative decisions.

The University tailored an online preference engine (like those from Netflix, Pandora, and Amazon) to an academic setting. The system finds courses that meet unmet degree requirements, as well as student characteristics. A "five star" course is one that perfectly meets the student's program, is central to the institution's curriculum, and is likely to result in a good grade for the student.

Students access a web portal by computer or smartphone, and it is easy to find classes that fit their schedule and program. In addition, when students click on a major, they are provided with information about whom they can talk to

about their major, what kinds of careers people get with this degree, and access to national data with average salaries and job availability.

The system was introduced in the spring of 2011. Since then, average earned hours have increased. The more classes are recommended, the more students pass and the more credit hours they earn. The system has been rolled out at six other schools in Tennessee. So far, the results are impressive. Across the nation there is a 20% achievement gap between average hours earned for African American and white students. With this system, the gap drops to 6%.

"The idea is to take all the data we have and empower the choices students make, so they can be more successful, and we can be more successful in the advice we give to them."

— Tristan Delaney

▪ **Revising dual degree and freshman programs also has a significant impact on completion.**

To improve completion rates, Governors State University (GSU) has incorporated Complete College America principles into several programs. Dr. Maimon described three initiatives:

1. *Dual degree program.* This was developed through collaboration with 10 community colleges in the Chicago region and has a retention rate of over 95%. A core theme is communicating the value of completing the associate's degree at the community college before transferring to GSU. Research shows that bachelor's degree completion rates are much higher if students complete their associate's degree first. The program also emphasizes intrusive advising, where GSU pays transfer specialists to spend two days a week at partner community colleges. Participants in the dual degree program are encouraged to take 15 credit hours per semester and must finish their associate's degree in five semesters or less. Financial incentives are also provided. Tuition is frozen at the rate it was when the student was accepted into the program and Pell eligible students receive a GSU Promise Scholarship.

"We have been enormously successful in the dual degree program. The first cohort graduated this May, and we have over a 95% retention rate for them. Applying Complete College America principles really works."

— Elaine Maimon

2. *Freshman program.* GSU freshmen participate in a full-time, block schedule program. Since making friends makes a big difference in retention, every student takes at least three classes with the same group of students. Each cohort has a theme and no class has more than 30 students. Peer mentors provide additional support.
3. *Early start at GSU.* Students that need remediation start the fall semester two weeks early. During that semester, their classes are extended from three to four hours.

The Alpha and Omega of SEM: Supporting Student Success

Speaker: **Tricia Seifert**, *Assistant Professor, Ontario Institute for Studies in Education, University of Toronto*

Overview

One of the central tenets of SEM is supporting student success. However, institutions often define success too narrowly, focusing on retention toward completion. The Supporting Student Success study found that higher education should focus on a more holistic definition of success that accommodates individual students' academic and personal goals.

Institutional culture plays a key role in how staff, faculty, and senior leaders cooperate and collaborate to support student success. Network cultures, which value communication and collaboration, encourage employees to interact with students as both educators and service providers. Leaders must set an example and create an environment that promotes student success.

Context

Tricia Seifert shared findings from the Supporting Student Success research study, which explored how institutional structures and cultures support student success.

Key Takeaways

- **To support students, SEM leaders must reevaluate their measures of student success.**

SEM is all about supporting students throughout their entire lifecycle with an institution. That means providing assistance through recruitment, admissions, matriculation, graduation, and beyond. The notion that SEM support for students never ends must be embedded into the discourse on campus.

To best support students, SEM leaders need to reexamine measures of student success. Most organizations focus on retention toward completion as the most important sign of success. However, Dr. Seifert and other scholars believe a more nuanced approach is required. Understanding the academic and personal goals of individual students is very important, regardless of how long they are at an institution.

In the Supporting Student Success study, Dr. Seifert interviewed over 650 stakeholders at 14 institutions in Ontario. These conversations led to a more holistic view of student success and highlighted these findings:

- *The definition of success varies by student.* Researchers heard this repeatedly from participants.
- *Success falls into the academic and personal domains.* Academic success includes factors like retention and graduation, GPA, content knowledge, good program fit,

and academic engagement. Personal success includes achieving personal goals, having a sense of belonging, and taking risks.

- *Employment post-graduation is not a dominant success measure.* It was rare that study participants said that success was only about getting a job upon graduation. Career readiness, however, such as gaining lifelong skills like teamwork, time management, and self-reliance, was noted as important.

"SEM is all about supporting students through a never-ending lifecycle. This idea is something we need to embed in our discourse every day."

— Tricia Seifert

- **Organizational culture dictates whether an institution supports student success.**

Dr. Seifert's team asked study participants to draw how their organizations' cultures support student success. Drawings often fell into two categories:

1. *Student-focused, network culture.* These drawings looked like spider webs or Venn diagrams. A network culture is perceived as having shared commitment to supporting student success. Leaders take a synergistic, open, and advocating approach to their work. As a result, employees feel comfortable partnering with people in other divisions. Staff and faculty connect their work to a vision of student success in the broad sense, where success is a process that persists through students' tenure at the institution.
2. *Institution-focused, siloed culture.* In these organizations, leadership styles don't connect people. As a result, faculty and staff aren't empowered to collaborate across functional areas and they are less certain how their work supports student success.

Although the culture at most institutions is a blend of these two styles, it is important to recognize that culture manifests in how people work together.

