

# What is the “Guided Pathways Model?”

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In their 2015 book, “*Redesigning America’s Community Colleges*”, Bailey, Jaggars, and Jenkins introduced the idea of guided pathways in such a clear way that colleges across the nation are willingly taking the time and energy to re-think how they operate from a systemic level. This examination is not just a tinkering around the edges or tweaking a program here and there but a major redesign of our systems that starts with the end goal of student completion and then creating the systems to achieve that end goal. The fact that their book is leading to significant rethinking of how higher education operates attests to how well Bailey, Jaggars, and Jenkins made the case for the need to redesign our community colleges.

However, for those who have not read their book and are not part of the small but rapidly growing guided pathways community of policy makers, the term “guided pathways” can be an obstacle to understanding what the “guided pathways” redesign of our systems is trying to accomplish. The word “pathway” is used in so many different ways in education policy that many people are confused by the new way of integrating the student success practices into a coherent system when we call it “Guided Pathways”. The term “pathways” comes with a history of different, sometimes contradictory, meanings that perhaps it might be better to come up with an alternative term that conveys the same idea of guiding students through the journey of their college experience.

While driving through a large metropolitan city new to one of us (Strobel) before in a rental car with all the other thousands of cars jockeying for position, the car’s GPS navigation system was a godsend. It told me which exit to take or turn to make with plenty of warning and even redirected me around traffic accidents or road repairs to keep me moving forward toward my destination. It also recalculated the route if I missed the turn without getting flustered. As I gave thanks for the hundredth time for making the right decision to pay the extra amount for the GPS unit, it struck me that the car’s GPS is analogous to what we’re trying to create with “Guided Pathways” and everybody outside of the education policy community is familiar with the function of the GPS routers. In the rest of this description of the Guided Pathways, we recast the components of Guided Pathways into a “college GPS” analogue, so that those outside the education policy community, including students, will have a ready intuition of what we’re trying to create.

The Pathways Model is an *integrated, college-wide* approach to student success that creates a college GPS for our students to navigate their way through their entire higher education experience to completion. Working with the local high schools, a college orients the student to their starting location of their higher education journey and choosing the path that will move

them toward a career of interest to them and of value in the labor market. After they begin on their chosen path, the college GPS guides them along the way, letting them know actions they need to take when necessary and guide them back to the path of their chosen destination when the inevitable life events or academic obstacles appear in their path. An added bonus of the college GPS system is that it empowers a wider range of students to explore higher education because it makes the journey less intimidating.

At the core of the college GPS are the clear, educationally coherent program maps. The map database created by faculty and advisors contains easy-to-understand steps for the routes through the programs along with the learning outcomes of the programs that are aligned with identified requirements for success when transferring and entering the workforce. The college GPS will triangulate the student's starting position on the map, provide the support necessary to get the student onto college-level pathways, and keep the student on the pathways to successful completion of the program.

### **Guided Pathways Essential Practices**

There are four fundamental features or components of the college GPS. In the Guided Pathways community, they are called the “four pillars”. Let's take a look at each of the fundamental features (pillars) using the college GPS mental model. The four features of a college GPS are given below along with the essential practices for each component.

#### ***1. Clarifying the Path***

Any GPS system operates within the context of the geography of a region. For the college GPS the geography is the faculty-created curriculum for the courses in programs. However, instead of building out from individual course outcomes, faculty begin with the end goal of their program's outcomes and create the shortest path of courses the students will take from their first day of attendance to their graduation. With the learning outcomes of the program in mind, the faculty create the learning outcomes for the courses and the links to successive courses in the program. This is the reverse direction of how many (all?) of our programs were developed in higher education. All too often in the past, programs resulted when enough courses were cobbled together to create a package with enough units to call the package a program. Instead of linking a bunch of already existing courses (way stations), the college GPS has the faculty start their design process with the program outcomes (destination) in mind and then create or redesign the courses (way stations) to meet the program outcomes. Discussions across traditional discipline boundaries will be the essential key factor to how well the colleges will be able to clarify the path for their students.

