Introduction

In the fall of 2019 four sections of twenty-four students each enrolled in the first course of the **Gainesville High School and Lanier Technical College Engineering Technology-Advanced Manufacturing Career Pathway**. Designed and implemented in partnership with regional manufacturers and educational institutions, and incorporating career exploration and work-based learning experiences, the career pathway culminates in student attainment of:

- college-career readiness
- work-based learning experience
- certification of workforce competency
- 19-hours of a specified curriculum for dual college-high school credit
- AAS in Electrical Engineering Technology through Lanier Technical College, and
- BS in Electrical Engineering through the Southern Polytechnic College of Engineering and Engineering Technology at Kennesaw State University

Come fall of 2020 twenty-eight high school juniors will enroll as the first student-test group in the **WellStar Nursing Career Pathway**. Developed and implemented in partnership with the Wellstar Health System, the Georgia Board of Nursing (GBN) and regional educational institutions the career pathway builds in career exploration and work-based learning experiences and results in student attainment of:

- college readiness in 10th grade
- work-based learning experience
- completion of 26-hours of specified curriculum for dual college-high school credit
- nursing aide certification
- GBN approved pilot-Practical Nursing Diploma and AAS in Nursing through Chattahoochee Technical College, and
- BS in Nursing through Georgia Highlands College

In both pathway-programs of study, successful students are guaranteed an interview for employment with participating industry partners after high school graduation and upon attainment of a targeted postsecondary credential. Both career pathways are also designed to minimize college tuition cost to participating students and their families.

The SREB Career Pathway Initiative builds upon the work of the SREB Commissions on Career and Technical Education, Community Colleges in the South, and College Affordability, which were released in 2015-16. Collectively the reports profiled a challenging environment in which a high school diploma is no longer the path to the middle class. Commission findings also highlighted alignment between secondary and postsecondary education and employment. In 2015 the Credentials for All commission report stated this in stark terms:

"Simply put, the bridge from high school to postsecondary attainment and career opportunities is broken. To solve this problem, more high school students must

get into community and technical colleges — and on pathways to postsecondary attainment and career advancement — much sooner."

The three commissions cited "clearer pathways", "structurally guided pathways" and "career pathways" as strategies to address alignment concerns and inefficiencies, improve workforce development and increase program completion while lowering tuition cost to students and their families. As envisioned career pathways would align secondary and postsecondary studies and industry need within a seamless program of study designed to prepare students for employment in high wage-in demand careers.

SREB engaged leaders of business, secondary and postsecondary education, state agencies, work force entities, and policy makers in Kentucky and Georgia in an effort to realize the potential of career pathways. For over two years in Kentucky and almost three years in Georgia potential partners were identified, meetings were convened and actions were taken to evaluate capacity and efficiency of current programs in meeting industry need in targeted sectors. Discussions focused on aligning industry-valued certifications and skills and academic credentials within a seamless program of study from high school to college to work. The work produced the following "guiding principles of career pathways" which to continue to evolve as they drive pathway implementation efforts in Georgia.

- Career pathways are advanced as best practice programs of study to
 maximize success for a broad and diverse student population within delivery
 models that are effective, affordable, and sustainable. They utilize project-based
 assignments, and accelerated learning and support students with career guidance
 and advisement.
- Career pathways are developed and implemented as industry-driven jointpartnerships involving secondary and postsecondary education, industry leaders, policy makers, state agencies, workforce entities and community organizations to address documented employment need in high wage-in-demand careers.
- Career pathways integrate industry-valued certifications and skills with targeted academic credentials, work-based learning and student interest within a seamless and structured program of study that begins in high school, progresses through college, and provides multiple exit and re-entry points for students to explore employment opportunity in high wage economic sectors.
- Career pathways are designed to maximize district, state, institutional, community and industry partner resources to minimize tuition and other college cost to pathway students and their families.

Career Pathway Concept Model

Institution	Outcome	Employment
High School	Life learning foundation	Entry employment
	High school readiness	High wage sector
	College & career ready	
	Industry-valued certification	
	College credit - up to 30 hours	
	Guidance-advisement-career exploration	
	CTE & college prep	
	Success skills	
	WBL experience w/ industry	
	partners	
	No cost to student or family	
Community-Technical College (CTC)	Advanced credential	Family sustaining wage
	12-month Associate's Degree	
	30-60 credit hours (up to 90- hours CTC)	Career track
University	Bachelor's Degree	Career advancement
	30-60 credit hours	

What We Learned

The following "what we learned statement" highlights 5-key takeaways of the development and implementation experiences relating to the career pathway initiatives in Kentucky and Georgia. The following section will expand on these comments in greater detail.

Partners: You need the right partners and they will need a reason to engage and to stay engaged within the pathway process. You have to establish a collective buy-in amongst pathway partners toward the project's objectives and maintain that support throughout development and implementation process. If you have to "hard-sell" the pathway objectives, they probably are not the right partners.

