

A Blueprint for Creating Career-Focused Pathways

Using Data and Partnership to Integrate
Career Exploration in GP
Breakout 4

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Los Angeles Trade-Technical College



Jesus Guerra

Chair – Advanced Transportation and
Manufacturing Pathway
Director – Transportation Workforce Institute



Marcy Drummond

Senior Fellow/
Consulting Instructor

Objectives

✓ Design Principles

Learn design principles for career-focused pathways

✓ Models, Maps, Tools

Gain tricks/tips for developing competency models and program design/redesign tools

✓ Process for Career-Focused Pathway Development

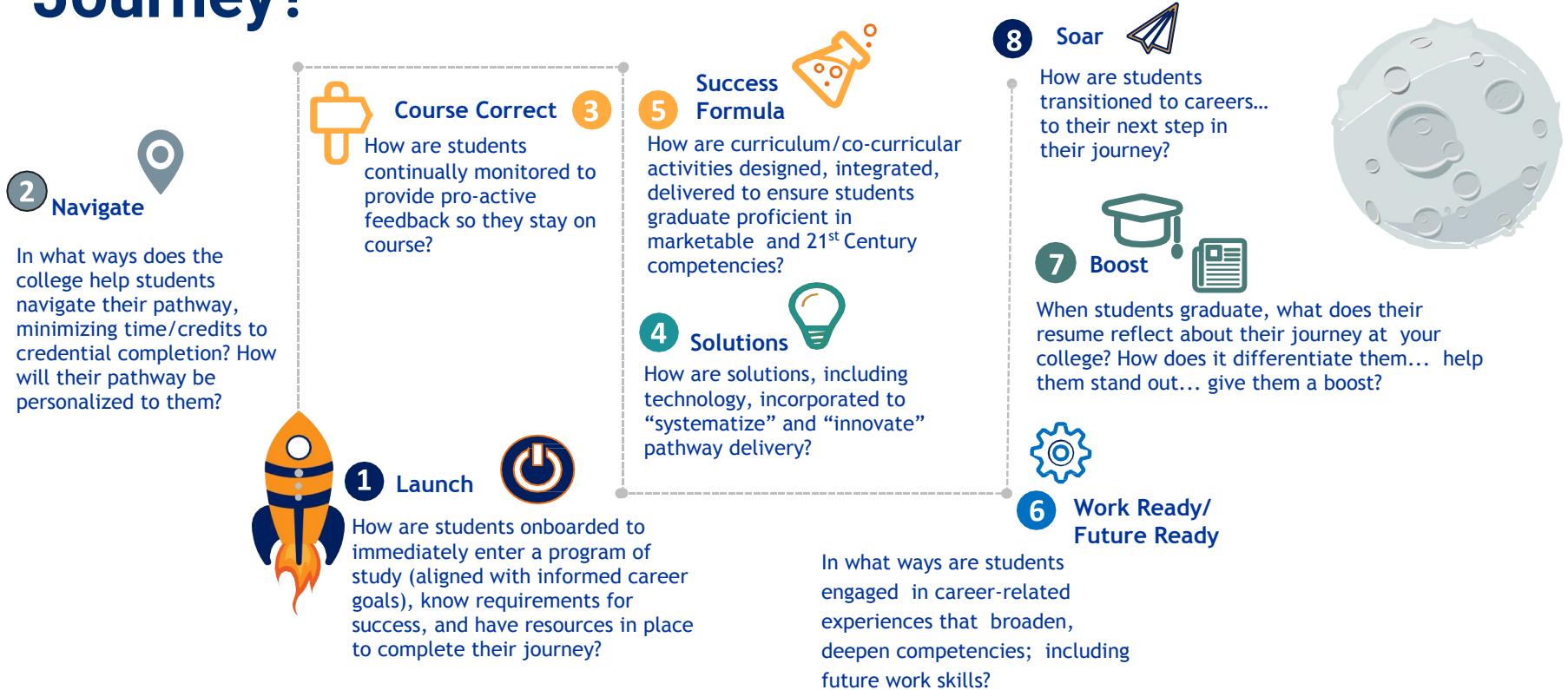
Understand the steps for implementing (a data- and stakeholder-driven) career-focused pathway development process

✓ Resources

Gather templates, tools, and resources for designing career-focused pathways

✓ What are Your Objectives?

How are you Guiding Students' on a Successful Journey?

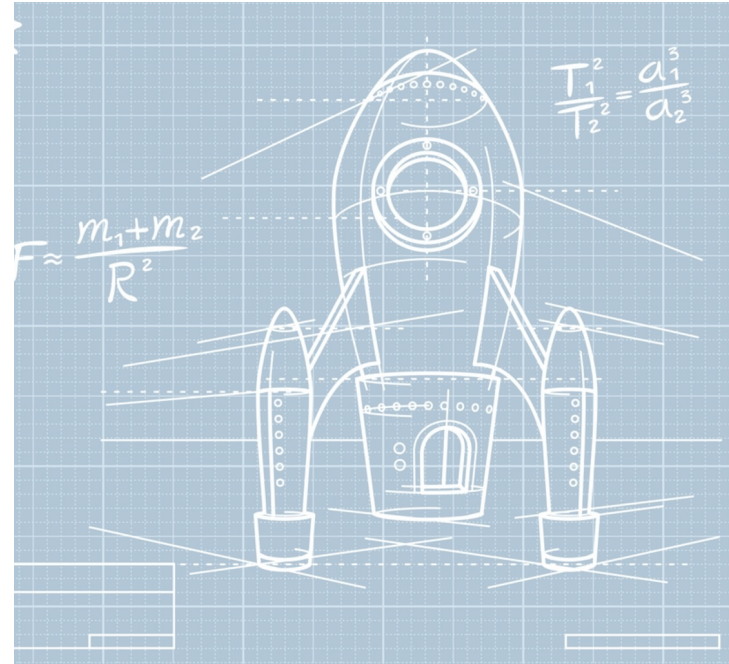


8 Design Principles

- ✔ **Human-centric Design is Essential**
- ✔ **Guided Pathways + Competency Building**
- ✔ **Involve Key Stakeholders (internal and external)**
- ✔ **Ground Pathway Development in Research**
- ✔ **Develop Frameworks, Models to Guide Pathway Development**
- ✔ **Integrate Co-curricular Learning Activities to Expand Students' Competencies and Career Experiences**
- ✔ **Backwards Design Starting with Students' End Goals**
- ✔ **Design and Implement an Integrated Approach**

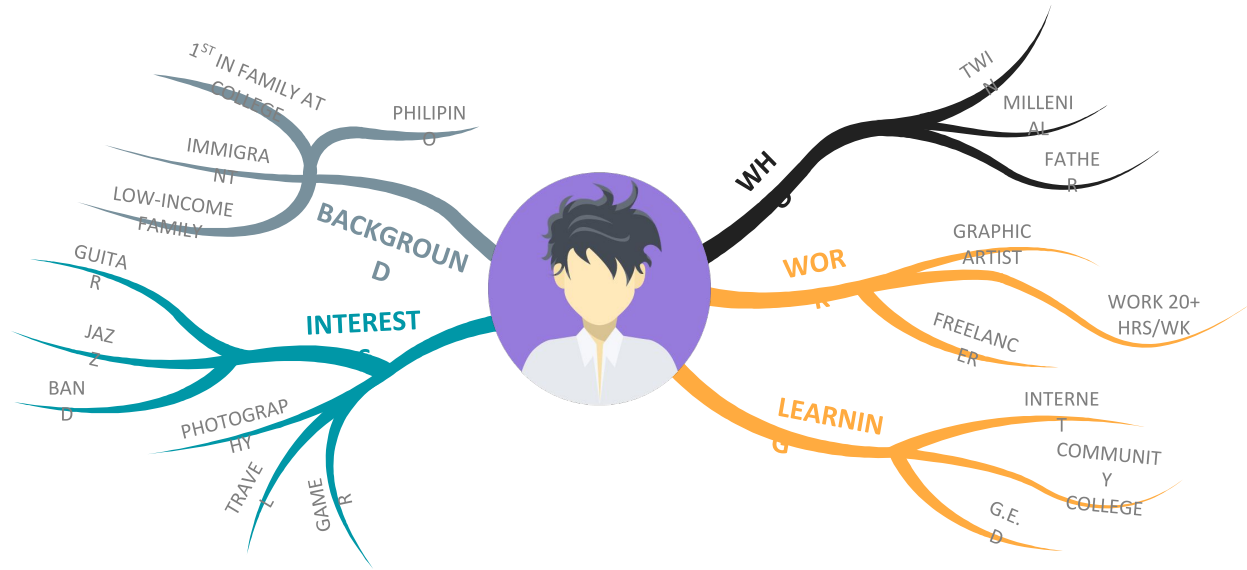
Design Principle

- Human-centric design is essential



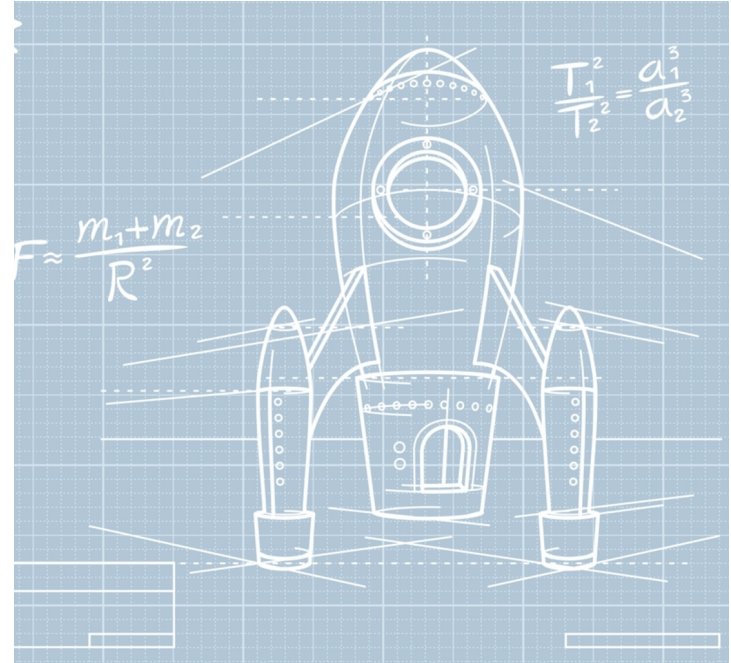
Human-Centric Design is Essential...