The learning outcomes of the programs are developed to prepare students for employment and further education in fields of importance to the college's service area. Faculty at the community

college and the transfer institution(s) work together to create the transfer pathways so that the associate degree learning outcomes and courses are optimized to transfer as many of the associate degree credits to university majors. In California, this was the goal of the SB1440 legislation that established the associate degree for transfer. This transfer degree guarantees an AA or AS degree within 60 units that can be used at any CSU where another 60 units will result in a Bachelor's degree. Students with the transfer degree will enroll at an CSU with junior upper-division status and not be required to take any lower division courses for their major.

In order to choose a particular major and path for either a certificate or transfer degree, students and their families will want easy access to what needed skills that certificate or degree will provide them for future employment. The college GPS will not only show the paths but also have sufficiently detailed descriptions of the destinations, so the students will know what they have to pick up along the way to enjoy their time at the destination. Detailed information about the employment and further education opportunities targeted by each program is posted on the college's website so that students will have clear motivation to choose a particular program and stick with the program. In order to make the journey less intimidating for the students, the routes through the programs are clearly mapped out, so that students know which courses they should take and in what sequence. This is especially important to first-generation students (and their families). The college website should be designed to make it easy for students to see the course sequence and other key progress milestones of the programs from start to completion.

This clarity of the path and destination will help the students understand why they have to take the set of general education courses offered by the college. Also, a clear path gives the students the tools they need to choose which particular general education courses they need to take to reach their destination. Interdisciplinary faculty discussions are especially crucial to redesigning the general education package of courses to fit the end goals of the programs offered by the college. However, having a large number of possible destinations to choose can be an obstacle in itself.

In a city, there are probably hundreds of possible routes to take from one location to another but a car's GPS navigation system is designed to offer the driver only a few options. This is because offering hundreds of options would be a bit overwhelming to the driver and lead to "choice paralysis" (see [Barry Schwartz's "The Paradox of Choice" and his response to critiques of that work](#)). In the college context, the plethora of programs (e.g., over 70 at Bakersfield College) can lead to choice paralysis. Faced with dozens of choices, students will either not choose a program or choose one at random to "check the box" so they can continue on with the registration process. Furthermore, community college students often do not have the life experience or background knowledge to have a clear sense of which program they want to pursue. Either way, the student has no real commitment to a program.

Colleges are beginning to explore the simplification of the choices facing the students with "meta-majors". With "meta-majors", similar programs are clustered together by similarity of

course requirements. [Note that some institutions use the term “*Areas of Study*” or “*Areas of Interest*” instead of the term “meta-majors” but the idea of clustering similar programs is the same.] This benefits the students by simplifying the choices without penalizing them. For example, the Allied Health meta-major would cluster the various nursing, emergency medical technician, radiology, and pharmacology programs. A STEM meta-major would cluster the natural science, computer technology, engineering and mathematics programs. Some colleges, like Guttman Community College, give degrees in the meta-majors while others use the meta-majors to provide some focus to the student in their first one or two semesters while they explore which traditional, more specialized major they want to do during their last year at the community college. In both meta-major incarnations, the meta major will give students a sense of identity with the subject area and also greater motivation to make a real commitment. The meta-major also provides students with structured flexibility as they gain sophistication in their decision-making abilities toward eventual career choices.

In meta-majors the general education courses, especially math and other foundation skills coursework, are appropriately aligned. For example, students in a STEM meta-major would take the appropriate set of calculus-based set of courses while the meta-major for the social sciences would take the math set of courses ending with statistics. The Allied Health meta-major might have a certain set of biology and chemistry courses that would not be the same as those for those in the STEM meta-major.

## *2. Help students choose and enter a pathway*

Any GPS will locate the user’s position in the map database and then offer a few options of possible routes to the destination. The college GPS determines the level of college-readiness of the student and maps out the route to getting the student up to college-level ability if necessary and then through the college-level courses to completion. For students needing remediation, the college GPS is especially critical to their success because they are much less likely to complete than students who arrive at the college already prepared to do college-level work. In California, only 39.6% of the “unprepared” students complete their education and that’s even after six years. The “prepared” students are almost twice as likely to complete at 70.0%. (See the Student Success Scorecard website at <http://scorecard.cccco.edu> for a detailed breakdown of success rates among all types of students.)

