Pathways to Adult Success (PAS)
Guiding Students and Institutions to the Future:
Cross Sector Data Systems and Visualizations Workgroup

November 13, 2018
8:00 a.m. to 3:00 p.m.
Hotel Indigo, Baltimore, MD

Focus of this Workgroup

This group will consider the architecture and use of cross-sector data systems that link K-12, higher education, and the workforce and local/regional labor markets. Optimally, the resulting data can inform districts and secondary schools on the progress, persistence, and success of their graduates over various periods and in various institutions, organizations, or careers, promoting better guidance and preparation within the school environment. It can also inform organizational restructuring to support students and educate them about the nature and variety of pathways to adult success in their community. To be useful, the data must be easy to access, organize, and present.

8:00 – 8:50 a.m.	Registration, continental breakfast, and networking
9:00 a.m.	Welcome, meeting overview and expected outcomes, brief housekeeping
9:10 a.m.	Who is in the room?

- Introduce yourself briefly – name, role, organization
- Update from participants since last convening
- Burning question(s)

9:45 a.m.	Consideration of the PAS Navigation System from the perspective of the Cross-Sector Data Workgroup (in small groups- count off 1, 2, 3, 4; reassemble at tables by numbers, identify a facilitator and recorder; use chart paper and keep notes in your small group)

- In your view, what indicators/actions/outcomes can be measured and tracked within the proposed navigation system? Identify and list them.
- In your view, what indicators/actions/outcomes *should* be measured and tracked? How would you measure? How frequently?
- For each topic you have identified, who would need to be involved in order to do this? (In what role and from which sector?)
- Do the topics you have chosen meet the criteria for Indicators? (yes, no, maybe; by topic)
- What would you and your colleagues learn from this work?
- Propose a measurement system

10:15 a.m.	Break

11:15 a.m.	How-to's: Purpose and characteristics (remain in earlier groups)

- Review one "How-To" related to data and the list of proposed data-related "How-to's"
- What are the strengths and weaknesses of this particular "How-to"? If you would modify it, how?
- What are the strengths and weaknesses of the "How To" approach for teaching PAS to newcomers?
- What additional "How to's" should be developed?

11:35 a.m.	Report out; group discussion and synthesis
12:00 p.m.	Networking lunch
12:45 p.m.	Consideration of PAS Collaboration, in small groups (different small groups from the morning session), from the Cross-Sector Data Workgroup perspective

- What collaborations are most vital for accomplishing the purposes of this workgroup, and as related to the Navigation System?
- Which collaborations will be easier, and which more difficult, to establish?
- What opportunities and hurdles do you anticipate?
- With which collaborators do you recommend starting? (Prioritize, if time permits.)

1:30 p.m.	Break
1:45 p.m.	Report out; group discussion
2:00: p.m.	PAS Pilots Purpose—"beads on a chain"—Roundtable

- What are the suggestions for pilots related to Data and Navigation System?
- What are the suggestions for pilots related to Data and Collaborations?
- Examples of pilots that those present have started or are considering

2:45 p.m.	Synthesis, closure and next steps
3:15 p.m.	Shuttle departs for BWI airport and Penn Station train (advance sign-up, please)

Thank you for participating, safe travels, and mark your calendars.

Virtual Workgroups: Data, Jan. 29; Postsecondary Navigation, Jan. 31; Collaborations, Feb. 5
Each virtual meeting will be held 1:30 to 3:00 p.m. EST

In-Person or Virtual Workgroup: Mid-March 2019 (TBD)

Spring In-Person Convening: May 1-2, 2019, Hyatt Regency, Baltimore Inner Harbor

A Navigation System
for
Postsecondary Options

The purpose of the Pathways to Adult Success (PAS) navigation system discussion is to clarify the experiences, expectations, and supports that students need to make the transition from the elementary and secondary world into the postsecondary one. It identifies steps that institutions, educators, counselors, advisors and collaborators should take to foster youth development and help young people become increasingly responsible for self-management. While a navigation system is especially important for first-generation college-goers, it is useful for everyone, particularly as we all seek to retool our lives and national economy for a future in which old rules no longer apply: one infused with technology and job impermanence.