- **Communication across campus can lead to cooperation, coordination, and collaboration.**

Institutions that participated in the study described how better communication among different functional areas led to greater productivity and unity. Dr. Seifert described three types of interaction that promote a more networked culture:

1. *The Power of Tim Hortons.* Tim Hortons is a popular Canadian coffee chain. Often when people are in line for coffee, they meet someone from another part of their institution that they've only interacted with over email. That personal connection makes it easier for individuals to reach out to one another when they need help.

2. *Town Hall Meetings.* Some institutions hold town hall meetings where staff from different units come together to discuss issues and share information. It is an opportunity for people to collectively problem solve, communicate, and network. Although communication is hard, it can be done effectively at schools of any size.

3. *Communities of Practice.* These groups can revolutionize a campus's ability to move from basic communication to collaboration and improvement of programs and services. Duplication of effort is time consuming and expensive. Communities of practice are a way to share ideas and challenges in a way that leverages time and resources. This is essential during times of financial constraint.

- **Higher education professionals must commit to being both educators and service providers.**

In higher education, employees must find a place for transformational opportunities within everyday transactions. For example, financial aid can serve as a bridge for helping students think about financial literacy.

Institutions must value and reward staff for providing excellent service and educating students for holistic success. If speed of action is the primary metric for employees, opportunities may be lost for transformational, educational interactions.

Professional development plans are essential to train people for these new roles. SMART (specific, measurable, attractive, realistic, and time-based) goals are the key, because no one works toward goals that aren't attractive to them. Gaining support from communities of practice can be another effective way to motivate learning.

- **Leaders must communicate and model collaboration for staff, faculty, and students.**

Leaders set the tone at institutions. Collaboration and innovation are prevalent in places where staff feel supported. In addition, campuses with network cultures view students as partners. They are regularly brought into conversations about developing, launching, and assessing learning programs.

It is important to recognize that students call on their peers to help navigate higher education. As a result, students are as instrumental a part of their peers' success as faculty and staff. All too often, students represent a critical but overlooked resource.

"Leaders' actions speak louder than words. Supportive supervisors act in ways that bring the notion of a networked, communicative, and collaborative space to the forefront."

— Tricia Seifert

Other Important Points

- **Institutional culture and completion rates.** In Spring 2014, Dr. Seifert will start Phase III of the Supporting Student Success study which will correlate institutional characteristics and culture with student year-to-year retention and completion. This research will focus on institutions across Canada.

New Models for Students: System Redesign

Speaker: **Zakiya Smith**, *Strategy Director, Lumina Foundation*

Overview

For economic and civic reasons, we must expand access and success in education beyond high school, particularly among adults, first-generation college students, low-income students, and students of color. While there are many things that higher education can do to produce different outcomes, financial aid is a critical component.

Unfortunately, America's student aid system can't support the successful enrollment and completion of huge numbers of students. It is time to fundamentally rethink the national approach to financial aid and create a system that provides transparency, incentives, and opportunities for students with the greatest need.

Context

Zakiya Smith discussed the shortcomings of America's financial aid system and how the system could be redesigned to meet the country's post-secondary education goals.

Key Takeaways

- **Post-secondary education goals cannot be met without rethinking the financial aid system.**

Today, family incomes are stagnant and the cost of higher education continues to rise. Yet, the White House and other organizations stress the need for post-secondary credentials. By 2025, 60% of jobs will require post-secondary education. To match where the nation is going economically, changes are needed in higher education.

To prepare students to fill these jobs of the future, Lumina Foundation has a goal that 60% of the country's adult population will, by 2025, have some sort of post-secondary degree or credential.

To achieve this goal, more emphasis is needed on low-income, first-generation, and minority students—demographic groups that haven't traditionally been successful in higher education. Since these students are least likely to have resources to pay for college, we must think about financial aid in dramatically new ways.

"The fact is we are trying to increase the number of graduates from populations that are least able to afford it. We have to think about the financial aid models we have in dramatically different ways."

— Zakiya Smith

- **Large amounts of money are spent annually on financial aid, but it is not used optimally.**

Every year, about \$150 billion is spent at the federal level on financial aid and \$90 billion in refundable tax credits for financial aid are used. Over the past five years, \$200 billion was spent on Pell Grants.

Unfortunately, the timing of aid and information about aid is not well coordinated. Without a good information system, financial aid is useless. Unless people know that incentives exist, they won't change their decision-making patterns about higher education.

- **Financial aid programs should be redesigned with an eye toward transparency, incentives, and alignment.**

To attain the nation's post-secondary education goals, a different approach to financial aid is imperative. Lumina Foundation has developed five design principles for revising financial aid programs.

1. *Focus subsidies on the neediest students.* Institutions should make college more affordable by prioritizing subsidies for those who, for financial reasons, wouldn't otherwise go to college. Family income can't be a barrier to higher education.
2. *Remove student loan debt as a barrier to higher education.* People need signals about how much they can borrow for education in a responsible way. The current system makes the repercussions of debt decisions long lasting.
3. *Make the price of college more predictable and transparent.* With a voucher-based financial aid system, students need to know what they are getting for their money.
4. *Develop incentives based on completion.* Today, incentives are implicit. Instead, explicit, completion-oriented incentives must be established.
5. *Align federal, state, and institutional federal aid policies.* These policies should supplement each other in useful ways, rather than working at cross purposes.

"We must focus subsidies on the neediest students, focus on incentives, provide good information, and align programs. Although it's hard to put into practice, it's imperative that we do something differently or we won't meet our goals."

— Zakiya Smith

▪ **Institutional responsibility is a common theme in discussions about financial aid reform.**

When it comes to reforming the federal financial aid system, many options are on the table ranging from completely changing the Pell Grant to a state-based aid system, to making income-based payment the default option for repaying student loans.