Human-Centric Design (HCD) methods involve the perspective of students in all steps of design, problem-solving, and implementation processes



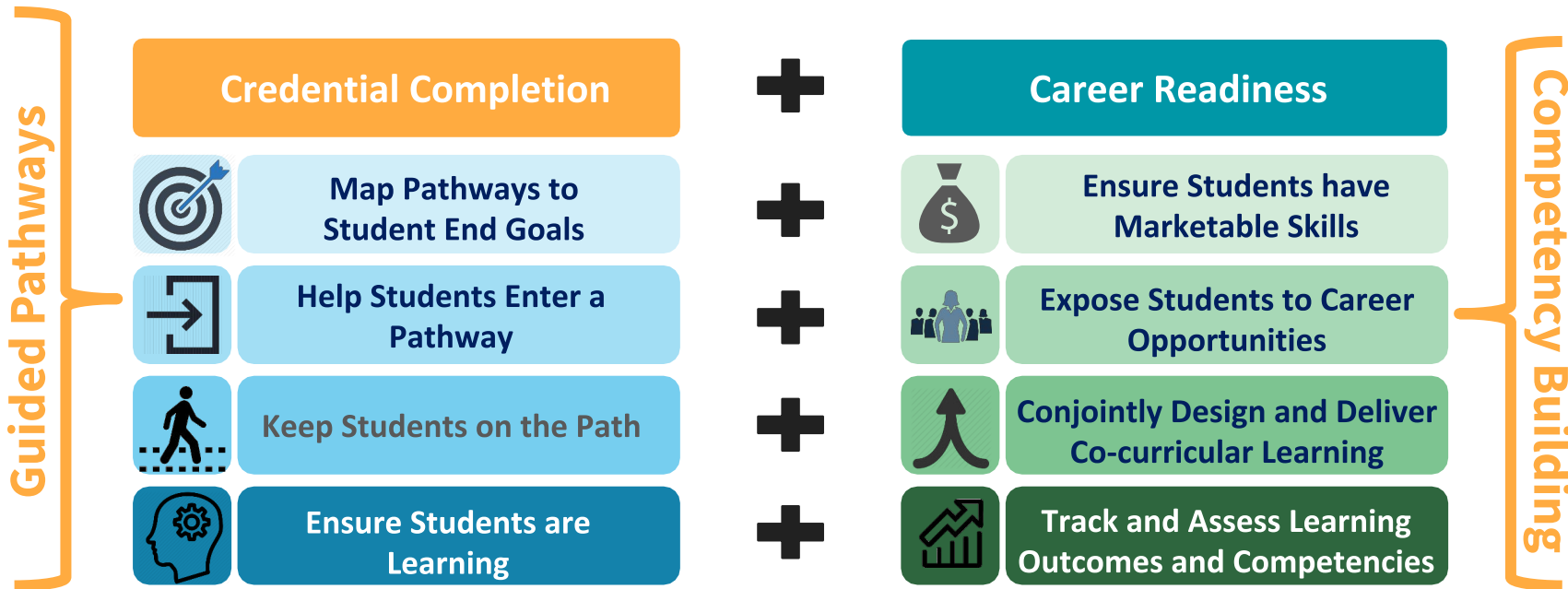
Design Principle

- Guided pathways + **competency building**



Ensuring Career Success:

Credential Completion through Guided Pathways **AND**
Career Readiness through Competency Building



Career-Focused Pathway DNA

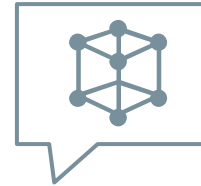
Guided Pathways

Clear, coherent programs and maps with specific course sequences, progress milestones, and learning outcomes that guide students into and through college to credential completion, employment



Support Structure

Extensive set of interdependent, integrated strategies and services that promote students' academic success and close educational opportunity gaps by targeting academic and non-academic achievement barriers



21st Century, Competency-based Curriculum

Structured sequence of learning and experiential activities prepare students with 21st competencies for 21st century careers



Co-Curricular Engagement

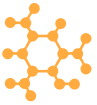
Intentional co-curricular projects, activities, services, and resources to augment learning and increase student competencies



Career-Focused Pathway DNA

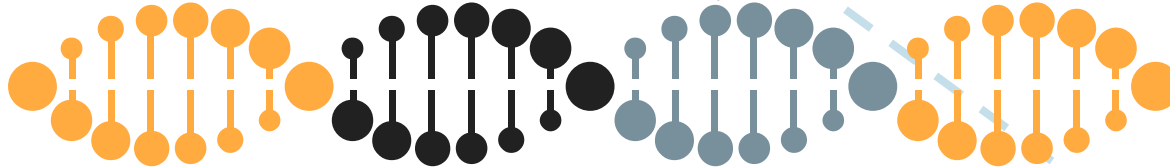
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Co-Curricular Engagement

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Six Steps for Developing Career-Focused Pathways

1

Prepare

Career-focused pathway development requires shared vision/understanding, commitment, and participation of key stakeholders at each step of process

2

Research

Evidence and data provide the foundation for developing career-focused pathways

3

Design

College stakeholders engage in design thinking, modeling, user-centered design practices, and more to create an institutional roadmap for implementing career-focused pathways spanning the entire student journey

Six Steps for Developing Career-Focused Pathways

4

Build

Intentionally structured and integrated sequence of courses, experiential learning activities, and integrated co-curricular enhancements form career-focused pathways

5

Launch

Supportive policies, processes, resources, structures, etc. are established to ensure efficient and successful implementation of career-focused pathways

6

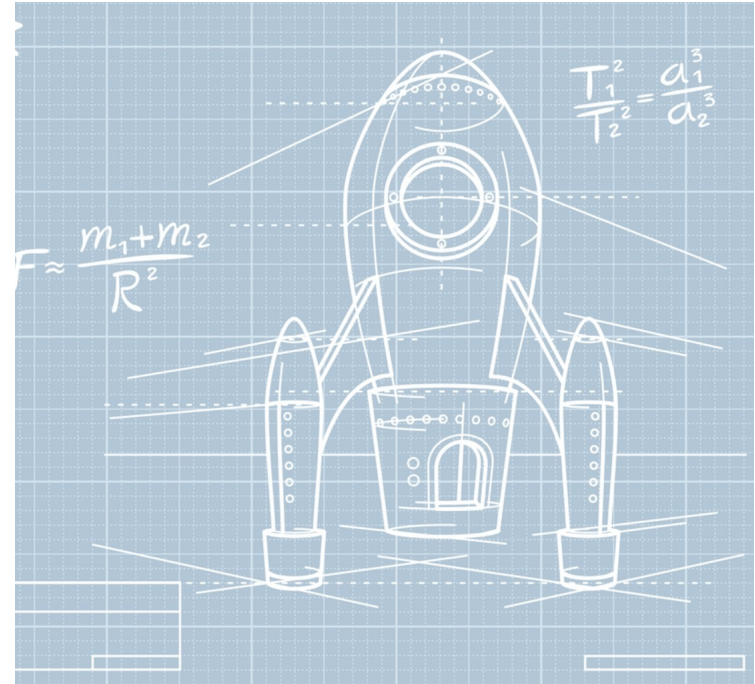
Evaluate

Ongoing and intensive review of pathway implementation, competency gains, and student success is conducted

