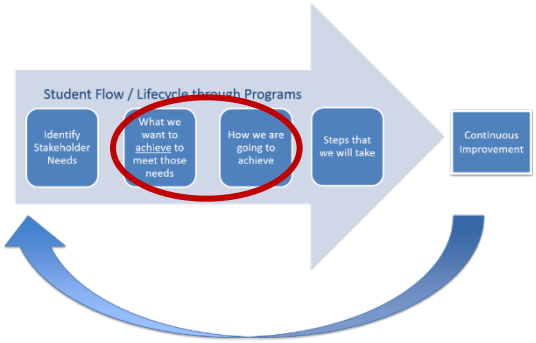
ETCS Strategic Planning Workshop

September 22, 2017

Facilitated by:
IPFW Center of Excellence in Systems Engineering
ETCS Strategic Planning Steering Committee Members



Exercise #4: Developing, Communicating and Implementing ETCS College Initiatives in the Context of Student Flow through Programs and Administrative Processes	
Goal	Relate the steps and needs from student flow to the sub-initiatives and define the work that must be done.
Description	Participants visited all or as many of the sub-initiatives they'd like to contribute to or learn more about, referencing any of the flows developed during Exercise #2. Then, teams formed around each sub-initiative to define the work in terms of Functional Requirements (FRs) and Physical Solutions (PSs).
Steps	
1	For each sub-initiative, identify and re-write the program flow steps that apply to each one, using an **orange** post-it note.
2	Identify the student needs that apply to each program flow step from item 1 above, using a **magenta** post-it note to document each need.
3	Teams are formed by individuals choosing which sub-initiative they would like to contribute to or learn more about.
4	Teams decide which needs are required for the sub-initiative to be successful.
5	Using **green** post-it notes, teams convert each need into a requirement that the college must achieve, i.e. "WHAT must ETCS accomplish?" Example: • **Need** - Information and direction on majors for students • **Requirement** - Ensure that students have the information they need to be successful We will call these specific types of requirements: **Functional Requirements** (FRs) and they should be stated as verbs.

6	Teams decide "HOW do we propose to achieve the FR?" and document each one on a **yellow** post-it note. This is a **Physical Solution** (or PS), which is really a hypothesis to achieve a functional requirement. Example: • **Functional Requirement (FR)** - Ensure that students have the information they need to be successful • **Physical Solution (PS)** - *One hour introductory session for new students by dept. chairs* A PS is the thing we choose, through collective agreement, to implement, which could be a tool, a policy, a process, a program, a unit, etc., and is always a noun. There are 3 types of PSs: • Improvement to the current work/PS • Expansion of the current work/PS • Development of a new PS
7	Teams classify each PS as a solution that can be implemented in the short-term (this semester), medium-term, or long-term.
Key Learning Points	
Key Points	• When a large number of program flow steps are influenced by a sub-initiative, this indicates that a sub-initiative is a priority. • Understanding flow provides an opportunity to identify other sub-initiatives that may be important that we have not identified. • The FR starts with a verb, it defines *what* we want to accomplish. • Physical Solutions should always be stated as nouns and define *how* we will achieve the FR. • Doing the sub-initiative only does not ensure that we meet student needs as it relates to the flow.