Common themes across most options are the notions of institutional responsibility and that schools should be held accountable for their use of financial aid. Given the amount of money spent on financial aid at the federal and state levels, this argument is unlikely to go away.

Unfortunately, tensions exist between public expectations for higher education and what schools are held accountable for. For example, what students and families want often doesn't comport with a low-cost model. When people look at rankings and quality measures, it's more about prestige and selectivity than educating more low-income and first-generation students.

In light of these realities, Ms. Smith made three recommendations:

1. *Consider the information given to students to support decision making.* Students are the driving force. If they are given better information, they will hold colleges accountable for the things that matter like completion.
2. *Change the dialogue about how institutions of higher education are valued.* Higher education has a unique opportunity to shape where the conversation goes next. A key question is how we reward success and distribute money to institutions that do a good job.
3. *Engage with others about the future of the financial aid system.* If we agree that the financial aid system is inadequate, how should it be changed? Organizations like Lumina Foundation are interested in discussing how the student financial aid system should be redesigned.

Meeting the Diversity Goals of Your Institution: Navigating the Supreme Court Guidance on Race and Ethnicity in Admissions Post-Fisher

Moderator: **Michael V. Reilly**, Executive Director, AACRAO

Speakers: **Art Coleman**, Managing Partner and Co-Founder, EducationCounsel LLC

Pamela T. Horne, Associate Vice Provost, Enrollment Management and Dean of Admissions, Purdue University

Michele Sandlin, Managing Consultant, AACRAO Consulting

William E. Sedlacek, Professor Emeritus of Education, University of Maryland, College Park

Overview

As enrollment officers strive to meet their institutions' diversity goals, many are faced with questions about their admissions process in light of the Supreme Court decision in *Fisher v. the University of Texas-Austin*, and the return of the case to the Fifth Circuit Court.

Each institution must decide whether its use of race- and ethnicity-conscious policies is justifiable. Measurement is an essential part of a legally defensible admissions process, but it is often overlooked. One promising alternative to race-conscious policies is non-cognitive variables.

Context

The panel discussed the implications of the *Fisher* decision on admissions and the role of holistic admissions practices.

Key Takeaways

- **Diversity initiatives must support educational goals.**

Although it is important to have lawyers involved with diversity plans and goals, it is wrong to view diversity as fundamentally a legal issue. Mr. Coleman raised the following issues:

— *Diversity is about achieving mission-driven, core educational goals.* Since affirmative action addresses remedial issues, it is the wrong term to use.

"If you look at the skill sets required to be successful in 21st-century learning, they align with the educational benefits of diversity."

— William E. Sedlacek

— *It is important to measure the success of race-conscious admission practices.* Schools often think diversity issues are all about the numbers. Numbers are a necessary, but not sufficient, condition for success. If institutions have a critical mass of underrepresented minority students, but do nothing to facilitate robust exchanges on their racially diverse campuses, they still have more work to do.

— *The federal legal rules regarding race- and ethnicity-conscious practices apply to all contexts.* Every diversity case the Court has ruled on has been related to admissions. However, the basic rules also apply to financial aid, recruitment, and outreach.

- **Federal law requires institutions to examine and justify their use of race- and ethnicity-conscious practices.**

Federal law requires that when a student receives a benefit or opportunity based in part on race, the institution must justify the practice if challenged. In practical terms, schools should pursue practices that are not overly reliant on race, yet are sufficiently reliant on race to generate a positive outcome.

In light of this federal law, Mr. Coleman recommended that institutions focus on the three sets of questions that have guided Supreme Court judgments:

1. As institutions strive to achieve diversity, are they using race-conscious practices, and if so, are they necessary? What evidence exists that race is necessary, and what benefits does the institution derive from race-conscience practices?
2. How flexible are the race-conscience practices and what is the burden on non-qualifying beneficiaries?
3. What is the review and evaluation process? Is the institution tailoring its program as circumstances change?

On an annual basis, institutions should review to what extent they are using race- and ethnicity-conscious policies. This analysis should inform judgments about whether those policies are justifiable, based on the benefits derived by the school. Courts will want to see results, such as the yield achieved after policies are implemented. And, while it is important for institutions to avoid quotas, they should, at the same time, have good ideas about how to gauge success.

"Fisher didn't change the fundamental standards, but it did make it very clear that you have to focus as much on your race-neutral practices as your race- and ethnicity-conscious practices."

— Art Coleman

- **Measurement is essential for a legally defensible admissions process.**

When institutions consider a race-neutral admissions policy, they must consider whether their admissions process supports the institutional mission, what traits the institution values, and how those traits will be measured during admissions.

Schools use many different techniques during admissions. Ms. Sandlin discussed the pros and cons associated with several of these:

- *Interviews.* These are used often at the graduate and professional level. One challenge is availability of a tested scoring rubric.
- *Essays.* The scalability of essays and framing the questions can be problematic. At the undergraduate level, essay questions often aren't structured or focused. Having a scoring rubric is essential.
- *Short answer questions.* This approach has worked well at many institutions. Short answer questions are directed and easy for students to respond to, and scoring rubrics measure success well. From an administrative perspective, this approach is practical. Questions can easily be automated through SIS or ERP systems, which helps admissions offices meet deadlines and enrollment goals.

▪ **In admissions, socioeconomic status is not a substitute for race.**

Some institutions focus on socioeconomic status during admissions as a substitute for race. While overlap exists between ethnicity, race, and socioeconomic status, there isn't a one-to-one relationship.

For example, many second-generation students of color come from upwardly mobile families who are moving to the suburbs. An admissions policy focused on socioeconomic status could overlook these students who can play an important role in building bridges between different demographic groups on campus.