Ownership: To be successful, at some point in the development and implementation process key partners including the industry senior leader, college president and high

school principal and most importantly - the school and college faculty need to assume and demonstrate ownership and responsibility for the career pathway initiative.

Process: Time is not your friend; you have about 12-months to develop and begin implementation of the career pathway before interest will wane even with the strongest supporters. Turnover of key leaders will also arise so you need to proceed with a sense of urgency and focus in addressing program alignment and efficiency, poor communication within and between schools, colleges, and universities and the lack of engagement with employers.

Focus and Persistence: Be clear and specific with the objectives of the pathway initiative. Be simple and straightforward in planning. Establish a schedule tied to specified goals and stick to it. Address, re-address and confirm agreement and responsibility within key areas. Persist when issues arise and when they resurface.

Challenges: College and career readiness and the transfer of college courses for credit within degree programs is a persistent problem. Confusion of what college and career readiness means persist at some high schools and colleges and certainly with employers who complain high school and even college graduates have not mastered the necessary "success skills" to be prepared for work. Specified strategies outside of state graduation requirements are not evident.

Transfer of college credit and specifically the application of such credit within community and technical colleges and from these 2-year colleges to programs at 4-year postsecondary institution remains an issue especially regarding "technical" courses.

Change is hard - really hard. Everyone is busy doing "their real job" and faculty and administrators are worn out over the "latest flavor of the week change program" – especially if it is competing with "their" initiative.

Who and What is Needed

1st Meeting with Key Leaders

- Objectives for this meeting:
 - o Agree upon model and principles of career pathway
 - o Identification of educational partners and associated leaders
 - o Responsibilities and expectations of key Leaders
 - Schedule of development and implementation process
 - o Employer establishes credentials of value within pathway
 - Adopt agenda and meeting date for Meeting 2: Educational Partners -Leaders
 - Finalize invitation for the second meeting

Responsibilities and Expectations of Key Leaders

Catalyst-Organizer-Coordinator

- Advances the program
- Controls and directs the process
- Leads initial meeting with key leaders
- Builds consensus
- Sets and keeps schedule
- Communicates progress and issues follows up on action needed
- Supports the initiative
- Other

Convener

- Champion of the program
- Gets all parties around the table and keeps them there
- Gains buy-in for the career pathway model and principles
- Attends 3-convenings and Design-Implementation Team Meetings as needed
- Other

Employer - Senior Leader

- Owns and brands the program
- Attend 3-convenings and Implementation Team Meetings as needed
- Buy-in career pathway model, principles
- Identifies credentials of value (i.e., certification of value, AAS, BS)
- Agrees to educational partners
- Agrees to sponsor career exploration, WBL
- Guarantees interview for EMPLOYMENT at targeted credential attainment
- Appoints and empowers: assigns a designee to serve on the Design-Implementation Team
- Other

Funder:

- Embraces and advances the career pathway model and principles
- Aligns resources to attainment of objectives and holds partners accountable

2nd Meeting - Leadership Team

Key Leaders

- Catalyst-Organizer-Coordinator
- Convener
- Employer Senior Leader and Designee

Educational Partners - Postsecondary Education

System Leader

- Program Director (system level)
- College President*
- Dean Over Targeted Program
- Program Director (college level)
- Other TBD

Educational Partners - Secondary Education

- State Department of Education
- District superintendent
- District superintendent appoints and empowers a designee
- School Principal*
- Other TBD

Credentialing or Professional Entities (Board of Nursing)

Workforce Development Board

Other TBD

* All of these are important members, but the involvement of the college president and principal is essential to success.

Objectives - Key Leaders Meeting

- Review and collective adoption:
 - o Model and principles of career pathway
 - o Educational partners
 - Ownership of career pathway
 - o Schedule of development and implementation process
- Validation and ownership of credentials of value within pathway
- Identification of leadership and faculty for the Development Implementation Team
- Adopt an agenda for the Development Implementation Team

3rd Meeting: Career Pathway Development and Implementation Team (this is the first meeting that will include secondary and postsecondary classroom faculty)

Key Leaders

Leadership Team Members

- Catalyst-Organizer-Coordinator
- Convener
- Employer senior leader and designee

Educational Partners

School and College Leadership and Faculty

- College and career readiness
- Guidance, counseling and advising
- Targeted program i.e., nursing, engineering technology
- Dual enrollment
- Faculty of targeted dual enrollment curricula
- Other

Objectives - Career Pathway Development and Implementation Team

- Review and collective adoption:
 - o Model and principles of the career pathway
 - Career Pathway Development Implementation Team ownership of career pathway
- Validation and ownership of credentials of value within pathway
- Review of schedule
- Future agenda items student attainment within the high school experience
 - College and career readiness
 - o Industry-valued certification
 - Work-based experience
 - o College application and admission
 - o Dual enrollment
 - Postsecondary progression