The Guideposts below summarize various distinct components of the navigation system. While some can be implemented by schools and districts, many require collaborations to bring them to life.

Guidepost #1: The Foundation -- Course Preparation and Guidance

Getting ready for the future is what school is all about. Whether youth are bound for college or career, school and district educators must ensure that a few short-term and long-term basics are firmly in place.

- **Require courses and course sequences that maintain options** for college and career goals starting in middle school, that are accessible to all students, removing existing participation barriers.

- **Construct clear pathways** – for core academic courses, foreign language and arts electives, and career tech. National data shows that the number of "good" jobs for those with a high school degree have dwindled in the last 25 years; "good" jobs for those with some post-high school credentials or a bachelor's degree have increased and are projected to continue to do so. (The Georgetown Center for Education and the Workforce defines a "good job" as one in which workers ages 25 to 44 make at least $35,000 per year, and those ages 45 to 64, $45,000).

- **Do not assign students into courses at random** or without respect for course sequence. Revising the master schedule can be a key step enabling equity-driven access, as is changing placement requirements for courses required for future success, whether college or career. A school-level parallel system of student support, required for students whose indicators show their need for it, can be similarly important for student success.

- **Teach and re-teach all students the course names, sequences, pacing and minimum grades** in middle and high school that enable college and career access. College access requirements vary by state and type of college. Career access varies by regional workforce

needs, employer ability to establish structured internships and apprenticeships as part of course sequences and pathways, and employer commitment to less formal experiential learning and career exposure (for instance, job shadows, career days, speakers, etc.).

- **Emphasize that minimum grades are floors rather than ceilings**. To succeed in the competitive worlds of higher education and the workplace, students should aim for grades and skill development far beyond the minimum. Stress that while a grade of D is usually sufficient to pass a course and graduate, a D average is insufficient to get into and do well in college or a good job. Motivation, attitude, interest, commitment, knowledge, skills, and a desire to keep on learning are essential attributes for future success in a chosen field.

- **Monitor student progress** through the sequence, with frequent grade and transcript analysis. Catch those who are falling through the cracks and assign mentoring and tutoring to get students back on track and moving forward. Consider implementing the college model of co-requisite assistance, which builds extra time and embedded credits into essential courses for tutoring/mentoring directly related to concepts taught that day and week.

- **Require students to develop a plan for their future** in late middle school, with the support of annual one-on-one update meetings. Occasional group check-ins during the school year will re-enforce this planning. If counselor-to-student ratios are too low to accomplish this, enlist the help of volunteers and professionals from collaborating organizations who are trained in local, district, and state graduation requirements and post-secondary preparation expectations. This "distributed counseling" pool of adults should work closely with counselors, learning from them and enhancing their capacity while bringing awareness of the world beyond school walls.

- **Teach parents the same information on courses, sequences, goals for grades, and regional career opportunities**, in comfortable, peer-facilitated conversational gatherings. Build on parent, neighborhood, community and faith-based networks to offer parents and families knowledge to guide their children wisely, augmented by one-on-one empathetic meetings.

Guidepost #2: Building a Passion and Making It Happen: Exposure, Experience and Motivation Regarding Career and Education Options and Decisions

Some youth enter high school not yet knowing "what do I want to do and where do I want to go in life?" Others know but are unsure of next steps needed to get there. A small percentage have clarity on their dreams: both "I will" and "how to."

Inspiring youth to have dreams and then mesh dreams with reality is a major adult role in youth development. Children and youth should experience exposures and opportunities that that will help them keep personal options open, make wise post-high school decisions, and embark and persist on individual paths to adult success. Here is a checklist of desirable components for schools and collaborations to establish for youth and to augment with exposures and experiences for parents.