"Using race as one of many admission factors is about an admissions officer having the right and responsibility to create a vibrant and dynamic community of scholars that benefits all students."

— Pamela T. Horne

▪ **Non-cognitive variables support assessment models that can be used for everyone, regardless of race.**

Non-cognitive variables can contribute to a more balanced approach to assessment. Examples of non-cognitive variables include long-range goals, leadership, community, and nontraditional learning. Each of these dimensions can be measured in different ways.

Dr. Sedlacek and Ms. Sandlin discussed three projects where non-cognitive variables have been used to increase diversity:

- *Oregon State incorporated non-cognitive variables into the admissions process with no increase in budget.* These variables turned out to be strong predictors of retention and student success. One key to success was a scoring rubric. This measurement tool could be used to defend what the institution was doing and why, if a legal challenge emerged.

"When using non-cognitive variables in admissions, it's important to have a tested rubric. If you face a legal challenge, the rubric is a measurement tool that can defend what you are doing and why."

— Michele Sandlin

- *DePaul University implemented non-cognitive variables through the Diamond Project.* They were more predictive of the likelihood of student success than GPAs, SATs, and other scores. The Diamond Project also highlighted the importance of data and documentation when using non-cognitive variables in admissions.
- *Gates Millennium Scholars are selected using non-cognitive variables.* The retention and graduation rates among low-income and Pell-eligible students have been far above what would be expected.

Non-cognitive variables are useful in academic settings abroad, as well as in the United States. In Canada, many institutions are pursuing broad-based admissions. The University of Australia is also considering the use of non-cognitive variables to enhance diversity.

Extending SEM Into Integrated Planning and Advising Services: Helping Students Get On—And Stay On—Track

Speaker: **Josh Jarrett**, *Chief Learning Officer and Co-Founder, Koru*

Overview

Colleges and universities are moving toward integrated planning and advising services (IPAS) to boost student success and better manage limited resources. Degree planning, coaching and advising, and early alert systems personalize the student experience and empower students to take control of their academic destinies.

The IPAS market is still developing and institutions are in the early adoption phase of the technology lifecycle. Expertise that SEM leaders have developed in database decision making, comprehensive approaches, and breaking down silos will be invaluable as more institutions implement IPAS.

Context

Josh Jarrett discussed trends in integrated planning and advising services and shared findings from a Gates Foundation initiative to accelerate the development of vendor solutions and institutional implementations.

Key Takeaways

- **The Gates Foundation is committed to improving higher education in the United States.**

Today in the U.S., the best predictor of whether a person will escape poverty is his or her parents' education level. To address this challenge, the Gates Foundation is pursuing a higher education strategy to help people fulfill their potential, access opportunity, and be their best selves. This strategy has five focus areas:

1. *Personalization.* Through the use of technology and new processes, students can find their path, while getting the attention and experience they need.
2. *Flexibility.* Institutions must provide flexible education options, since only about 20% of students attend college full-time after high school. The other 80% are non-traditional students.
3. *Clarity of information.* Students and families need access to useful information to make good decisions about higher education.
4. *Value.* Thought must be given to the different types of value created by higher education. Measures must also be in place to ensure that institutions deliver on their promise.
5. *Affordability.* The economics of higher education must be examined in terms of the overall cost structure, as well as the financial aid system.

- **IPAS is an effective way to personalize the student experience.**

Navigating the path to a degree is hard for students. Although institutions have gotten systematic about using data, integrating processes, and professionalizing strategic enrollment management on the front and back ends, gaps exist in the student experience. Academics, advising, counseling, and financial aid are fragmented.

Integrated planning and advising services addresses this issue by creating a consistent path for students. It replaces silos with an approach that focuses on the full learner experience and journey.

"In many sectors, the focus is on the customer experience. Higher education needs to think about the learner's journey and experience and then build services around that."

— Josh Jarrett

IPAS has three focus areas: 1) degree planning; 2) coaching and advising; and 3) early alerts and risk targeting. Students are empowered with personalized plans that improve completion and institutions enhance their operational efficiency. Implementing IPAS starts at the top with an institutional commitment. It requires process redesign, as well as technology changes.

- **Degree planning puts students on a path to success.**

Behavioral research on decision making shows that people prefer a limited number of choices. Degree planning supports this research and helps with student decision making. It sets a degree destination and works backward to chart a course with manageable options.

Arizona State University (ASU) has had significant success with degree planning. Mr. Jarrett described ASU's approach:

- *Require meta-majors.* Freshmen are required to declare a meta-major, which is a broad category that can lead to several different majors. Students work on courses that will be transferable to a major in their selected meta-major.

- *Determine likelihood of success early.* ASU identified the critical courses required for success in different majors. Those courses are sequenced early in students' degree plans. If students fail a critical course twice, they must change their major.

- *Leverage online advising.* ASU's eAdvisor system is set up so students are alerted if they register for classes that will put them in a five-year plan. The alert indicates that the selected courses will add a year and \$12,000 to their college experience. A link is offered to make an appointment with an advisor.

ASU has seen great results from their degree-planning program, alongside other efforts. Retention rates have increased 11%; in 2009 the percentage of “on track” students increased from 46% to 80%; and six-year graduation rates increased 11.5%. In addition to the student benefits, the university can forecast the types of courses it will need for the next two to four years and ensure that sections are full.

▪ **Coaching and advising connects students to resources through a sustained, personal relationship.**

Coaching and advising builds student success by integrating on- and off-campus support structures. This approach has worked well for Sinclair Community College. When the school found that its approach to case management was fragmented, they built their Student Success Plan system.