Ideally, the college and high schools have worked together in a strong partnership to assure that college-bound seniors are truly college-ready. Part of the college GPS works at the high school level to provide early remediation if necessary. The college-high schools/other feeders partnership motivates and prepares the students to enter college-level coursework in a program of study when they enroll in college.

In addition, dual enrollment provides another way to bridge K12 to higher education by having the students take college-level classes before they graduate from high school and earn college credit. One example in California is the “Get Focused...Stay Focused!” program that works with high school students beginning in their ninth-grade year. The ninth-grade students develop a ten-year plan after they’re provided with a clear picture of the time and money it takes to reach a given destination or goal. The students update their ten-year plan in the following years of high school and they can get college credit as student development coursework.

In some cases, the students are able to complete their first year of college during their senior year of high school. For students who would otherwise shy away from college because of family background, the dual enrollment introduces college-level courses in the safe, familiar environment of high school. Those students are much more likely to go on to get a college degree than students in schools without dual enrollment.

The satellite GPS uses a least three satellites to fix a user’s location on the Earth. The more satellites that are used, the more accurate is position given. Multiple-measure assessment (placement) uses the same idea to triangulate a student’s location in the college-readiness landscape. The traditional placement method uses a single high-stakes placement exam in a foreign setting to determine the student’s level of college-readiness. This is akin to determining just their longitude on a map and it is often the incorrect longitude! Using the placement exam in conjunction with the student’s performance in high school provides a much more accurate triangulation of the student’s college-readiness. Often, the multiple-measures assessment places the student at a higher level than the traditional placement method, so less remediation is required by the college. Multiple-measure assessment is already well in place systemwide in California with the Common Assessment Initiative’s Multiple Measures Assessment Project. The California data shows that a junior year high school student with a GPA of 2.6 will have a 70% likelihood of succeeding in the gateway English course when they start college. In the past many of these students were placed at many levels below the gateway English course, became discouraged and dropped out.

For those students truly needing remediation, the college GPS maps out the quickest route possible through remediation and provides the intensive support those students need to get up to speed for college-level classes. Colleges redesign their basic skills classes to accelerate the students through the less interesting remediation, so they can take the college level classes that got them interested in college in the first place sooner. The California Acceleration Project is one example of systemwide groundwork that has already been laid.

Colleges also provide the special support needed to help academically unprepared students succeed in the “gateway” courses for the college’s meta-majors. The content and learning

outcomes of the gateway general education courses are tailored to the meta-major so students can integrate the content of the individual courses in the context of the meta-major. Also, the content and learning outcomes of the meta-majors are designed to build the non-academic foundation skills the students will need on their pathway to completion and in the workforce. The tailoring of the content in the meta-major's general education courses to the meta-major will increase the students active engagement with those courses instead of students seeing them as just "a hoop to jump through" without knowing why.

Unlike a regular GPS that requires the user to choose their destination, the college GPS provides the guidance and support to help the students determine their eventual destination in the workforce and then maps out the quickest route to that destination whether the destination is after just a community college program or after further education at a university.

Other examples of the groundwork California has laid include the Student Success & Support Program (the work of outreach, assessment, counseling/education advising, and early intervention), Equity (outreach and work with target populations), and the Basic Skills Initiative. Hispanic-Serving Institutions are able to apply for the Title V grant through the U.S. Department of Education.

### *3. Help students stay on the path*

Any regular GPS worth purchasing or renting has the feature of guiding the user step-by-step and redirecting around accidents and other obstacles that inevitably pop up. The third pillar of guided pathways is the "guided" part of the term—an intentional monitoring of students progress along the pathway and intrusive interventions that redirect the students back onto the pathway when "life happens". The early intervention part of SSSP is in this pillar.

In the college GPS, advisors monitor which program every student is in and how far along the student is toward completing their program requirements. Technology tools are available from the college's website that enable the students to easily see how far they've come on the pathway and what they need to do to complete their program. One example of such a tool is Degree Works. Technology tools are also used to alert advisors and students when students are at risk of falling off the program pathways. Examples include Starfish and GradesFirst. Policies and personnel supports are in place to intervene in ways that help students get back on the pathway. Active monitoring of the students enables advisors to assist students who are unlikely to be accepted into limited-access programs, such as nursing or culinary arts, and to redirect the students to more viable credential and career destinations.