- **"Bring the outside world in,"** beginning in middle school or earlier. Through speakers, field trips, or hands-on experiences in STEM, art, and "maker spaces," expose children to the rich variety of options in their community and region. In middle school and higher, organize job-shadows; by high school, add internships, work-based learning, and volunteer experiences. Many resources exist to help overcome logistical and other barriers in developing such opportunities.

- **Organize day trips** to local businesses, agencies, museums, zoos, parks, nature centers, and other community resources, with engaging presenters and age-appropriate choice of locations and formats. Design day trips to give meaning to the idea of a career, and a sense of what is available in students' community, as well as 30, 60, and 100 miles away, or even out of state.

- **Design age-appropriate college experiences**, age appropriately, to expose students to the wide-angle view and concrete "to-do's." Course preparation as outlined earlier is the foundation; build on it. One strategy is college representative visits to campus in middle or early high school, as well as in later years of high school.

- **Organize trips to nearby college campuses, beginning in late elementary school,** and definitely by middle school. Most students ultimately attend college within 50 miles of home, so knowing what is possible within a region is essential. In addition, especially in the upper grades, expose students to more distant campuses. Often more selective colleges are farther away, yet students who attend such colleges usually experience greater institutional support towards graduation. One rural Kentucky high school principal required all students to participate in six college visits prior to graduation, including an overnight trip to a flagship university. Consider that potential in-demand college athletes are fully aware of the variations in campus opportunities and outcomes. Educators should make sure the same occurs in academic and technical settings!

- **Consider the crossover of content offered in both college and career exposures.**
  - All trips should offer exposure to the physical setting, the differences between college/ workplace and home, and the "why" and "what" of both. Beginning in upper elementary grades, start the discussion by asking, "How does a job differ from a career?"
  - By late middle school and early high school, students and often parents need to learn about types of colleges (community/technical; open-access four-year; and selective); credentials and degrees offered, and how these differ; and how for-profit and not-for-profit institutions compare. College and workplace representatives can help make these distinctions.
  - In upper grades, students and parents need to develop understanding of the varying returns on investment of effort and money from degrees and credentials, as well as the differing return on investment by focus area. (Two-year associate degrees in engineering offer substantially higher earnings than many bachelor's degrees in the

humanities.) Explain these variations in accessible language, in student- and parent-friendly settings.

- o Make high school/ college options such as dual enrollment clear for students and families, indicating whether credits gained are transferable to institutions other than those in which they were earned, and/or count towards college majors, certificates and professional credentials. Some states have clear guidelines in this regard, while others do not.
- o It is crucial for students and parents to learn about the transfer options and requirements from two-year colleges into four-year institutions. Many states guarantee transfer when certain conditions are satisfied; these conditions must be clear in advance, so students can plan and take courses appropriately in the first two post-secondary years.
- o For late high school students, organize more complex college visits to learn about different types of living arrangements, fees, transportation, and other lifestyle and cost logistics. These will vary by college type (e.g., most community colleges are not residential).

Guidepost #3: Navigation Steps and Supports, Co-navigators, and Reorganized Institutions

Meshing dreams with reality is not easy. Reality often means embarking on college, careers, jobs, and relationships – in frequently changing combinations, especially for those ages 16-30 but often beyond. Situationally wrong and right decisions are made. Our society has not yet learned how to open the path to opportunity for many of those who are not affluent by birth and zip code. Research has shown that when supported, individuals do superlatively: when they know how to reach out asking for support, and when others know how to reach out and respond. Young adults face the challenge of finding the path to post-secondary opportunity; helping them do so is the responsibility of adults as advisors and co-navigators.