The system allows counselors to manage student profiles and identify risk areas. This helps advisors target coaching and build customized plans of action that integrate campus and community services seamlessly. When the system was used with at-risk students, the school saw tremendous results. Term-to-term retention rates increased 26%; year-to-year retention rates increased 12%; at-risk students are now five times more likely to graduate within six years.

The Student Success Plan system was built with open source technology funded through the Gates Foundation Next Generation Learning Challenge. The system is being rolled out at 10 to 15 colleges in Ohio and North Carolina.

▪ **Early alert systems predict course failure and enable recovery.**

Traditionally, alert systems have been driven by faculty triggers. Today, there are more sophisticated predictive models and algorithms that indicate where and when students may be sliding off track. This enables schools to target resources in a more directed way. Mr. Jarrett shared three examples of successful early alert systems.

1. *Purdue University.* Students interact with the Course Signals system once a week. A green indicator suggests the student will probably pass their course; yellow is a sign of concern; red predicts course failure. Three factors go into the model: GPA before the semester, cumulative quiz scores, and time the student spends in the learning management system. Course Signals is powerful because it creates agency for students, who are motivated to seek help. The institution has seen an 18% improvement in four-year retention rates and a 4% improvement in four-year graduation rates.
2. *Rio Salado College.* By a term's eighth day, the school's early alert system has an 80% predictive accuracy rate about whether a student will successfully complete a course. The number one predictor of success is whether the student has logged into the learning management system before the first day of the term. That's a proxy for engagement, interest, and excitement.
3. *Open source predictive models.* The Next Generation Learning Challenge funded an open source algorithm for

predictive models through Marist College which is available for use.

▪ **There is considerable energy in the IPAS market, but institutions are still in the early adopter stage.**

There are great things happening in the open source and commercial IPAS vendor marketplace. To catalyze the market and accelerate the pace of innovation, the Gates Foundation launched the IPAS Market Accelerator Program. The program has two goals:

1. *Vendor side.* To make customer requirements more explicit, institutions were surveyed.
2. *College/University side.* To align stakeholder interest, the program offers case studies, data, ROI studies, and targeted financial support for test cases.

Program partners include EDUCAUSE, Community College Research Center, PAR Framework, and Alvarez & Marsal. Last winter, the Gates Foundation ran an RFP process to find institutions that were trying to implement IPAS. They made 19 grants to institutions in 13 states. Priority was given to open-access institutions that serve low-income, first-generation students.

“There are great things happening in the IPAS market. The Gates Foundation wants to catalyze the market and accelerate the pace of innovation on both the vendor and institutional sides.”

—Josh Jarrett

Based on findings from the IPAS Market Accelerator Program, Mr. Jarrett made the following observations:

- *Recognize that culture and processes must change, and not just the technology.* It is harder to modify a culture than implement a new system.
- *Understand the whole system before making changes.* Because IPAS is all-encompassing, touching one system can create issues with other related systems.
- *Learn to love big data.* Using data to drive operations and choices is something the SEM movement has done well.
- *Identify metrics early.* It is essential that systems exist to measure and track progress.

While many institutions are experimenting with IPAS, some wonder whether faculty can integrate this into current practices and whether technical integration challenges will be too complex. Expertise of SEM leaders in database decision making, comprehensive approaches, and breaking down silos will be invaluable as institutions adopt IPAS.

Other Important Points

- **College to career transitions.** This is likely to be the next hot button issue in higher education, as recent graduates are un- or underemployed, and businesses can't find qualified graduates.

Using College Scheduler to Ease Registration and Hit Your Enrollment Goals

Speakers: **Dr. Kevin Pollock**, *President, St. Clair County Community College*
Robert Strazzarino, *Founder and CEO, College Scheduler LLC*

Overview

When a student exceeds the planned two-year or four-year time frame in which to complete the required credits, there is less chance the student will graduate—either on time or at all. This has negative consequences for the student, the institution, and the country.

As institutions strive to raise graduation rates and improve service to their students, they are looking for new and innovative ways to attain these goals. Through various initiatives and focused activities such as academic advisement, offering courses students need, degree planning, and helping students find the best schedule each semester, graduation rates and time to completion can be improved. Leveraging technology can play a key role in helping students achieve their goals.

Context

Kevin Pollock and Robert Strazzarino discussed why graduation is important and the importance of graduating students on time, discussed the role of academic advising, and presented ideas that institutions have implemented to “push” students toward graduation.

Key Takeaways

- **College graduation is important to students and the country.**

Four reasons why graduation is so important are:

- *Cost to students and the economy.* If students don't graduate, or graduate in more than four years, they are paying for tuition, room and board, and other fees that accumulate, without providing a benefit. Going to college for six years is 50% more expensive than four years, which can represent total costs of tens of thousands of dollars.

For the economy, individuals who start as full-time students but fail to graduate six years later represent \$3.8 billion in lost income, \$566 million in lost federal income taxes, and \$164 million in lost state income taxes.

- *Relevant skills.* For students and the country to compete, graduates who are up to speed on the most recent technologies are needed in fields such as computer science and computer information systems.

- *Government funding for institutions.* Funding for an institution can be tied to and/or impacted by graduation rates. For example, in Louisiana, 40% of college funding comes from the government. Proposed legislation aims to tie funding to outcomes (which means graduation rates).

- *Recruiting and admissions.* Graduation rates demonstrate student success, which plays a role in attracting new students. Also, graduation rates are a factor in college rankings, which also affect recruiting.