LESSONS LEARNED

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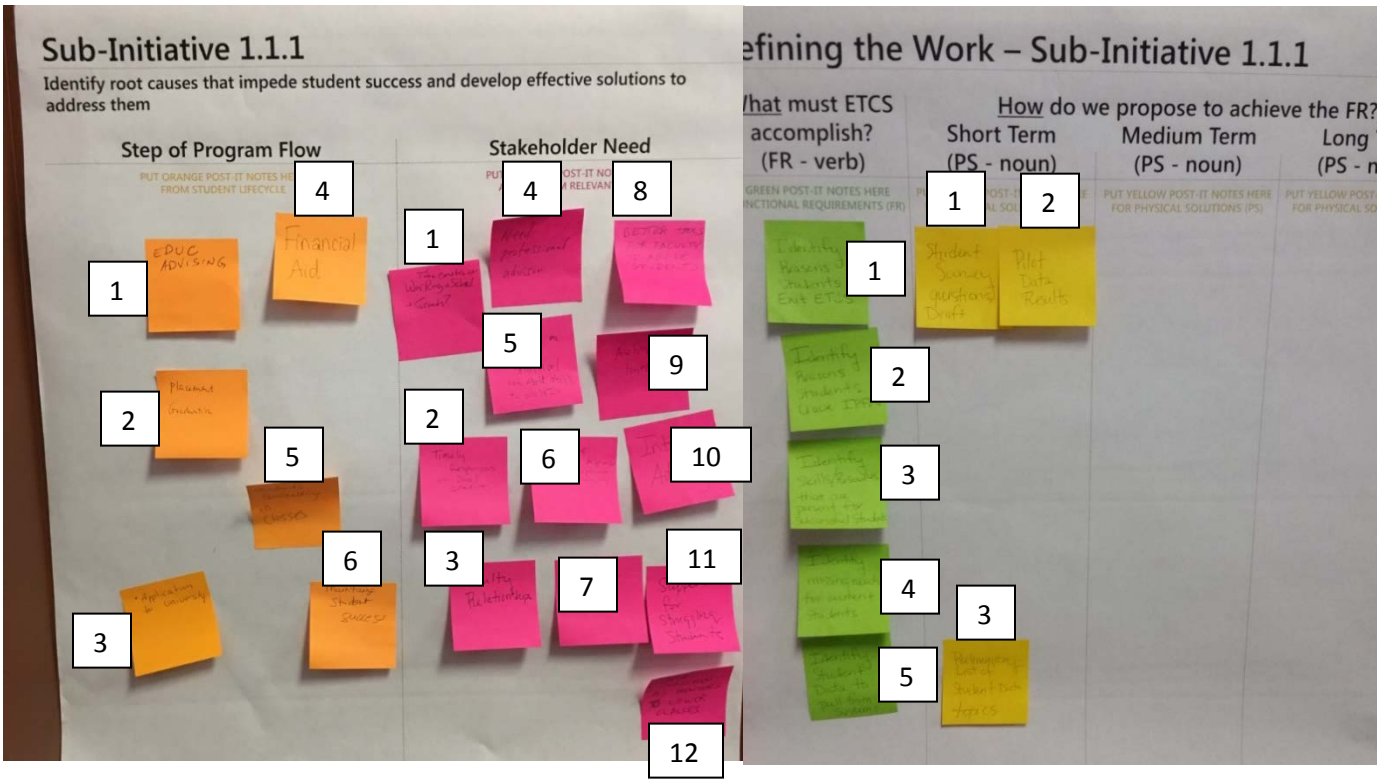
1.1.1 Sub-Initiative and Defining the Work