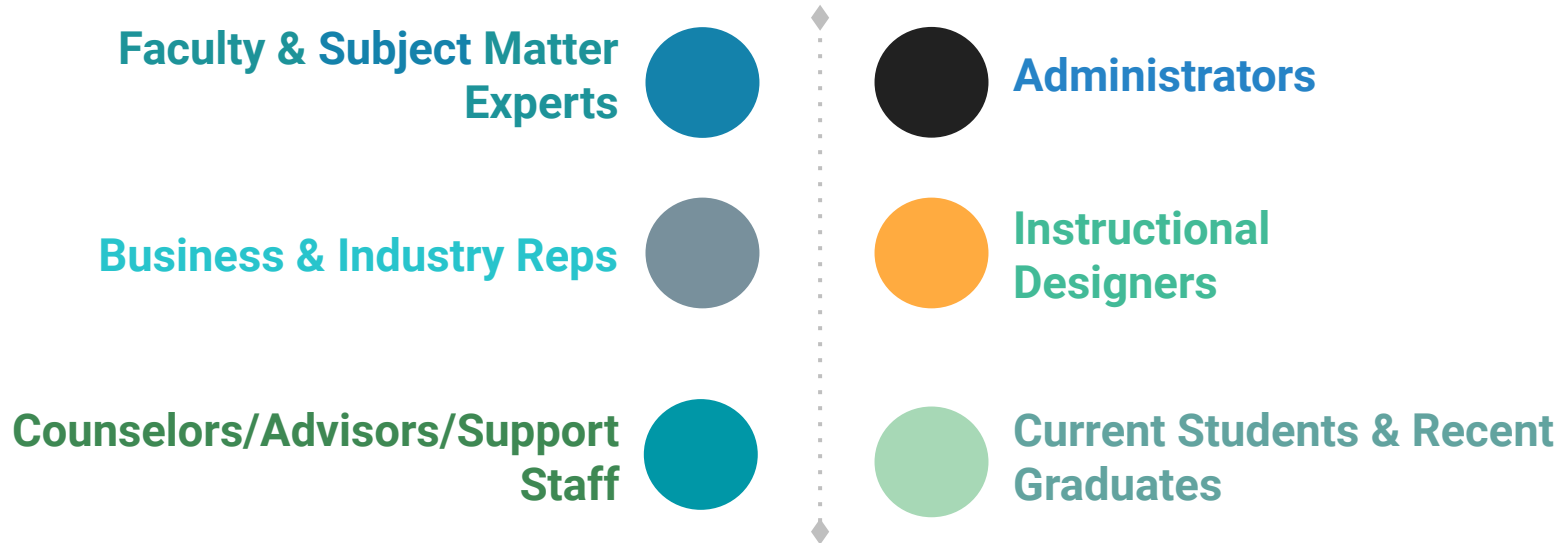
1 Prepare

Design Principle

- Involve key stakeholders
- (internal + external)



Stakeholders for Career-Focused Pathway Development

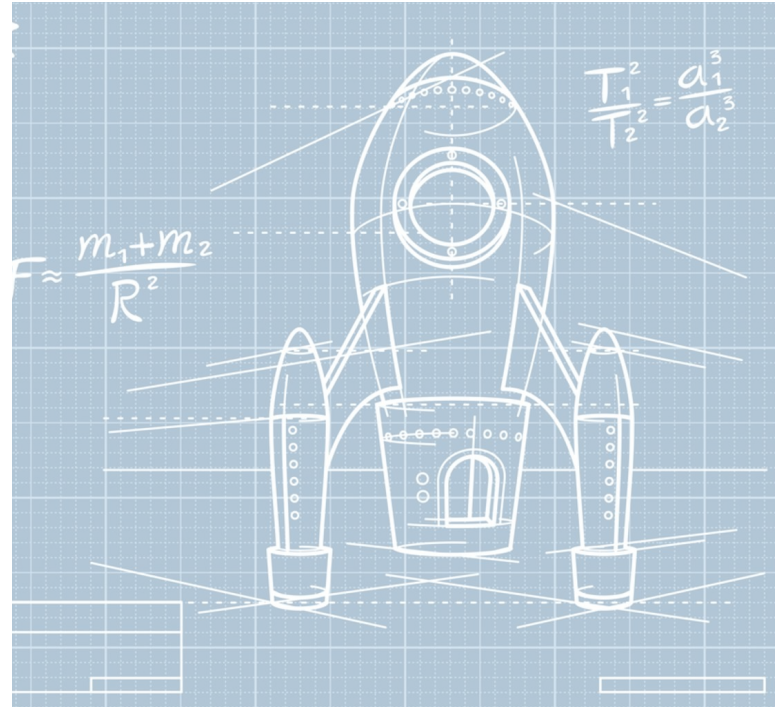


- Sample employer/industry advisory meeting agenda is available in the Toolbox. Refer to the Competency Model-Pathway Industry Advisory Meeting Agenda document.

2 Research

Design Principle

- Ground pathway development with research



Research Areas



Today's and Tomorrow's Learners

are seeking a more direct link between learning and work/career

Majority of Students Want Career Connected-Learning

57% of today's postsecondary students are looking for a learning provider that:

- enables them reach their ideal career position in the shortest amount of time
- provides links to labor markets
- puts them in touch with relevant employers and prepares them for their career transition



Generation Z Learners*

- Born 1995 to 2010 (ages 6-21)
- Roughly 2 billion youth

Learning Preferences**










- Wired for fast delivery of content, data, and images from computers
- Want hands-on options and practical skills with employer internships
- Have preference for digital learning
- Dislike lecture-based classrooms
- Want their education customized
- Expect to work, learn, and study whenever/wherever
- Love to explore using own route – design own course of study

Sources:

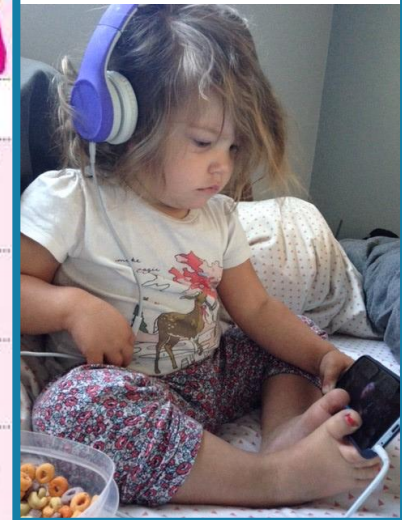
Source: Ladd, H. R. (n.d.). Recognizing the diverse needs of today's students: Part I of a two-part series. *The Differentiated University*. The Parthenon Group. Retrieved from: http://www.parthenon.com/GetFile.aspx?u=%2fLists%2fThoughtLeadership%2fAttachments%2f85%2fThe%2520Differentiated%2520University_WP_web_final.pdf

* Kingston, A. (2014, July 15). Get Ready for Generation Z: They're smarter than Boomers, and way more ambitious than the Millennials *Maclean's*. Retrieved from <http://www.macleans.ca/society/life/get-ready-for-generation-z/> ** Renfro, A. (2012, December 5). *Getting Smart*. Retrieved January 6, 2015, from Meet Generation Z: <http://gettingsmart.com/2012/12/meet-generation-z/> ** Northeastern University. (2014, November 18). Innovation Imperative: Meet Generation Z. *Innovation Imperative Series*. Retrieved from http://www.northeastern.edu/innovationsurvey/pdfs/Innovation_Summit_GenZ_PollRes_KeyMess.pdf

5 Generations of Learners

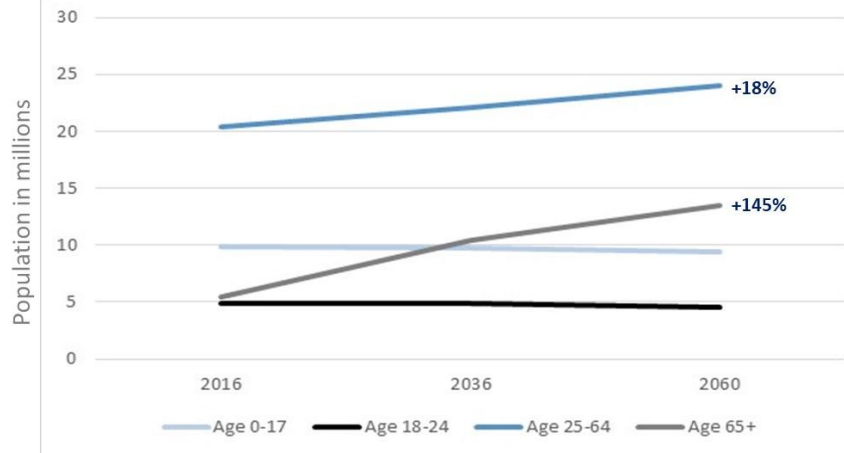
Talking a different language					
Formative experiences	Maturists (pre-1945) Wartime rationing Rock'n'roll Nuclear families Defined gender roles - particularly for women	Baby boomers (1945-1960) Cold War 'Swinging Sixties' Moon landings Youth culture Woodstock Family-orientated	Generation X (1961-1980) Fall of Berlin Wall Reagan/Gorbachev/Thatcherism Live Aid Early mobile technology Divorce rate rises	Generation Y (1981-1995) 9/11 terrorists attacks Social media Invasion of Iraq Reality TV Google Earth	Generation Z (Born after 1995) Economic downturn Global warming Mobile devices Cloud computing Wiki-leaks
Attitude toward career	Jobs for life 	Organisational - careers are defined by employees	"Portfolio" careers - loyal to profession, not to employer	Digital entrepreneurs - work "with" organisations	Multitaskers - will move seamlessly between organisations and "pop-up" businesses
Signature product	Automobile 	Television 	Personal computer 	Tablet/smartphone 	Google glass, 3-D printing
Communication media	Formal letter 	Telephone 	E-mail and text message 	Text or social media 	Hand-held communication devices
Preference when making financial decisions	Face-to-face meetings	Face-to-face ideally but increasingly will go online	Online - would prefer face-to-face if time permitting	Face-to-face	Solutions will be digitally crowd-sourced

Generation Alpha Class of 2030

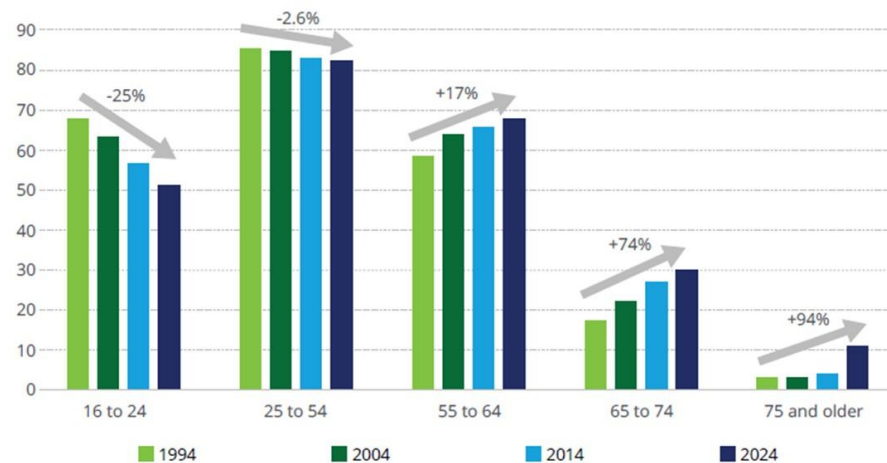


California and U.S. is Aging

California Population by Age
Projected to 2060



5 Generations Learning and Working



What are Implications of 5 Generations of Learners for Career-Focused Pathway Design?