- **Institutions are undertaking initiatives focused on graduation.**

Two examples of graduation initiatives are.

- *Finish in Four at Georgia Regents University.* This initiative provides flat tuition to undergraduate students based on 15 hours per semester. It encourages student enrollment in 15 or more credit hours per semester in order to complete a bachelor's degree in four years.

- *CSU Graduation Initiative.* This initiative strives to raise the freshman six-year graduation rate by 8 percentage points by 2015, and cut in half the gap in degree attainment by CSU's minority students. As a system, CSU graduates just over 50% of its students in six years. The Graduation Initiative commits to systematically discovering and dislodging roadblocks to student success, now and for the rest of their lives. Examples of activities that are part of this initiative include centralization and coordination of student advising, seeking funding for expansion of high-impact advising programs, enforcement of admission requirements, designation of a retention coordinator, and implementation of early intervention procedures.

- **There are specific steps that institutions can take to help students graduate faster.**

Ways that institutions are helping students graduate faster include:

- *Academic advisement.* This is a “people solution” that helps answer students' questions and guide students. In one example, Temple University increased its advising staff by about 50% to 85 people. Its advising efforts provided a conduit for students to share information about, “These are the things that are stopping us from graduating.”

- *Offering courses students need.* This involves offering the right number of sections of a course at the right times to keep students on a path to graduation. Analytics can help institutions determine which courses should be offered when.

— *Degree planning.* This involves students leaving an advisor's office with a clear plan in hand about progressing to graduation, storing that plan in the cloud, and having it easily accessible. Software can increase the efficiency of the degree-planning process. As an example, the University of Alabama—where enrollment is increasing 47% over 10 years, leading to lack of meaningful interactions between students and advisors—increased the quality of advising appointments by allowing students to use smart, easy-to-use, and powerful software to plan their own courses. The University's Registrar stated that with little growth in infrastructure the institution has focused on productivity enhancements that help provide quality student services.

At Austin Peay State University, software can suggest courses, similar to when Netflix makes recommendations based on personal preferences and trends. Such a system can lead to higher grades and fewer dropouts.

— *Helping students find the best schedule each semester.* Schedule planning can be extremely complex for students. Again, technology can be leveraged to help students have “the best shopping experience” in determining the best schedule each semester, which keeps them on course for graduation.

Other ideas to “push” graduation include:

- Creating a tuition structure where additional fees are incurred when course requirements are not met.
- Requiring mandatory and enforceable graduation plans based on a student having a certain number of credit units.
- Designating a specific number of credit hours by when the student needs to declare a major.
- Having students pick a meta-major to guide them through initial requirements into a program of study.

Since 2005 College Scheduler has provided a web-based schedule planner used by students and advisors. Implemented by 75+ institutions around the country, College Scheduler enables students to maximize credit hours, increase on-time graduation and find the perfect schedule. Visit CollegeScheduler.com for more information.

Biographies

Art Coleman

Managing Partner and Co-Founder, EducationCounsel LLC

Art Coleman is a managing partner and co-founder of EducationCounsel LLC, an affiliate of Nelson Mullins Riley & Scarborough LLP. With a background in providing legal, policy, strategic planning, and advocacy services to educators, Coleman addresses issues of access, accountability and completion in elementary, secondary, and postsecondary education.

Tristan Denley

Vice Chancellor, Academic Affairs, Tennessee Board of Regents

Dr. Tristan Denley earned his PhD in Mathematics from Trinity College Cambridge, and held positions in Europe and North America before becoming Vice Chancellor for Academic Affairs at the Tennessee Board of Regents in August 2013.

Throughout his career, he has taken a hands-on approach in a variety of initiatives impacting student success. He is presently involved in implementing a wide variety of initiatives surrounding college completion stretching from education redesign across the disciplines and institutional transformation, to the role of predictive analytics and data mining in higher education.

His most recent work has created a course recommendation system at APSU that successfully pairs current students with the courses that best fit their talents and program of study for upcoming semesters. This system, which combines hundreds of thousands of past students' grades with each particular student's transcript, to make individualized recommendations for current students was an IMS Global Learning Impact Awards winner.

Pamela T. Horne

Associate Vice Provost, Enrollment Management and Dean of Admissions, Purdue University

Pam Horne serves as Associate Vice Provost for Enrollment Management and Dean of Admissions at Purdue University, managing strategy and operations for admissions, financial aid, early college outreach, the registrar, and enrollment analysis and reporting. Her 30+ year career in higher education includes positions at Michigan State University, the University of Michigan, Eastern Michigan University and the University of Kansas.

Over the course of her career she has been active in state educational issues regarding the transition from secondary to postsecondary education. Through the Michigan Office of the Governor and Department of Education, Horne represented the higher education community in initiatives that established more rigorous high school graduation requirements and state-wide college-readiness testing. She also served as president of the Michigan ACT State Organization.

In Indiana she provides service and commentary to the Indiana Department of Education, the Indiana College Access Network, and the Commission for Higher Education. Currently, she is a Trustee for College Board and serves on the Public Policy Committee for AACRAO. Horne presents frequently at state, regional, and national meetings on such topics as the gap between college aspiration and preparation, the future of enrollment management, effective use of business intelligence and technology in enrollment management, the parent role in the college admissions process, college admissions and the media, the impact of changing demographics on higher education and much more.

Josh Jarrett

Former Fellow, Postsecondary Success, Bill & Melinda Gates Foundation, and current Chief Learning Officer and Co-Founder at Koru

Josh Jarrett co-founded and currently serves as the Chief Learning Officer at Koru, an organization devoted to addressing the college-to-career challenge.