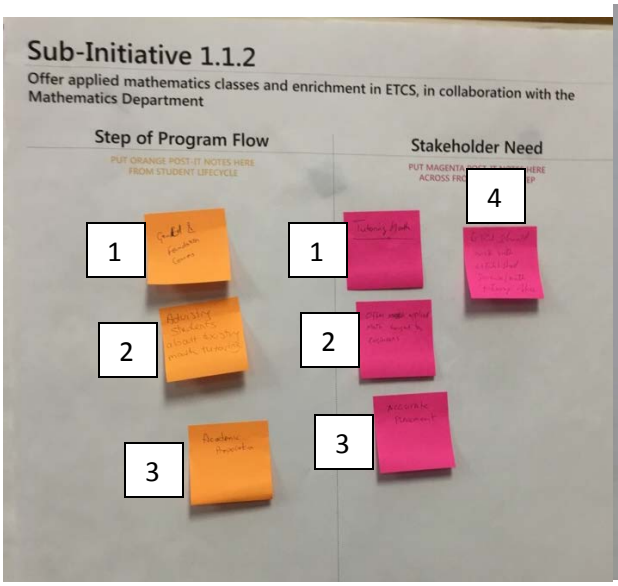


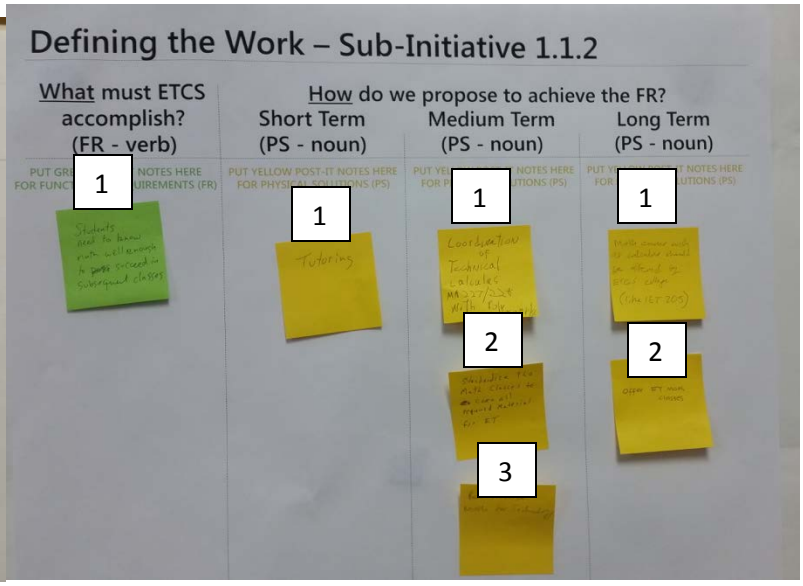
Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	Educ. Advising	Time constraint working + school grants?	Identify reasons students leave ETCS	Students survey questions draft		
2	Placement Graduation	Timely responses on dual credit	Identify reasons students leave IPFW	Pilot data results		
3	Application to university	Faculty relationships	Identify skills/resources that are present for successful students	Preliminary list of student data topics		
4	Financial Aid	Need professional advisor	Identify missing needs for current students			
5	Students succeeding in classes	Better data collection/and ability to analyze	Identify student data to pull from systems			
6	Maintaining student success	Ease and timely response of acceptance to university				
7		Mentoring				
8		Better tools for				

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
		faculty to advise students				
9		Ability to think				
10		Intrusive advising				
11		Support for struggling students				
12		Upper classmen as mentors to lower classes				