- Both prefer flexible routes to their end goals
- Both will choose to work in the Gig Economy
 - consider developing programs/options for high-demand gig jobs
 - consider incorporating gig skill-building in existing programs
- What are careers for older population and what education/training will they need?

Market Research Objectives



Industry, Labor Market Sources

- U.S. and State Sources
- Economic Modeling (Aggregated) Sources - EMSI
- “Real-Time” Sources
- Employer Sources
- Socially-Sourced - LinkedIn



- Lists and links to research sources are available in the Toolbox. Refer to the Labor Market Research Sources document.
- Information on locating certifications is located in the Toolbox. Refer to the Locating Certifications Information document.

21st Century/Future Skills

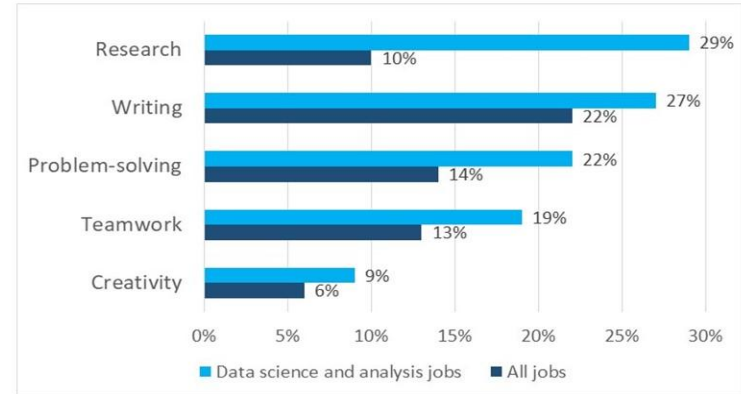
Emergence of Hybrid Jobs – a New Genome of Jobs

- A whole new categories of jobs that draw from and integrate multiple disciplines are emerging from Industry 4.0
- Combining technical expertise with “soft” skill expertise
- Examples: experience architect, user experience designer
- Burning Glass Technologies refers to this as a “new genome” of jobs

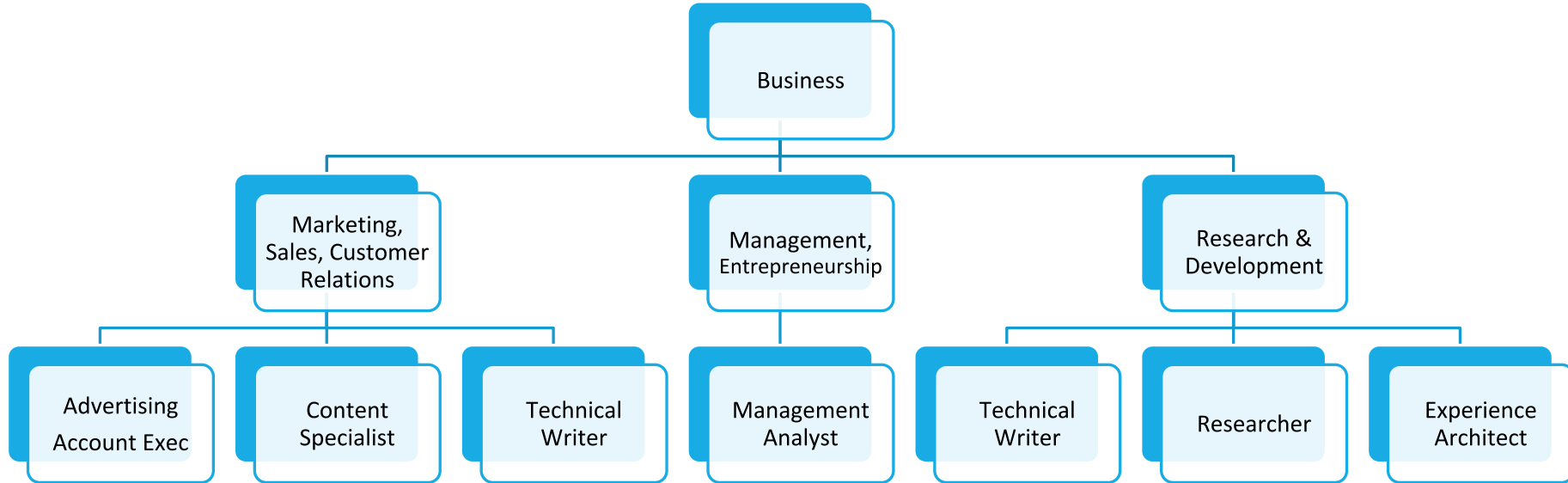


- Detailed information and lists of 21st Century competencies and future skills is available in the Toolbox. Refer to the Competencies and Competency Model Examples document.

Hybrid Jobs Require Increased Soft Skills



Example Pathway Framework



Occupations for Individuals with Degree in Psychology and/or English

Occupation	Psychology Pathway	English Pathway	Primary Industries
Administrative Services Manager	X		Business
Advertising Account Executive	x	X	Business
Advertising Agent	X		Business
Career Counselor/Advisor	X		Social Services
Case Manager	X		Social Services
Community Services Manager	X		Social Services
Content Specialist/Marketing Manager		X	Business
Copy Writer		X	Business
Corrections Officer	X		Social Services
Counselor	X		Social Services
Grant Writer	X	X	Social Services
Health Educator	X		Social Services (Health)
HR Professional - Human Resources Manager	X	X	Business
Human Factors Specialist	X		Social Services
Laboratory Assistant	X		Research, Science, IT
Management Analyst	X		Business
Market Researcher/Analyst	X		Business
Media Relations		X	Business
Medical Writer		X	Social Services (Health)
Proposal Writer		X	Business
Psychologist	X		Social Services
Public Relations Specialist/Manager	X	X	Business
Rehabilitation Specialist	X		Social Services
Reporter		X	Business
Researcher	X		Research, Science, IT
Sales Manager/Representative	X	X	Business
Social Media Specialist		X	Business
Software Developer	X	X	Research, Science, IT
Speechwriter		X	Public Administration
Teacher/Professor	X	X	Social Services
Technical Writer	X	X	Business, Research, Science, IT
Writer - General		X	Business
Experience Architect	X	x	Business, Research, Science, IT
User Experience Designer	X	x	Business, Research, Science, IT

Specializations

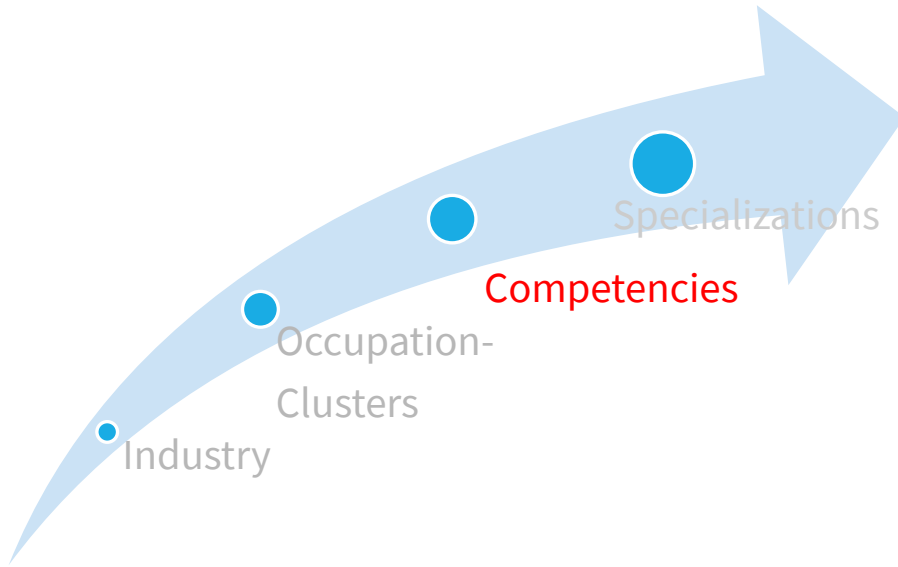
Competencies

Occupation-
Clusters

Industry



- LATTC's Advanced Transportation and Manufacturing Pathway's occupation matrix is available in the Toolbox. Refer to the ATM Occupation Matrix document.



Core Competencies for Occupations for Psychology and/or English Graduates

Core Competencies	Psychology Pathway	English Pathway
Understanding Human Behavior	X	x
Understanding Group Behavior	X	x
Understanding/Appreciating Different Perspectives		X
Decision-making	X	
Writing Skills	x	X
Speaking/Oral Communication Skills	X	
Organizational Skills	X	
Time Management/Manage Schedule/Deadlines	x	X
Critical Thinking	X	x
Creative Thinking	X	X
Problem-solving	X	
Teamwork	X	X

Activity

From what you've seen so far,
take a picture of the one thing
you think is essential
for implementing career-focused pathways at your college.