Here are some steps that should be on a navigation checklist:

- **Require students to meet with college/career counselors annually**, starting in 9th grade, to set and revise goals and organize personal schedules. A "distributed counseling" pool of adults can enhance existing counseling capacity.
- **Help students and families understand "match," "under-match," and "stretch" goals** between high school achievement and college expectations, as well as local and regional labor markets. Evidence indicates that many students "under-match," perhaps choosing what seems easiest and most accessible (e.g., community college) without realizing that in doing so, they forgo the intensity of institutional support that would improve their chance of earning a degree.
- **Include parents and families** in all matters related to college-going.
- **Teach students to manage standardized test timelines, finances, and requirements**, especially where "gatekeeper" assessments (SAT, ACT, ACT Benchmarks, Work Keys, ASVAB and/or other) are required for college and/or career access. They must register for assessments, pay or obtain waivers, and take tests early, to meet deadlines and be able to retake the tests if necessary.

- **Guide students through the college admissions process, no later than the fall of senior year**: different institutions' requirements; application, acceptance, and enrollment deadlines; information and orientation sessions; vaccination and health requirements and documentation; tutoring, mentoring, and credit opportunities; and major selection. Help students and families overcome fears and understand options. For immediately career-bound students, provide guidance on work-place opportunities, choices, and needed skills.

- **Help students and parents become financially literate**, particularly in understanding cost differences between two-year and four-year institutions in their area (which may differ surprisingly by region). They should learn how to submit the FAFSA on schedule; what grants and scholarships are available; how much loan debt is reasonable to incur and how to minimize it; strategies for making decisions about debt and securing additional scholarships; and about tuition aid, work-study, etc. Monitor progress, reinforce, nag, nurture and support.

GUIDEPOST #4: Preparing for Persistence in Postsecondary Occupations and Life

Despite limited data on the collaborative actions that will lead to the best outcomes for youth after graduation, there is some consensus on important actions for the community, educational institutions, and employers to take during students' first two years of postsecondary life. A short list of these recommendations follows; community collaborators should also collect and analyze data to hold themselves and students accountable for outcomes, as well as apply root cause analyses for these outcomes. Communities and youth will benefit from root cause and systems analysis in the first two postsecondary years, to monitor and iteratively revise improvement actions in a cycle of continuous community and young adult enhancement.

For the future of the community:

- **Help students navigate across institutional boundaries**. Support them through the transition from high school into college: attending information and orientation sessions; familiarizing themselves with tutoring, mentoring and credit options; and learning about majors. Collaboration is essential; between high school and college, young people are under the purview of neither institution, unless enrolled in a summer bridge program. Evidence suggests that except in the most selective institutions, twenty percent of those who accept college admissions offers do not register in the fall.

- **Support immediately career-bound students in the transition** into work-force expectations and skills.

- **Provide and require mentoring/tutoring and co-requisite courses** for first-year college students.

- **Use predictive data to identify students encountering difficulties promptly** and get advisors to them. Such advisors can be peer- or near-peer mentors: upperclassmen who have succeeded in particular disciplines and understand the thinking barriers that first-timers encounter. To do this, make sure that the technology capacity and structures for human capacity are in place in advance. Identify and recruit mentors, offering incentives

(e.g., part of practicum or internship course credit, federal work/study, or other campus opportunities). Some colleges and universities have successfully converted student support staff into Success Coaches.

- **Provide small bridge grants/loans**, depending on state law, to cover the almost inevitable gaps between scholarships and loans, unexpected life and family incidents, and tuition and fees due immediately. These are usually less than $750.

- **Work with community, education, and business collaborators to learn about youth experiences during the first two years** after high school. Align with higher education and business organizations to gather valid data and work together to develop indicators of college and career persistence in the first two years.

DATA-BASED COLLABORATIONS FOR YOUNG ADULT SUCCESS

The goal of EWS 1.0 systems is to improve high school graduation rates, particularly by focusing on key transitions on the preK-12 ladder. The purpose of Pathways to Adult Success (PAS) and related EWS 2.0 systems is to improve young adults' outcomes in the post-secondary world. For EWS 1.0, researchers have identified an evidence-based set of predictive indicators, progress monitoring, and actions related to improved high school graduation rates. Most actions can be undertaken with data and tools widely available in schools, including enhanced curriculum, instruction, and school organization oriented toward improving student support and guidance.