1.1.2 Sub-Initiative and Defining the Work

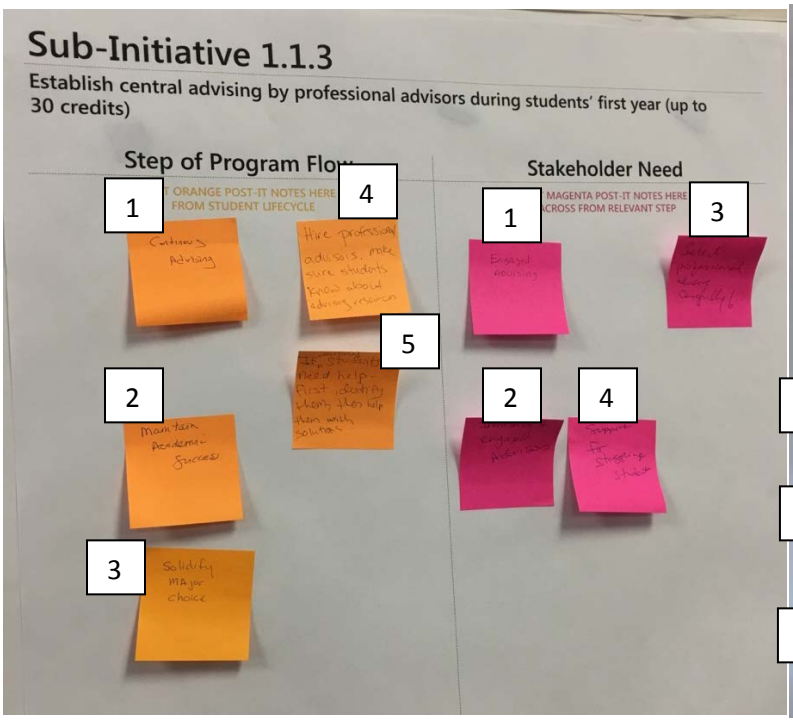


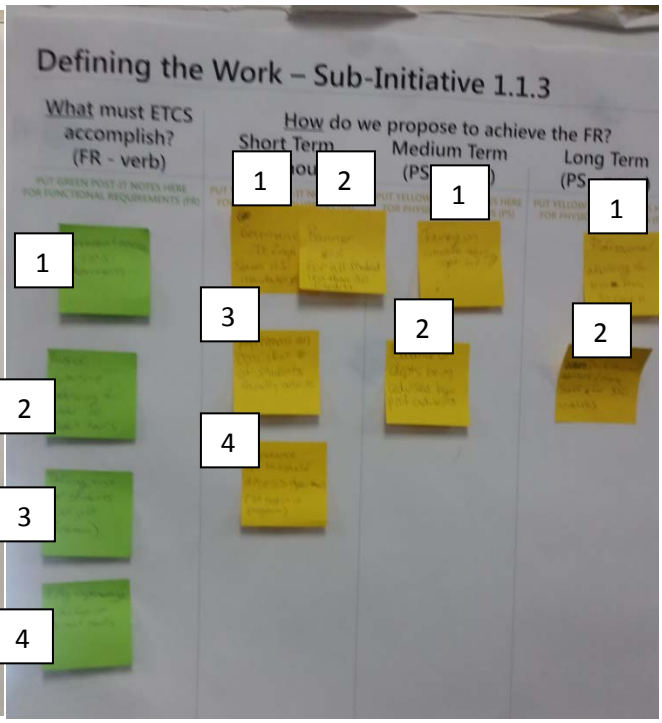


Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	Gen. Ed. And foundation courses	Tutoring math	Students need to know math well enough to succeed subsequent classes	Tutoring	Coordination of technical calculus MA227/228 with poly examples	Math courses such as calculus should be offered by ETCS college (like IET205)
2	Advising students about existing math tutoring	Offer applied math taught by Engineers			Standardize the math classes to cover all required material for ET	Offer ET math classes
3	Academic preparation	Accurate placement			Reintroduce math for technology	
4		ETCS should mark with established science/math tutoring office				

1.1.3 Sub-Initiative and Defining the Work



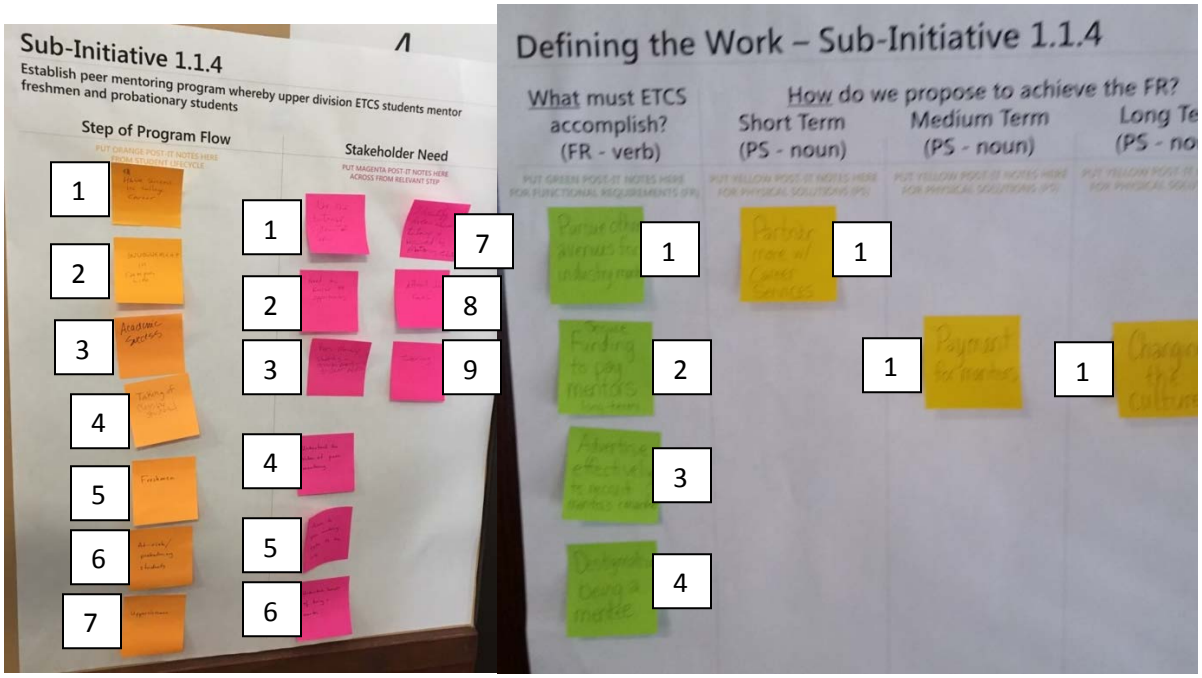


Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	Continuous Advising	Engaged advising	Agreement across all ETCS departments	Governance – Dr. Zoghi states its mandatory	Training on intrusive advising –opt-it?	Professional advising for less than 30 credits
2	Maintain academic status	Intrusive + engaged advisors	Practice intrusive advising for under 30 credit hours	Banner hold for all students less than 30 credits	Balance of departments being advised by professional advisors	Hiring more professional advisors/more staff for SSC initiatives
3	Solidify major choice	Support for struggling students	Defining first year students (not just freshmen)	Agreement on consistent number of student's faculty advise		
4	Hire professional advisors. Make sure students know about advising resources	Select professional advisors carefully!	Fully implementing my blueprint to meet needs	Agreeance on threshold across departments (30 credits in program)		
5	If international students need help – first identify them, then help them with					