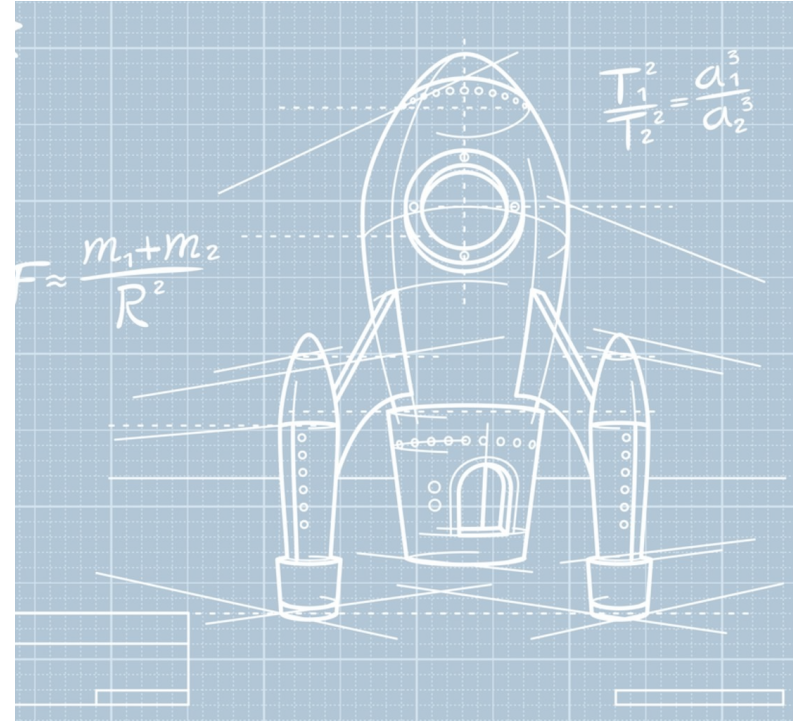
What are you aiming your camera at?



3 Design

Design Principle

- Develop frameworks, models to guide pathway development



Got Model?

- Purpose:

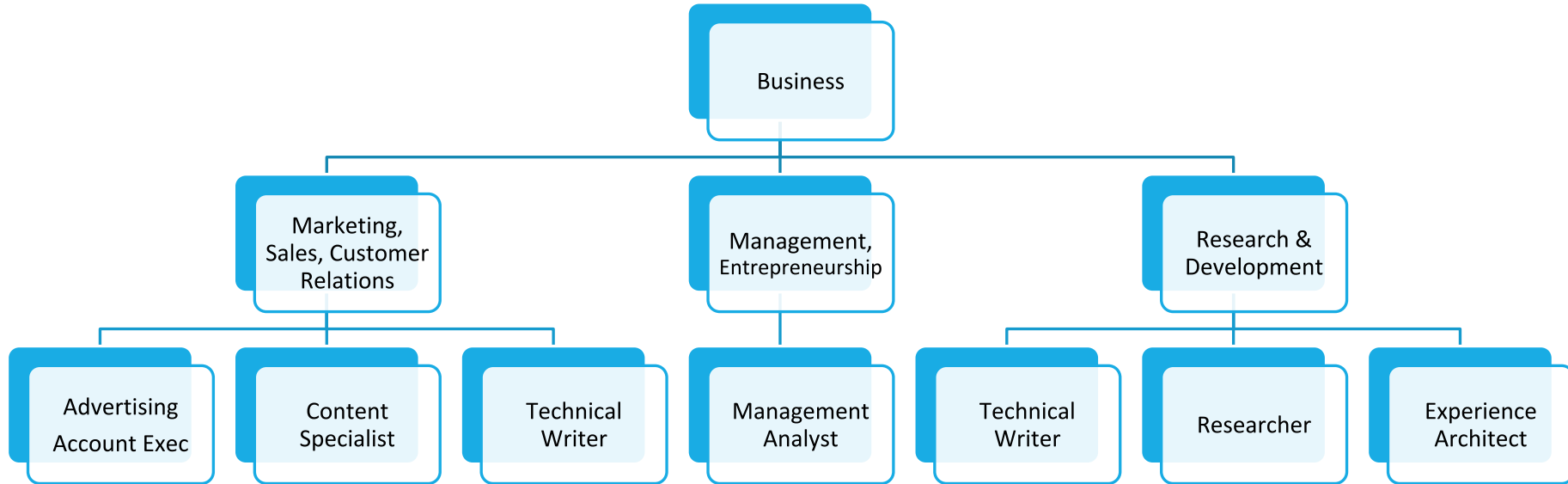
- ☐ Shared vision, understanding
- ☐ Brand the pathway approach at your college
- ☐ Illustrate how the whole is bigger than the sum of the parts
- ☐ Communication tool with stakeholders – particularly students
- ☐ Serves a roadmap for pathway development and implementation

- Elements of Successful Models:

- ☐ Developed with stakeholder engagement (including students)
- ☐ Level of detail is sufficient enough to tell the complete story (balancing act)
- ☐ Stands on its own, is easily understandable – self-explanatory to user/reader

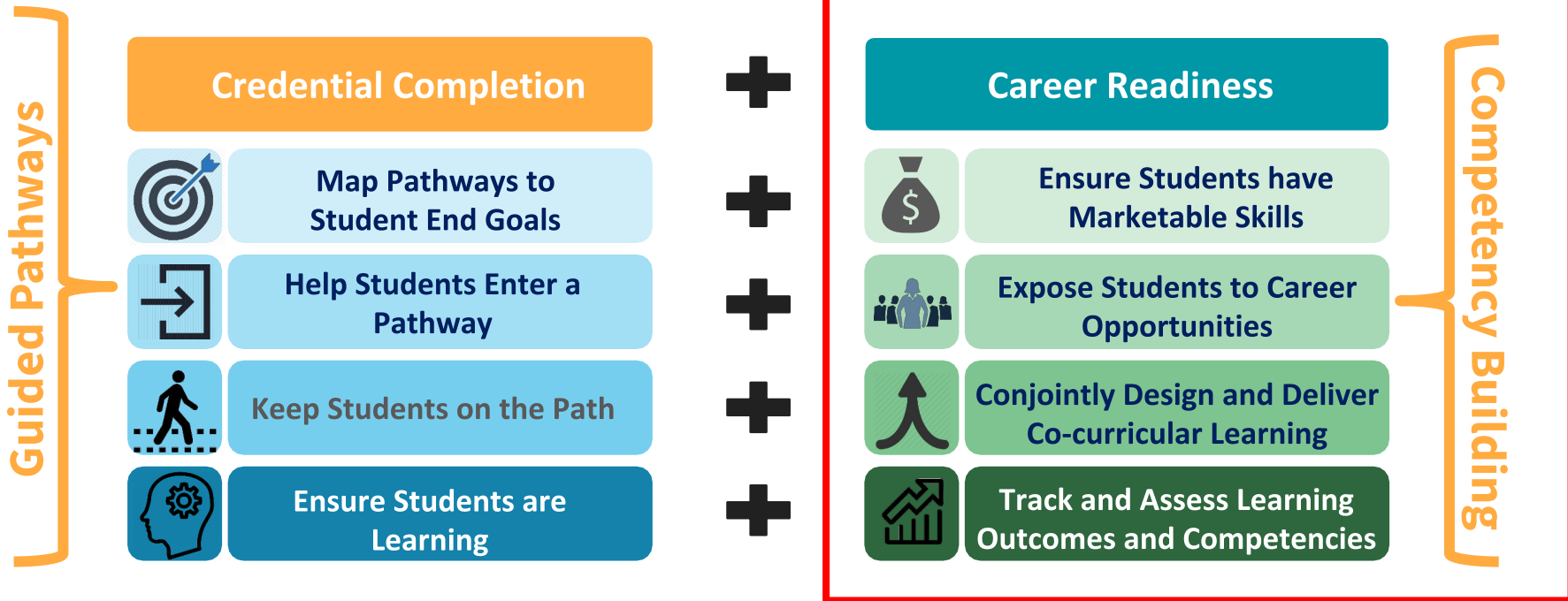
Provides context and insights as to what strategies, activities are core to the pathway(s)

Potential Pathway Framework



Ensuring Career Success:

Credential Completion through Guided Pathways **AND**
Career Readiness through Competency Building