However, focusing on postsecondary success for all – undergirded by action steps that are still primarily undertaken within the preK-12 arena – requires fine-tuning the EWS 1.0 process while retaining and enhancing its key features. The Navigation System section of this Framework proposed augmenting EWS with a precisely defined set of steps that includes course offerings, sequences, grading, and progress monitoring, along with a comprehensive portfolio of awareness, exposure, experiences, and guidance at multiple grade levels. Although evidence indicates that many of the concrete steps individually, and some in combination, produce strong outcomes for students, evidence is still lacking as to which combinations of navigation steps overall produce the best results – and whether all are necessary. Leaders in the field consider all of them important, yet few combinations fulfill all the criteria for predictive indicators enumerated in the beginning of this Framework, and it is not clear which strategies give the biggest "return on investment."

With those caveats, this section will explore several strategies for making the Navigation System work optimally. It will consider what information is necessary to foster postsecondary success equitably and what data from beyond school and district walls will be helpful, and propose roles, types, and characteristics of collaborations likely to foster generative actions. These considerations provide a scaffold for developing Data-Based Collaborations for Young Adult Success.

Data

To constructing Pathways to Adult Success that are more effective for more students, educators, counselors, parents, the community and "receiving institutions" (colleges and employers) must learn more about high school graduates' current outcomes in higher education, the workforce, and civic life. To facilitate this, stakeholders must share data transparently, discuss it frequently, look for strengths and weak points, and devise strategies for improvement and incentives for success for everyone. (Adults as well as youth need feedback that their work is worthwhile). Knowledge gathered from different sectors leads to concrete plans of action and specific steps to prepare the next generation of students for greater success beyond K-12 schooling.

In this quest, schools, districts, and communities must also use new sources of data beyond attendance, behavior, and course-passing/credit accrual. These will include as-yet untapped information, such as data on young people's health and homelessness, or data from post-secondary sources. Clearly, some barriers to such sharing remain; despite the emergence of statewide longitudinal data systems in the past decade and greatly enhanced technological capacity, few schools and districts enjoy direct feedback from colleges, universities, or employers on how former students perform. Concerns exist about how to share health data while ensuring confidentiality;

however, legal advisors in some innovative communities have created Memoranda of Understanding (MOUs) to enable data sharing across sectors to better support young people.

Types, Scope, and Complexity of Data-Based Collaborations

Collaborations are necessary at many levels. School district central offices compile data from multiple sources and synthesize it to develop a picture of the whole child individually, and to construct group portrayals across grade levels and schools. This includes data from federal programs and funding streams; state grants and funding streams (e.g., homeless, foster care, migrant and "at risk" students); community health, non-profits, and mentoring and tutoring programs; and academic and career/tech assessments and surveys. Similar coordination at the state level is also helpful; a few states have created internal cross-sector councils to make it possible.

Three other important areas of collaboration are those between preK-12 and

- post-secondary institutions
- the workplace
- the community, including non-profits and agencies.

The process of obtaining and using cross-sector data effectively is usually time- and effort-consuming for all parties, but this should not discourage stakeholders from pursuing such data based collaborations. However, potential collaborators should anticipate that it may be three to five years before they achieved their aspirational goals – but that they will accomplish many "small wins" along the way, rewarding results that become incentives and cause for celebration for all involved.

In developing collaborations, it is helpful to start with strong end-game goals and clear, carefully paced actions. Document actions and outcomes well, reflect on them, learn from them, and modify as appropriate. Some learning will focus on the process: decision points, reasonable timetables, and unanticipated hurdles and opportunities. As you gain management, infrastructure and cross-sector communications experience – along with successes and failure! – incorporate greater complexity, linking additional sectors. Communities where productive partnerships in support of children already exist may be able to start more ambitiously and include multiple sectors. However, many Collaborations will initially involve just one sector other than districts and schools, to keep the project manageable and experience early organizational success.

Building the flow of data from rivulets into creeks and then rivers will take time. What are some useful questions to ask?