The colleges have in place a scheduling infrastructure that ensures students can take the courses they need when they need them. The scheduling infrastructure is robust so that students can plan

their lives around school from one term to the next, and so that they can complete their programs in as short a time as possible.

#### *4. Ensure that students are learning*

Of course, all the work described above is all for naught if learning is not taking place. Learning outcomes are clearly defined for each of the college's programs and for the courses in those programs. The faculty have developed the learning outcomes of the programs to prepare students for employment and further education in fields of importance to the college's service area. The learning outcomes are clearly posted on the college's website for the students (and their families) to see the end goals before they commit to a program's pathway.

The learning outcomes are measurable and clear enough to be assessed, so that faculty can assess whether students are mastering the learning outcomes and building the skills needed for success across the program and career. Faculty assess the learning outcomes and use the results from that assessment to improve the effectiveness of instruction in their programs. The assessment is fine-grained enough for the college to track mastery of the learning outcomes by individual students and the colleges make that information easily accessible to students and faculty in a form that they can use.

Students internalize the content they've learned in their courses by participating in group projects, internships and other applied learning experiences—i.e., “learning by doing”. Finally, the college ensures that learning can happen by incorporating effective teaching practices throughout the pathways and providing the professional development to faculty update their teaching practices as student needs change.

### **Conclusion**

We have described the Guided Pathways Model using a “college GPS” analogue to improve the clarity of its goals to those outside the guided pathways community of student success leaders and policy makers. The term “pathway” has so many different usages in higher education that putting “guided” in front of it can cause even greater confusion. The GPS satellite network is now such an essential part of our lives that people from all levels of education and from just about every background have used a GPS application of some form or other. Everyone is familiar with its purpose and function, so we have recast the guided pathways project as a college GPS.

There are four fundamental features or components of the college GPS (“pillars of guided pathways”): clarifying the path that maps the pathways to student end goals; helping students choose and enter a pathway; helping students stay on the path through intrusive interventions;

and ensuring that students are learning. Clarifying the path gets colleges to “backwards design” their programs by starting with the end goals in mind and creating or modifying the courses to meet those program end goals. At the community colleges meta-majors are being developed to remove the obstacle of “choice paralysis” and provide the students with structured flexibility. The meta-majors will provide greater motivation to make the real commitment that is absolutely crucial to completing their education.

The college GPS will help students choose and enter a pathway by more accurately locating them within the educational landscape and enabling the students to acquire the college-level skills they need more quickly than they did before. The college GPS will help students stay on the path by actively monitoring the students location along the path and providing direction before an action must be taken as well as around the obstacles that will undoubtedly pop up when “life happens”. The college GPS ensures that students are learning by clearly defining the program outcomes and the outcomes of the courses in the program in a way that the students can understand, so the students can make an informed commitment to a particular program. If the students know what they need to do and why they need to do it, they will make the effort to succeed. In addition, clearly defined outcomes will enable the faculty to learn what needs to be changed in the courses and programs to meet the students where they are at and evolve as the societal environment changes.

The GPS satellite network is being used in new innovative ways undreamed of by the architects of the GPS network. In the same way the college GPS (i.e., guided pathways) approach is not prescriptive but it does create intentionality and clarity to what we’re doing. Each college has the flexibility to do what they want and tailor their system to realities of their environment. The college GPS approach will create a culture of interdisciplinary discussions and use of data to make decisions. With program outcomes clearly defined and useful student success data in hand, faculty will feel confident and empowered to make the changes needed in courses, programs and college systems to significantly improve student success and meet the workforce needs of society today and tomorrow.

## **Works Cited**

Bailey, Thomas R, Shanna Smith Jaggars, and Davis Jenkins *Redesigning America’s Community Colleges: A Clearer Path to Student Success*. Cambridge, MA: Harvard University Press, 2015. Print.

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