Alternative Fuel/Hybrid Vehicles <ul style="list-style-type: none">Compressed natural gas (CNG) enginesLight duty hybrid electric vehicles		Specialty Competencies <ul style="list-style-type: none">Environmental Compliance<ul style="list-style-type: none">Environmental regulations and programsVehicle and device testingVehicle and device installation and servicing			
Occupation-Specific Technical Competencies					
Occupational Safety – Unique to Position <ul style="list-style-type: none">Occupational safety of specific occupation	Electro-Mechanical Calculations and Measurement <ul style="list-style-type: none">ComputationMeasurement and estimation	Light Truck, Med/Hvy Vehicle, Bus, and Rail Inspection, Preventative Maintenance, Diagnosis, Repair <ul style="list-style-type: none">EnginesElectrical/electronic systemsDrive train systemsSuspension and steering systemsBrake systemsHVAC systemsAuxiliary power systemsBody systems and special equipment		Service Workflow <ul style="list-style-type: none">Preparing vehicle for servicePreparing vehicle for return to operation/customer	
Industry-wide Competencies					
Working with Tools and Technology – Also a Common Employability Competency <ul style="list-style-type: none">Selects, uses, and maintains tools and technology to facilitate work activity^{CES}	Checking, Examining, and Recording <ul style="list-style-type: none">Completing formsMaintaining logs	Test-Taking <ul style="list-style-type: none">Able to pass required exams	Realistic View of Industry <ul style="list-style-type: none">Understands demands and nature of work in the industry	Vehicle Systems <ul style="list-style-type: none">Knowledge of vehicle systems, components, and parts	General Safety <ul style="list-style-type: none">General safetyPersonal and shop safety
Common Employability Competencies					
Personal Skills <ul style="list-style-type: none">Integrity^{CES}Initiative^{PACTS, CES}Dependability and reliability^{CES}Adaptability^{PACTS, CES}Professionalism^{CES}	People Skills <ul style="list-style-type: none">Teamwork^{CES}Communication^{CES}Respect^{CES}	Critical/Analytical Thinking <ul style="list-style-type: none">Critical/analytical thinking^{PACTS and CES (adapted)}	Workplace Skills <ul style="list-style-type: none">Planning and organizing^{CES}Problem solving^{CES}Decision making^{PACTS, CES}Business fundamentals^{CES}Service (customer) focus^{CES (adapted)}	Information Technology <ul style="list-style-type: none">See Information technology literacy and Internet and email competencies below	
Academic and Career Readiness Competencies					
Reading <ul style="list-style-type: none">Reading^{PACTS, CES}	Writing <ul style="list-style-type: none">Writing^{PACTS, CES}	Connecting Reading and Writing <ul style="list-style-type: none">Connecting reading to writing and thinking^{PACTS}	Listening and Speaking <ul style="list-style-type: none">Listening and speaking^{PACTS}	Mathematics <ul style="list-style-type: none">Mathematics^{PACTS, CES}	Information Technology and Information/Digital Literacy <ul style="list-style-type: none">Information technology literacy^{PACTS, CES}Internet and email^{PACTS, CES}Information literacy^{PACTS, CES}Digital literacy^{PACTS}Computer literacy for students taking online classes^{PACTS}
Foundational Competencies for College and Career Success					
Self-Efficacy for College and Career Success <ul style="list-style-type: none">Social and emotional intelligence^{PACTS}Self-regulation and time management^{PACTS}Interpersonal awareness and conflict management^{PACTS}Decision making^{PACTS, CES}	Awareness of Academic/Career Options <ul style="list-style-type: none">Investigative^{PACTS}Self-aware and self-reflective^{PACTS}	Academic and Career Goal Setting and Planning <ul style="list-style-type: none">Academic/career initiative^{PACTS, CES}Academic/career planning^{PACTS}Resource acquisition and management skills^{PACTS}Goal management^{PACTS}	Navigating and Accessing College/Community Resources <ul style="list-style-type: none">Awareness of resource needs^{PACTS}Accessing academic support resources at the college^{PACTS}Accessing resources in the community^{PACTS}		

LATTC Advanced Transportation And Manufacturing Pathway

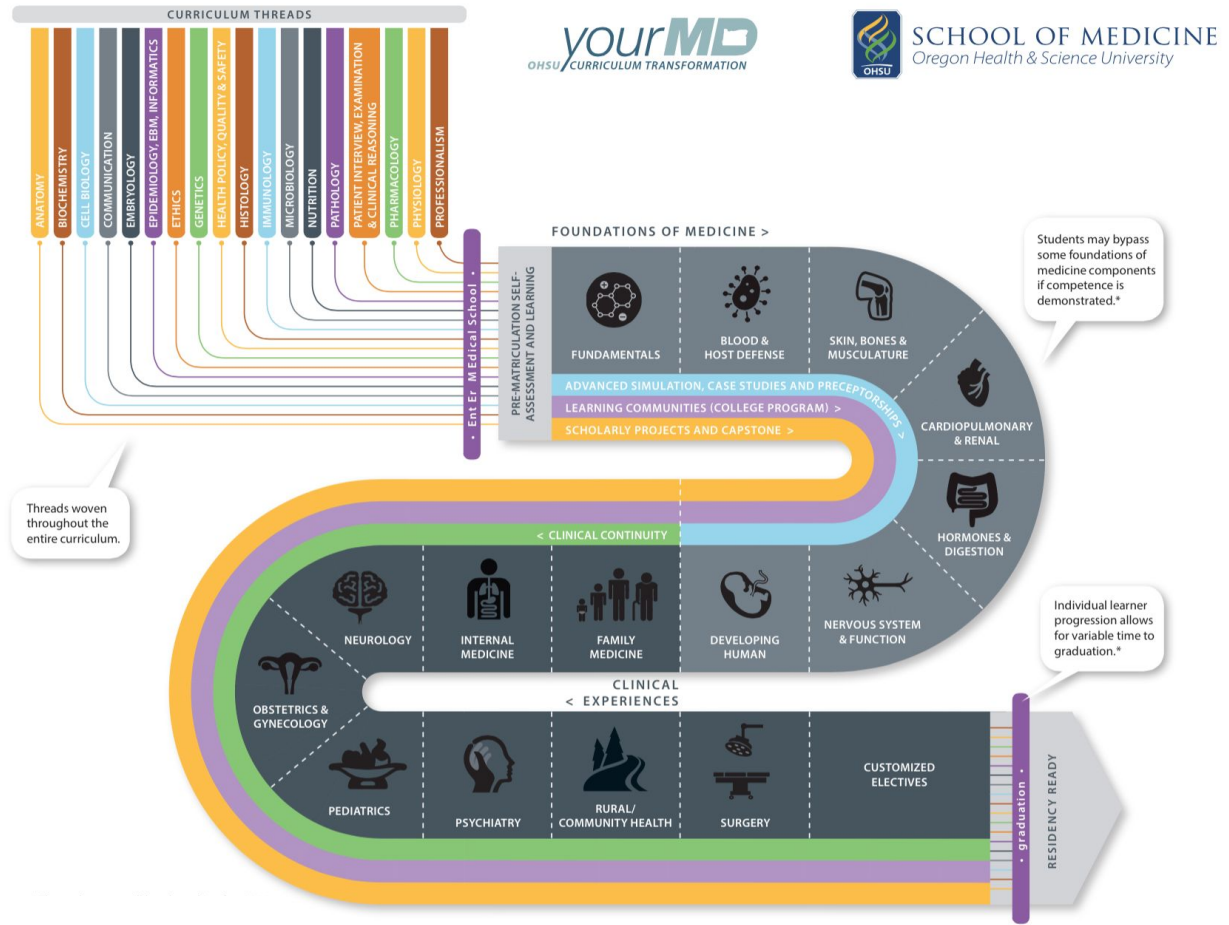
Diesel Technology Programs of Study Competency Model



- The complete competency model is available in the Toolbox. Refer to the LATTC Diesel Tech Program Competency Model document.

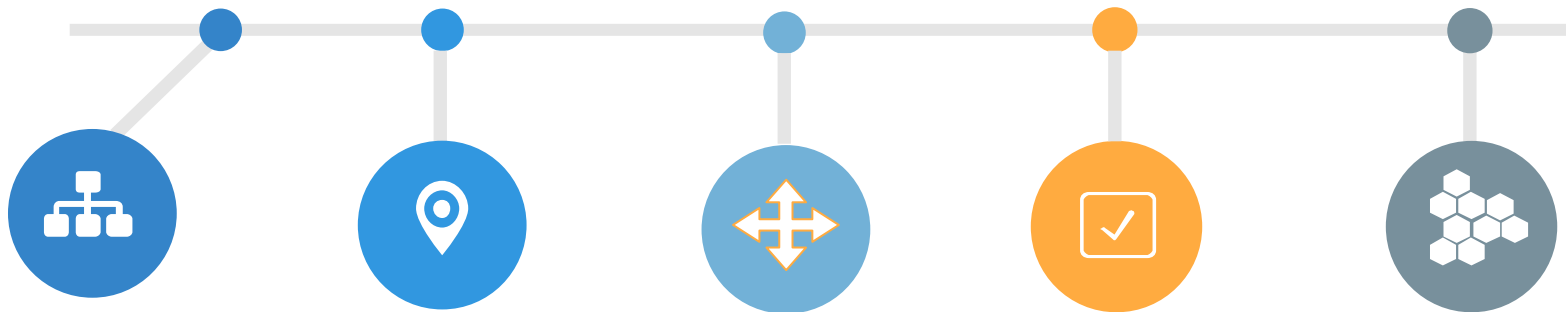
Pathways/ Competency Model Example

Source: Oregon Health & Science University, School of Medicine



- Competency model examples are available in the Toolbox. Refer to the Competencies and Competency Model Examples document.