- What do students, families, educators, and potential collaborators know about current student outcomes after high school graduation?

- What do they know about the support students receive when they are about to take the giant leap out of high school – and often don't know what they are embarking on as they confront the great unknown? (For the sequence of transition steps in which most students need support, see the *Navigation System for Postsecondary Options*).

- How many recent graduates who are accepted by postsecondary institutions and receive

financial aid actually enroll and attend class by the first fall semester?

- Are some groups of students more likely to enroll than others?

- What is their persistence after enrollment? For the first, second, third, and fourth semesters of college or career training?

- For those who enter two-year colleges, what is the transfer rate to four-year institutions and graduation rate within a six-year period?

- For those who enter the workforce (either right away or after gaining an industry-recognized credential), will their starting wage put them on track to sustain a family by their late 20s? Are their skills transferable, and can they be strengthened and deepened over the years? From the employer perspective: what do potential employers say are critical competencies and needs? What do they value most? What is the role of youth attitudes as well as aptitudes in employability, workforce persistence, and growth? How are employers' viewpoints communicated to youth, parents, educators, and local institutions of higher education, since they are responsible for helping young people develop skills important to local labor markets?

Other key questions arise regarding the nature of the collaboration itself – its purpose, size, shape, design, and target audience. For example:

- Who is the collaboration intended to assist and how quickly? (keeping the focus on preparing youth for adult success, both short- and long-term)

- What results are sought and for whom? Is the collaboration's goal to strengthen youth outcomes in school as the best precursor to later success? Is the intent to support students' transitions and persistence during preK-12 schooling and after its completion? Is the intent to rescue youth who have "stopped out" of school in their mid-to-late teens (sometimes called "opportunity youth") and return them to education, work, and civic life? Is the intent to improve skills in the local and regional workforce to meet current and future employer and community needs, leading to strengthened economies that benefit everyone? These are all are worthy goals, but they cannot all be accomplished at once – nor is this even desirable. The collaborators' focus, direction, and perceptions of need will y influence the design of the collaboration. Careful prioritization is essential.

- In what short- and long-term timeframe do you anticipate results?

- Is a new collaboration necessary? Or would refining, strengthening, and adapting existing relationships or partnerships make more sense and produce faster results?

- How will results be measured and monitored? Will the criteria for Indicators and Actions defined earlier in this Framework be applied consistently?

- What is the most effective action strategy in initiating, building, or re-building a collaboration that leads to measurable outcomes? (i.e., launch small, with one or two collaborators focused on a relatively finite and well-defined challenge; or start more

broadly, with a larger set of collaborators, still sharing a common goal?)

Underlying this work, and providing a strong foundation for the future, three final essential questions arise:

- How can each school and community improve conditions so that ALL students can access a quality curriculum, excellent teachers, caring administrators, and internal and external support systems that lead to adult success?

- Are there additional or underlying emotional, medical, dental or home- and life-situation barriers for some subgroups of the student body that hinder students' "opportunity to learn" and which may require the help of community professionals to solve?[1]

- How will collaborations and outcomes be measured? What are essential and valid indicators? Which strategies can collaborations pursue to generate, analyze, and communicate formative and summative feedback on students' and graduates' success? What indicators and benchmarks are most relevant to the strategies selected?

It is too early to know what will work best.

The concept of targeted Collaborations may be elusive to convey, yet data- and equity-focused collaborations are underway involving PAS partners around the country. As lessons are learned, these will provide case studies and examples to inform others' initiatives in broadening and deepening the impact of PAS. The key in all of these collaborations is focus, focus, focus, data, and sharing insights learned.

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[1] The Children's Health Fund has identified seven common Health Barriers to Learning: uncontrolled asthma, uncorrected vision problems or hearing loss, dental problems, persistent hunger, and certain untreated mental health and behavioral challenges. All are measurable and malleable, and may help schools identify additional students who need support but are not flagged by other indicators. PAS recommends, as a stretch goal to be achieved over time, that all states and districts provide universal health screening in schools for these key factors.