	solutions					

1.1.4 Sub-Initiative and Defining the Work

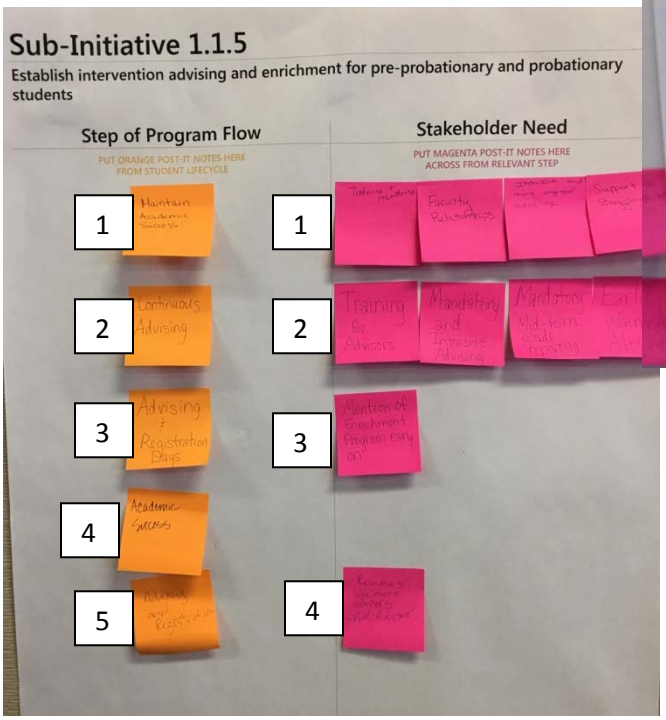


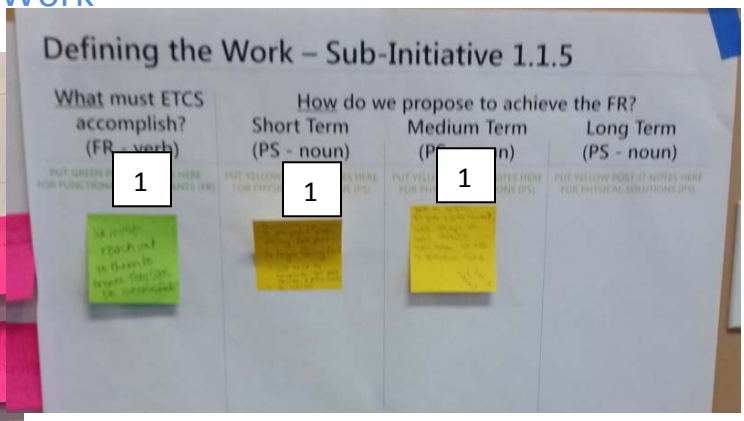
Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	Have success in college career	Use the tuition system at IPFW	Pursue other avenues for industry mentors	Partner more with career services		
2	Involvement in campus life	Need to know of opportunities	Secure funding to pay mentors long-term		Payment for mentors	Changing the culture
3	Academic success	Peers-money, students- enough mentors to cover needs	Advertise effectively to recruit mentors/mentees			
4	Taking of class by student	Understand the value of peer mentoring	Destigmatize being a mentee			
5	Freshmen	Access to peer mentoring before it's too late				
6	At-risk/ probationary students	Understand benefit of being a mentor				
7	Upperclassmen	Identify angles where tutoring is required by probationary students				
8		Attend job fairs				