Competency-Based Curriculum/ Program Development



Competency Model Framework

Competency model framework is used as foundation/reference point for pathway design

Curriculum Mapping

Compare existing curriculum to competency model framework – identify gaps and outlying content

Horizontal & Vertical Alignment

Horizontal alignment - competencies cross courses, disciplines, programs
Vertical alignment - competencies build upon pre-existing knowledge and/or prior competencies

Proficiency Milestones

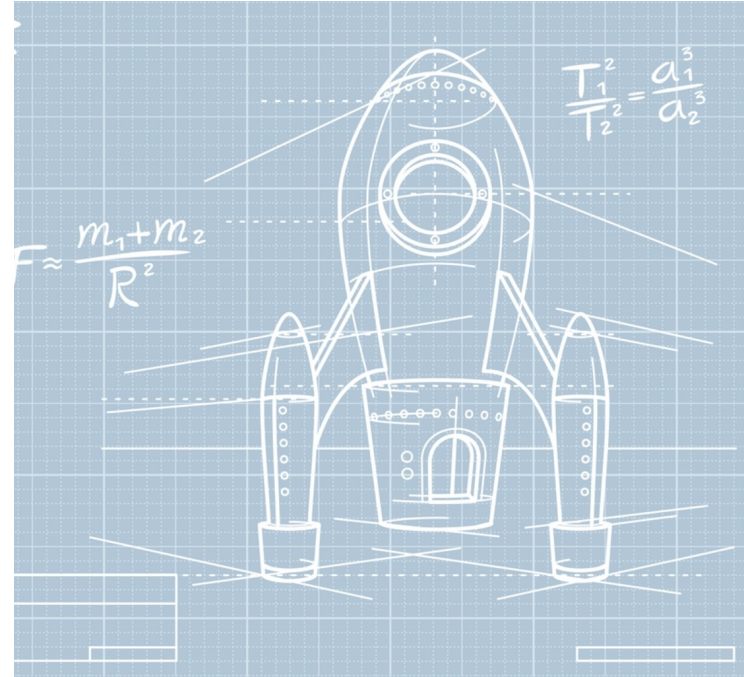
Identify at what point competency proficiencies are sufficient for employment in field of study

Stack & Lattice Courses/Programs

Occupational profiles, horizontal & vertical alignment and proficiency milestones are used to determine where to stack and lattice credentials

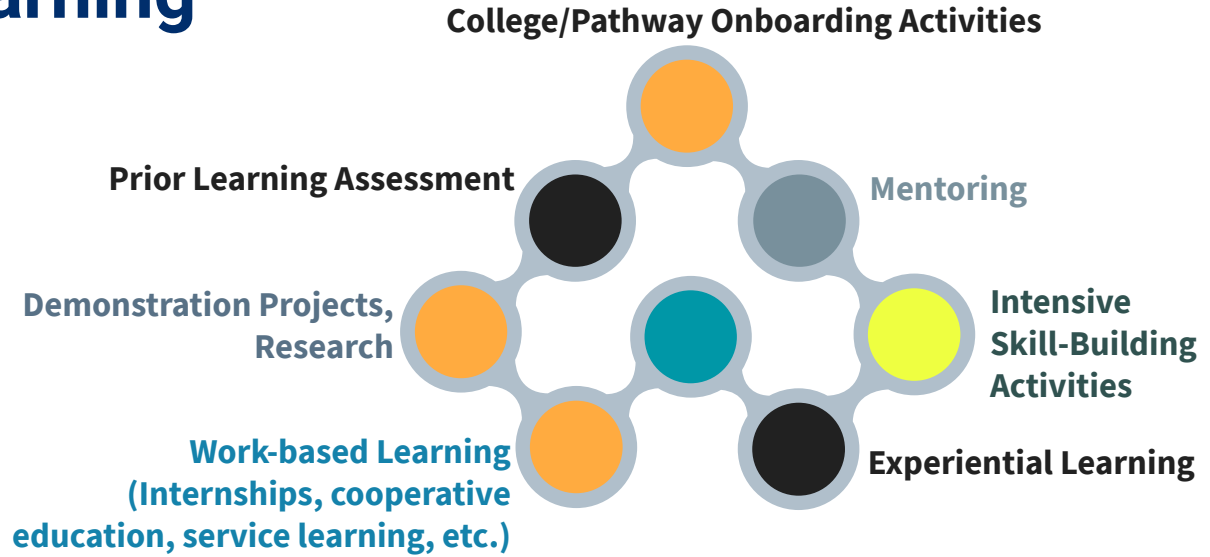
Design Principle

- Integrate co-curricular activities to expand students' competencies and career experiences



Co-Curricular Learning Activities

Co-curricular learning activities should be purposively designed and delivered con-jointly with course activities and included in academic/pathway maps and other materials provided to students. Learning outcomes resulting from co-curricular learning activities extend beyond academic and personal and also include 21st Century/Future competencies. Conditions for optimizing co-curricular learning should also utilized such as pre-activity student orientations, student learning agreements, student self-reflections, and planning/debrief meetings with students.



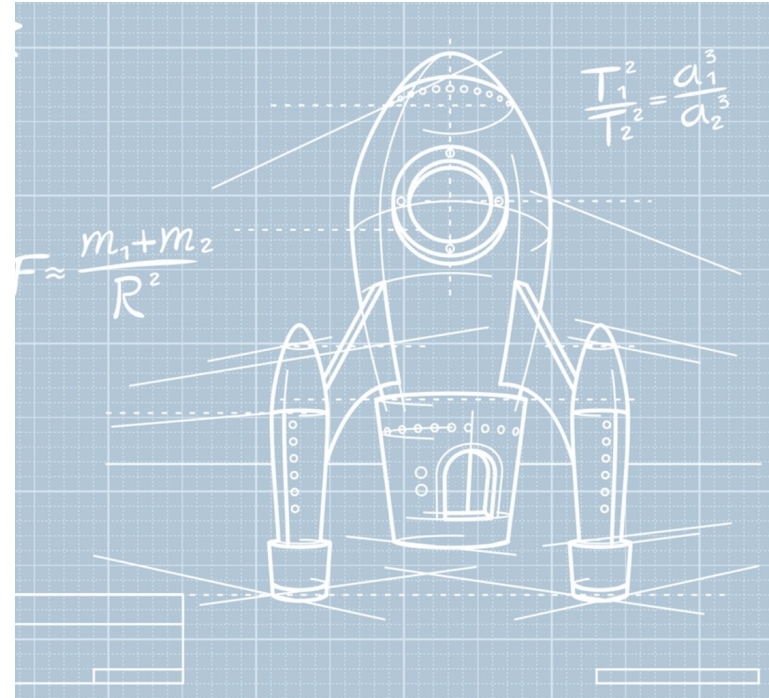
Note: co-curricular and curricular activities should be integrated to enhance student competency attainment but also to save student time and resources



- Tips and resources for co-curricular learning activities are available in the Toolbox.

Design Principle

- Backwards design starting **from students' end goals**



Design Pathways with End Goals in Mind

What a robust career-focused pathway looks like for the student



- LATTC's Diesel Tech student resume and cover letter is available in the Toolbox. Refer to the Resume and Cover Letter Example_DieselTech document.

KELLY BLACKWELL

Address Line 1 Address Line 2, City, State Zip |
(212) 256-1414 | kelly.blackwell@gmail.com

Energetic and passionate college student working towards a **BS in Marketing** at the University of Georgia. Gained expertise in data analysis, publication marketing, web-based advertising, and brand consulting. Aiming to use my knowledge of advertising, PR, product development, and consumer research strategies to satisfy the marketing internship at your company.

EDUCATION

University of Georgia, Athens, GA

Bachelor of Science in Marketing, Expected **Graduation June 2016**

- GPA: **3.8/4.0**
- Relevant Coursework - Marketing Analytics, Marketing Management, Survey Research, **Strategic Internet and Social Marketing**, and Integrated Marketing Communications
- Honors & Awards: Dean's List, Received third place in UGA's **business plan competition**
- Clubs: UGA Chapter of the American Marketing Association, Mu Kappa Tau
- Leadership: Vice President, UGA Chapter of the **Future Leaders Association**
- Semester Abroad: **Guangzhou and Beijing, China**

MARKETING EXPERIENCE

PET BUSINESS MARKETING CAMPAIGN

- Designed a cost-effective marketing campaign for a local pet grooming business that leveraged a combination social, email, and offline marketing techniques
- Surveyed pet owners in Athens to collect detailed data on the behavior of our target customer
- Developed a campaign budget of \$1,500 which we estimated to be the minimum cost that would yield the highest return on investment (ROI)
- Mined and analyzed four customer databases and user surveys to identify purchasing trends, and designed new sales and marketing strategies to target existing customers and develop new revenue streams

BUSINESS PLAN COMPETITION

- Entered UGA's business plan competition with a group of 4 classmates to build a mock food truck business
- Managed all of the marketing aspects of the business plan including industry analysis, customer trends, market growth, positioning, promotions, and social media presence
- Received 3rd place out of the 30 teams that entered the competition

ADDITIONAL SKILLS

- In-depth knowledge of **social media marketing platforms**: Twitter, Google+ Facebook, LinkedIn, Instagram, Pinterest
- Adept with **Microsoft Office Suite** and **social media platforms** including Facebook, LinkedIn, Twitter, Pinterest, and Instagram; and social media analytics tool such as Crimson Hexagon
- Chinese (Mandarin): Advanced**
- Familiar with consumer research tools **AYTM and GutCheck**
- Excellent organizational, oral, and written communications skills
- Self-motivated and works well independently

**Guided Pathway
Milestone**

**Curricular
Enhancements**

**Integrated,
Co-Curricular
Learning**

ACTIVITY:

What Will Your Students' Resume Look Like?



- This resume activity is available in the Toolbox. Refer to the Resume-Letter Exercise document.

YOUR STUDENTS' NAME

Energetic and passionate college student working towards a _____ degree.
Gained expertise in _____, Aiming to use my knowledge of _____ to _____ at your company.

EDUCATION

Your College Name Here

- Academic/Co-Curricular Milestone
- Academic/Co-Curricular Milestone
- Academic/Co-Curricular Milestone
- Academic/Co-Curricular Milestone
- Academic/Co-Curricular Milestone

EXPERIENCE

ADDITIONAL SKILLS

- In-depth knowledge of
- Adept with/ at
- Familiar with
-
-

Activity



Looking at the resume,
take a picture of the one thing
you think is essential
for implementing career-focused pathways at your
college.