Previously, as a Fellow for Postsecondary Success at the Gates Foundation, Josh Jarrett led the Next Generation Models portfolio, which supports learning innovations and technologies with the potential to dramatically increase low-income student success and improve affordability. Investment areas include interactive courseware and tools, diagnostic assessments, integrated planning and advising systems, and breakthrough delivery models.

Prior to the foundation, Jarrett served as an Engagement Manager in McKinsey & Company's Social Sector Practice, leading non-profit organizations on issues of strategy, operations and organization. In particular, his work focused on charter school expansion, adolescent health services, and the effectiveness of foundation grantmaking. Prior to McKinsey & Company, he served as an entrepreneur, helping to launch a customer service software company, and as business planning consultant in the National Park Service.

Jarrett is a graduate of Dartmouth College and he holds a graduate degree in business from Harvard Business School.

Stan Jones

President, Complete College America

Following three decades successfully reforming higher education in Indiana as Commissioner of Higher Education, state legislator, and senior advisor to the governor, Stan Jones founded Complete College America in order to build a network of states committed to substantially increasing the number of Americans with a postsecondary credential.

Mr. Jones began his longstanding commitment to education in 1974, when, at the age of 24, he was elected to the Indiana House of Representatives. As a member of both the

House Education and State Budget committees, he developed expertise in higher education and higher-education finance. Stan served 16 years in the Indiana State Legislature and more than five years as a senior advisor to Governor Evan Bayh. His service as Indiana Commissioner for Higher Education spanned 12 years and the tenure of four different governors from both political parties.

As Commissioner, he was credited as a primary architect of several landmark education policy initiatives in Indiana. These initiatives include the 21st Century Scholars program, an early promise scholarship program aimed at increasing the number of low-income students attending and completing a postsecondary education; the development of Indiana's new community college system; the creation of Indiana's Education Roundtable; and the implementation of Core 40, a college prep curriculum that has contributed to a significant increase in high school seniors going to college.

Elaine Maimon

President, Governors State University

As its fifth president, Dr. Maimon is leading Governors State University (GSU) to become a model twenty-first century university. The enduring commitment that has guided her career is accessibility to high-quality university education.

Under Dr. Maimon's leadership, GSU works in partnership with ten community colleges in the Chicago metropolitan area to implement the Dual Degree Program (DDP), supported by a major grant from the Kresge Foundation. While promoting this debt-free pathway from the Associate Degree to the Bachelor's Degree, Dr. Maimon has also led GSU in designing a state-of-the-art freshman program, implementing Complete College America (CCA) principles.

Internationally recognized as an expert in the teaching of writing, Dr. Maimon was a pioneer in the Writing Across the Curriculum movement, which has changed the way instructors teach writing in universities, colleges, and schools. Among her many publications are *A Writer's Resource* (4th edition, 2012) and *The McGraw-Hill Handbook* (3rd edition, 2012).

Dr. Kevin Pollock

President, St. Clair County Community College

Dr. Pollock has been president of St. Clair County Community College since April of 2009. In that time, he has been an advocate and leader for early/middle college, global awareness, international education, STEM, and student service initiatives.

Prior to his position at SC4, he served as vice president of student services at West Shore Community College in Scottville where he was also an adjunct faculty member. His career in education began as a high school and junior high school teacher. He also served as admissions director at GM Engineering and Management Institute (now Kettering University) in Flint and Lawrence Technological University in

Southfield. He also served as director of enrollment and recruitment at Lake Superior State University in Sault Ste. Marie.

Dr. Pollock earned his bachelor of science in education, his master of arts in education from Central Michigan University and his doctorate in higher, adult, and lifelong education from Michigan State University.

Nationally recognized as a public speaker, he has presented more than 80 sessions at conferences and colleges, including the ACT Enrollment Planners Conference, American Association of Collegiate Registrars and Admissions Officers Strategic Enrollment Management Conference, League for Innovation in the Community College, National Institute for Staff and Organizational Development, Association of Community College Trustees Leadership Congress and National Small College Enrollment Conference. His topics have included at-risk students, continuous quality improvement, mentoring, retention, strategic planning, and student success.

Dr. Pollock has written fifteen articles and book chapters. His writings are included in *The College Admissions Officer's Guide*, *Essentials of Enrollment Management: Cases in the Field*, and *The SEM Anthology*.

Active in community activities, Dr. Pollock is a member of the Economic Development Alliance of St. Clair County Board of Directors. He also has experience as a school board member, YMCA executive board member, and library district fundraising campaign chair. Dr. Pollock has served as an executive board member for the Michigan Community College Student Services Association and is a member of nearly a dozen professional associations.

Michael V. Reilly

Executive Director, AACRAO

Mike Reilly joined AACRAO as Executive Director on June 1, 2012. Prior to coming to AACRAO he served as the Executive Director for the Council of Presidents, an association of the six public baccalaureate degree-granting institutions in Washington State. He has 20 years of experience in university admissions and enrollment management, including having served as the Associate Vice President for Enrollment Management at both Central Washington University and Humboldt State University.

Michele Sandlin

Managing Consultant, AACRAO Consulting

Michele Sandlin is an AACRAO Managing Consultant. She previously served as the Director of Admissions and the Campus Visitors Center at Oregon State University for 15 years, during which university enrollment grew by over 67%, while achieving additional goals for diversity and academic preparedness of incoming students. Ms. Sandlin's career has also included successful tenures at Pacific University, Portland State University, the University of Oregon, and Western State College in Colorado.