9		Tutoring				

1.1.5 Sub-Initiative and Defining the Work



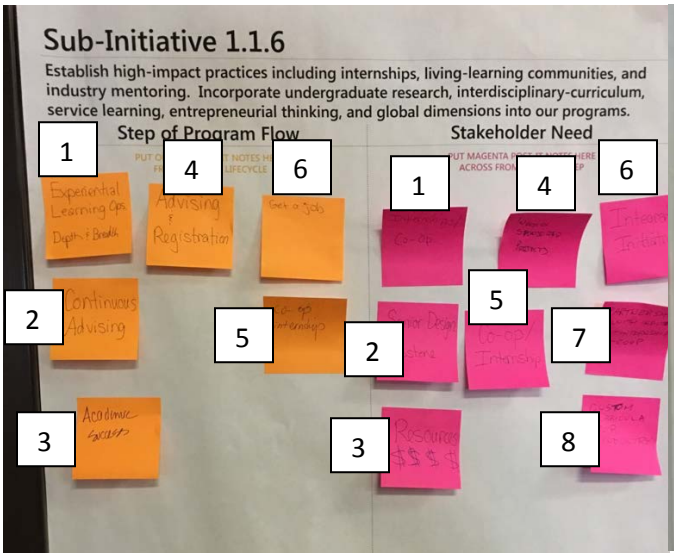


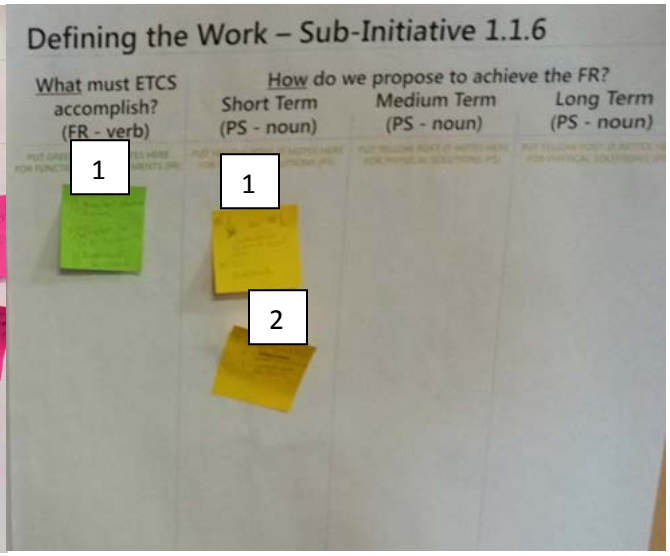
Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	Maintain academic success	- Tutoring and mentoring - Faculty relationships - Intrusive and more engaged advising - Support for struggling students	We must reach out to them to ensure they can be successful	Communicate requirements for pre-prob. +prob. during Fall 2017 to begin Spring 2018 -will need to complete SST prob. course + place holds -see advisor	Holds on all ETCS pre-prob. +prob. students; hold stays on until students have taken at-risk or probation course. SPR.18 to implement	
2	Continuous advising	- Training for advisors - Mandatory and intrusive advising - Mandatory Mid-term grade reporting - Early warning alerts				
3	Advising & Registration Days	Mention of enrichment program early on				
4	Academic					

	success					
5	Advising and registration	- Resources like more advisors - Prof. Advisor				