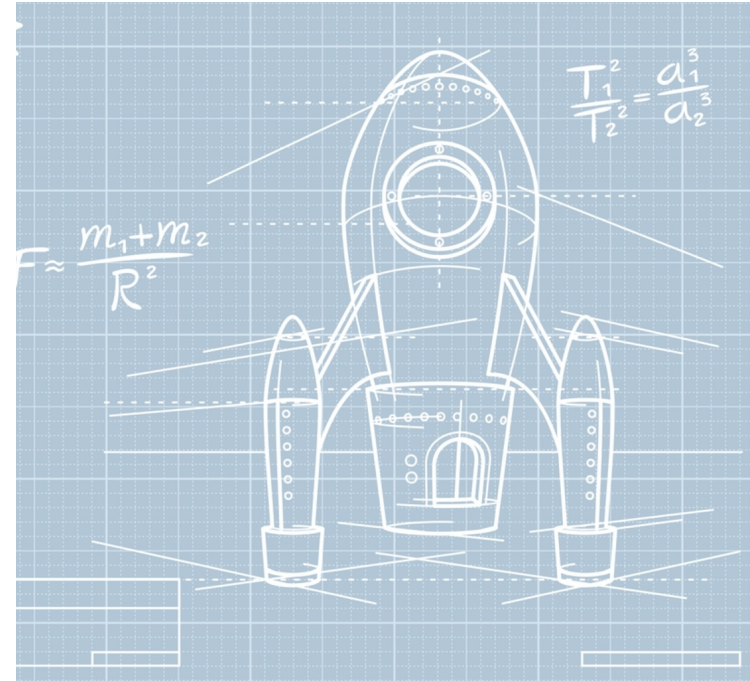
What are you aiming your camera at?

**What do you need to include in your pathway
model?**

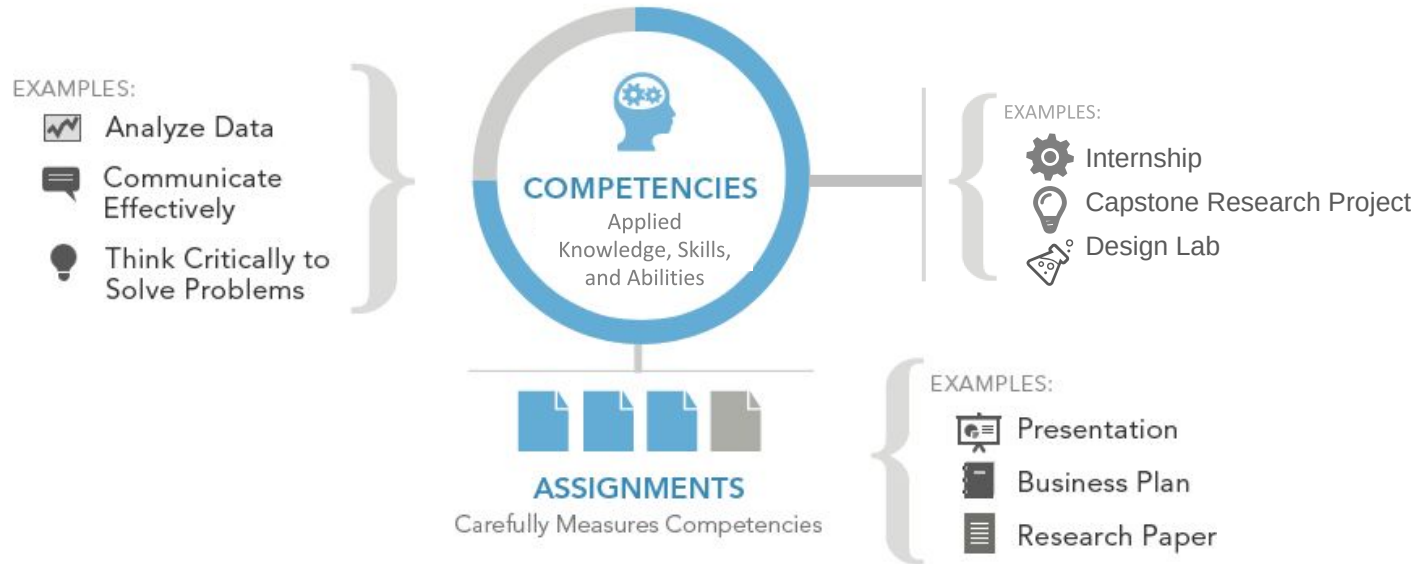
4 Build

Design Principle

- Design and implement an integrated approach

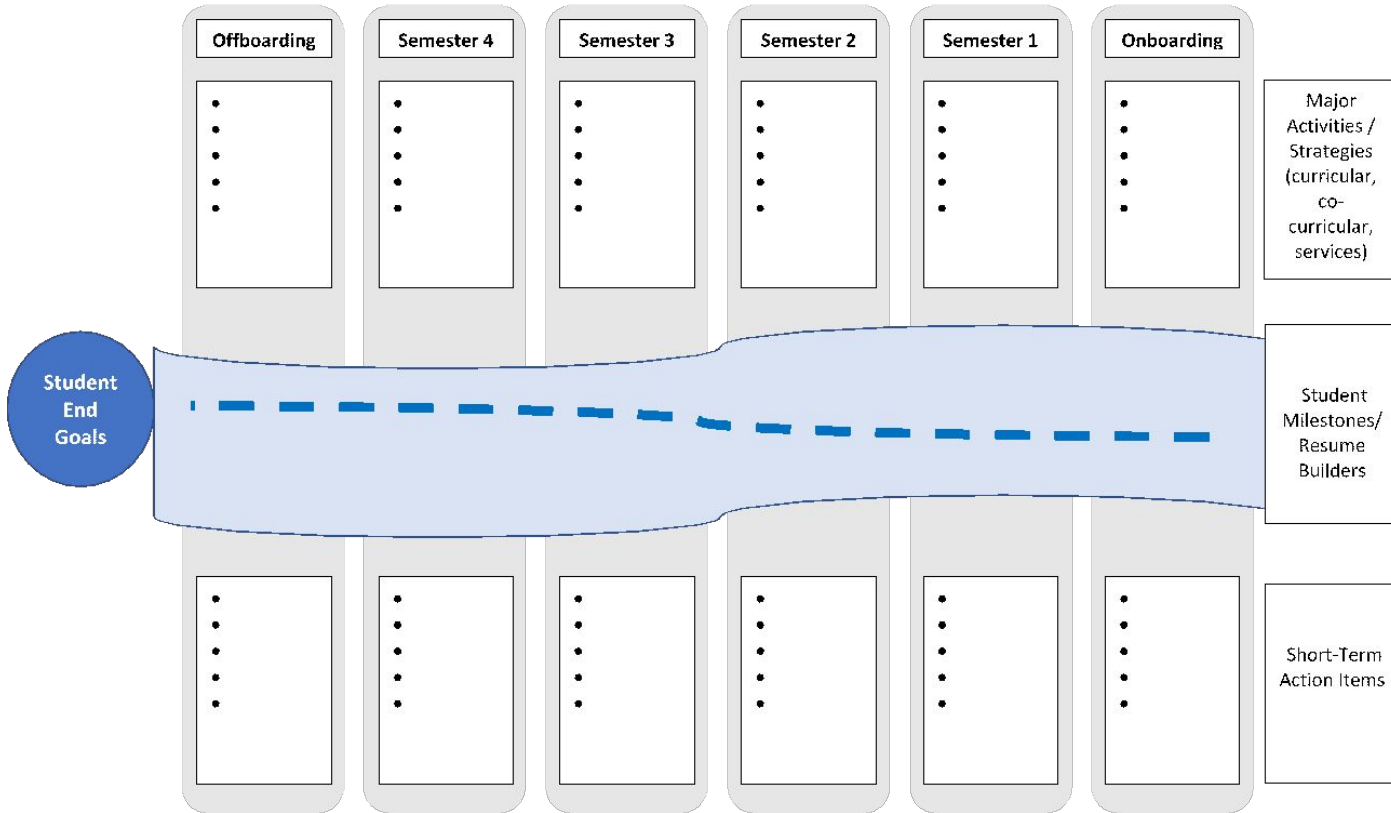


Curricular/Co-Curricular Learning Integration



Source: GradSkills Program, Competency-based Education Gets Its Own LMS & College Rankings. Online Learning Insights (Adapted). <https://onlinelearninginsights.wordpress.com/category/skills-for-students/>

Student Journey Mapping



- Journey mapping templates and instructions are available in the Toolbox.

How are you Guiding Students' on a Successful Journey?

2

Navigate

In what ways does the college help students navigate their pathway, minimizing time/credits to credential completion? How will their pathway be personalized to them?



1

Launch

How are students onboarded to immediately enter a program of study (aligned with informed career goals), know requirements for success, and have resources in place to complete their journey?



Course Correct

3

How are students continually monitored to provide pro-active feedback so they stay on course?

5

Success Formula

How are curriculum/co-curricular activities designed, integrated, delivered to ensure students graduate proficient in marketable and 21st Century competencies?



4

Solutions

How are solutions, including technology, incorporated to "systematize" and "innovate" pathway delivery?



8

Soar



How are students transitioned to careers... to their next step in their journey?

7

Boost



When students graduate, what does their resume reflect about their journey at your college? How does it differentiate them... help them stand out... give them a boost?



6

Work Ready/ Future Ready

In what ways are students engaged in career-related experiences that broaden, deepen competencies; including future work skills?



Questions
?????

Career-Focused Pathways Toolbox



[Link to Open the Toolbox](https://www.tinyurl.com/LATTCcareertoolbox)

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