During her 32 years as a higher education professional, Ms. Sandlin has become well known for her industry-leading expertise in holistic admissions, admissions operations, staff and space management, 2yr/4yr campus partnerships, branch campus development, transfer policy and practices, accreditation compliance review, articulation process, policy and agreements, decentralized-centralized structural realignment, and graduate and international admissions. She has served in state, regional and national leadership positions with AACRAO and with the International Baccalaureate Program, having served as the IB Chair for the Americas College and University Recognition Board.

Ms. Sandlin completed her Master of Science degree in Higher Education Policy Foundations and Administration at Portland State University. She is a native of the Colorado Rockies, and earned her Bachelor of Science degree in Human Sciences from Colorado State University.

William E. Sedlacek

Professor Emeritus of Education, University of Maryland, College Park

William E. Sedlacek is an Emeritus Professor of Education at the University of Maryland, College Park. He earned bachelor's and master's degrees from Iowa State University and a PhD from Kansas State University.

He is senior author of *Racism in American Education: A Model for Change* (with Brooks), and *A Measure of Racial Attitudes, The Situational Attitude Scale (SAS)*. He authored *Beyond the Big Test: Noncognitive Assessment in Higher Education* and has authored or coauthored more than 300 articles in professional journals on a wide range of topics including racism, sexism, college admissions, advising, educational measurement, and employee selection.

He has served as editor of *Measurement and Evaluation in Counseling and Development*. Also, he has consulted with more than 350 different organizations, colleges, and universities on interracial and intercultural issues, and has served as an expert witness in race and sex discrimination cases. He has served on research advisory committees for the Bill & Melinda Gates Foundation and the College Success Foundation.

He has received research awards from the American Counseling Association, the National Association for College Admission Counseling, the American College Personnel Association, and a Campus Model of Excellence award from the Office of Multi-Ethnic Education at the University of Maryland for research "affecting the lives of African Americans." In 2010 he was made a Fellow of the American Counseling Association, and in 2011 he received the William R. "Bud" Thomas Jr. Mentoring Award for "excellence in sustained mentoring of graduate college student personnel students" from the University of Maryland.

Tricia Seifert

Assistant Professor, Ontario Institute for Studies in Education, University of Toronto

Tricia Seifert is an Assistant Professor at the Ontario Institute for Studies in Education at the University of Toronto and is the primary investigator on the "Supporting Student Success" study, which examines stakeholder groups' (Students, staff, faculty, and senior leaders) perceptions regarding how their campus supports student success from organizational and cultural levels. Dr. Seifert has received funding from the Ontario Ministry of Economic Development and Innovation, the Association of Registrars of the Universities and Colleges of Canada, the Social Sciences and Humanities Research Council, the Higher Education Quality Council of Ontario, and the Connaught New Researcher program at the University of Toronto. Her research team blogs about the findings and implications for practice from the Supporting Student Success study at www.supportingstudentsuccess.wordpress.com and can be followed on Twitter @CdnStdntSuccess.

Seifert's recent publications include *Supporting Student Success: The Role of Student Services Within Ontario's Postsecondary Institutions* (2011) and an edited monograph for *New Directions in Institutional Research* titled, *Longitudinal Assessment for Institutional Improvement* (2010).

Seifert uses a mixed methodological approach to much of her research and teaches courses in quantitative research methodology and student affairs administration. Her research has been published in the *Journal of College Student Development*, *Research in Higher Education*, *Review of Higher Education*, and the *Journal of Higher Education*. Seifert serves on the editorial boards of *Sociology of Education* and is the Associate Editor for *New Directions in Institutional Research*.

Seifert earned a bachelor's degree in Sociology and Political Science with honors from Illinois Wesleyan University, a master's degree in College Student Services Administration from Oregon State University, and her PhD in Student Affairs Administration and Research from the University of Iowa. In 2010, she was named an Emerging Scholar by the American College Personnel Association.

Zakiya Smith

Strategy Director, Lumina Foundation

Ms. Zakiya Smith is a Strategy Director at the Lumina Foundation, where she leads the work of the foundation to develop new models of student financial support for higher education. Most recently, Smith served as a Senior Advisor for Education at the White House Domestic Policy Council, where she focused on developing the President's higher education policy. Smith also served in the Obama administration as a senior adviser at the U.S. Department of Education where she developed programmatic, policy, and budget solutions to respond to pressing challenges in college access, affordability, and completion.

Prior to her work in the Obama administration, Smith served on the staff of the Advisory Committee on Student Financial Assistance, where she conducted research and authored reports on college access programs, community colleges, and on the ability of low- and moderate-income families to afford college.

Earlier in her career, Smith worked in various capacities for Teach For America, helping to train new teachers, and for the federal GEAR UP program in East Boston, Massachusetts, providing college preparation and financial aid information to high school students. She was introduced to federal policy as an intern on Capitol Hill with the Congressional Black Caucus Foundation, working for her former hometown Congresswoman.

Smith holds a bachelor's degree in political science and secondary education from Vanderbilt University, and a master's degree in education policy and management from the Harvard Graduate School of Education.

Robert Strazzarino

Founder and CEO, College Scheduler LLC

A 2006 graduate from CSUC, Robert Strazzarino is the founder and owner of College Scheduler, a web based class scheduling system for student use at colleges and universities. Rob got his start while still an undergraduate when he developed the precursor to his current program, Wildcat Scheduler.

After successfully convincing the administration at Chico State to adopt his software, Rob took his show on the road and College Scheduler was born. Today, College Scheduler is in use at over 30 campuses nationwide including the University of Arkansas, Wisconsin-Madison, Penn State and Texas State University in San Marcos.

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