1.1.6 Sub-Initiative and Defining the Work



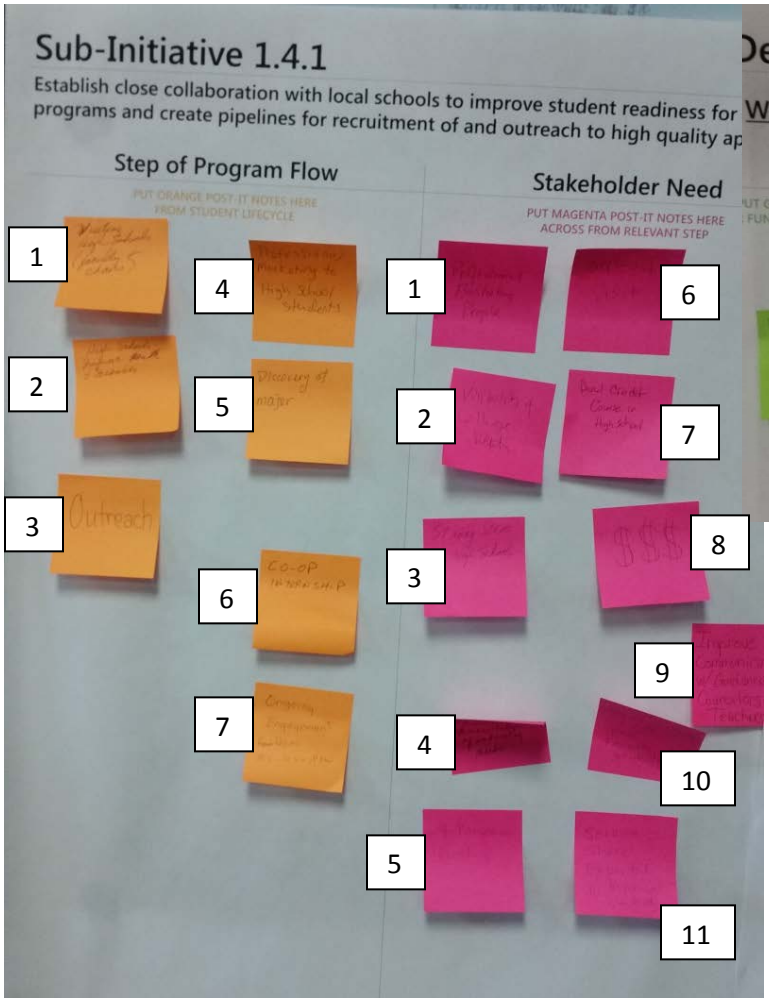


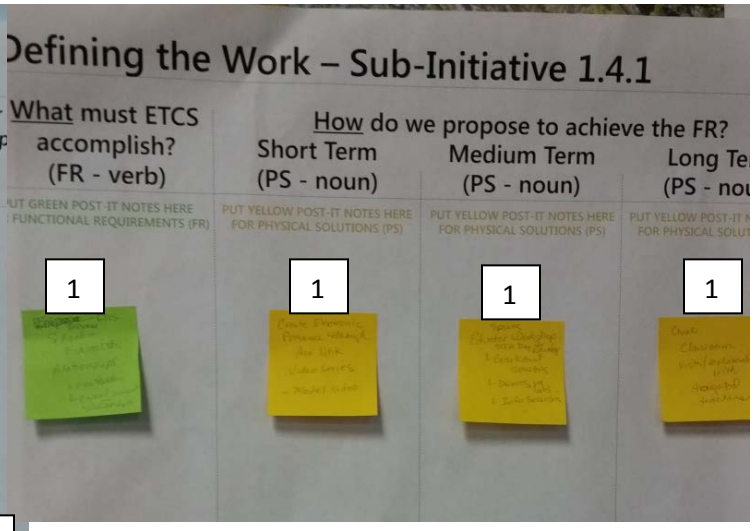
Transcription

#	Steps	Stakeholder Need	FR	Short Term PS
1	Experiential Learning Ops. Depth & Breadth	Internships/co-ops Senior Design Capstone	Internship 1. easy for students to access 2. Easy for employer to find students 3. Feedback to depart.	FR2. See FR1, Centralized location to send jobs FR3.) Feedback
2	Continuous Advising	Integrated initiatives		FR.1- Co-op office 2. better communication 3. centralized job board
3	Academic Success	Resources $$$$		
4	Advising & Registration			
5	Get a job	Co-op/Internship		
6	Co-op internship	Industry sponsored projects		
7		Partnership with industry -internship -co-op		

8		Custom curricula for industry		

1.4.1 Sub-Initiative and Defining the Work



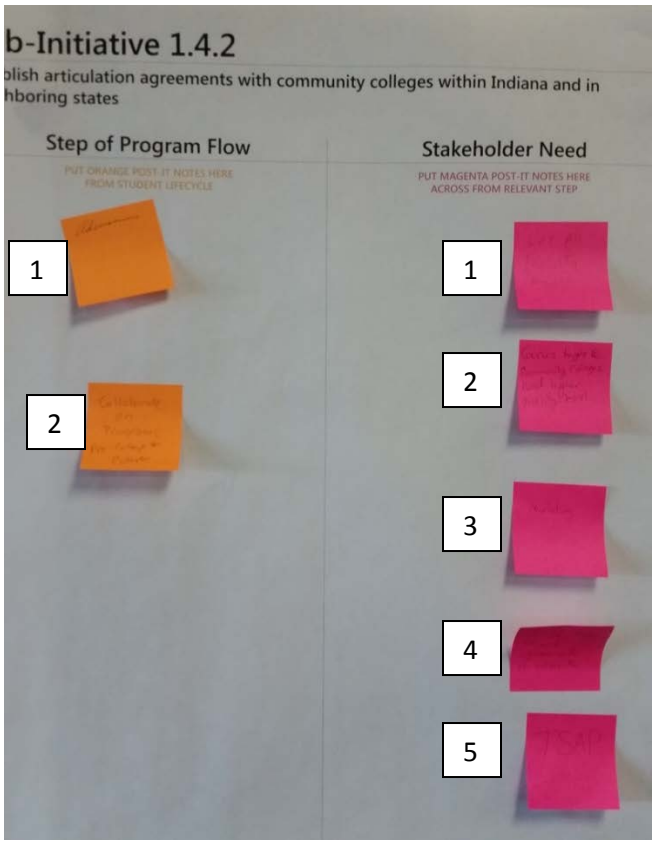


Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	Visiting high schools (faculty + chairs)	Professional marketing people	Increase ETCS school - education relationships- more teaching- expand current relationships	Create electronic presence through Ace link video series -model video	Spring educator workshop STEM day for Educators	Create classroom visits/collaboration with targeted teachers
2	High schools – improve math and science	Visibility + College Dept.			Cont. Demo labs, Info sessions	
3	Outreach	Strong Stem in high school				
4	Professional	Faculty knowing				

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
	marketing to high school students	knowledge of industry needs				
5	Discovery of major	$ Program funding				
6	Co-op internship	On-site visit				
7	Ongoing engagement	Dual credit in high school				
8		$$$				
9		Improve communication w/ guidance counselors & teachers				
10		Interaction with ETCS faculty students				
11		Service – share expertise with pre-college students				

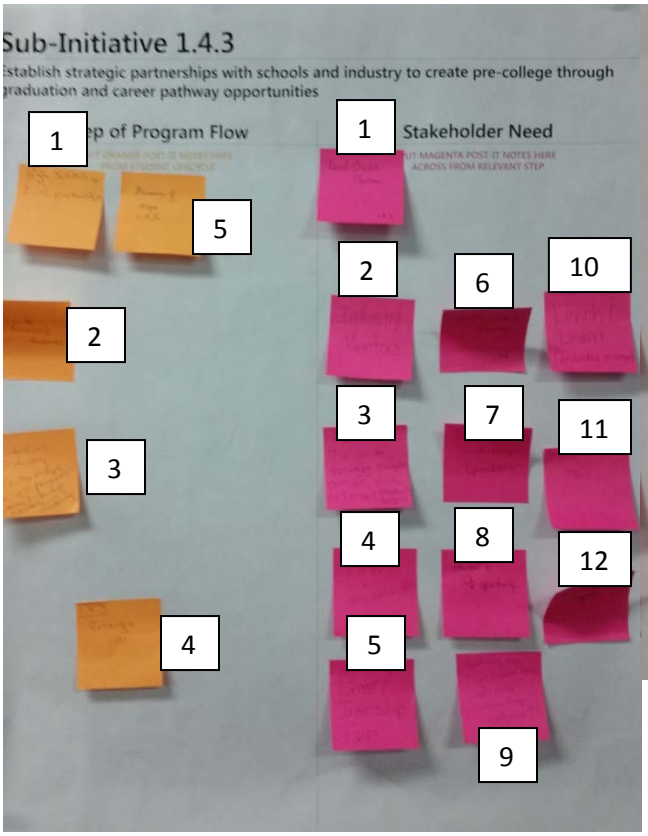
1.4.2 Sub-Initiative

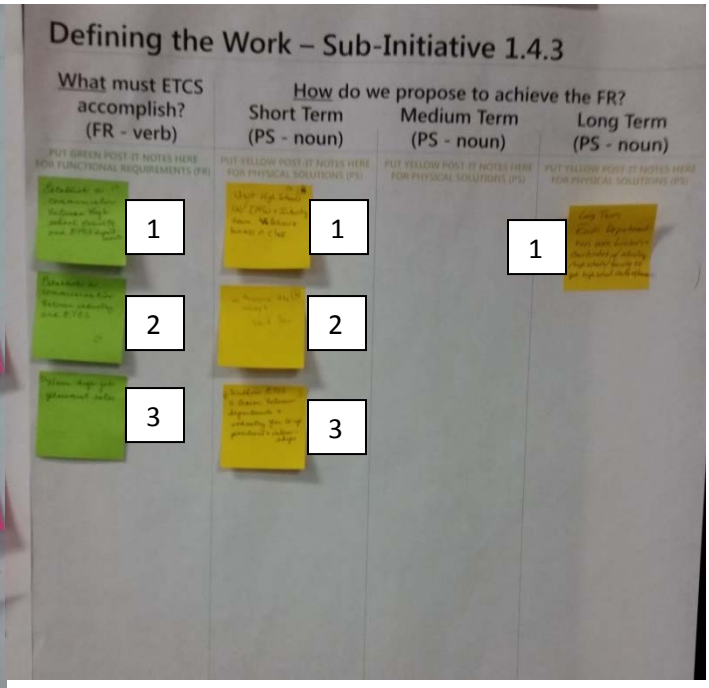


NOTE: No members of this team, work not yet defined

#	Steps	Stakeholder Need
1	Admissions	Let all faculty know
2	Collaborate on programs, Pre-college and college	Courses taught @ community colleges need higher quality level
3		Marketing
4		Keep most relevant agreements on website
5		TSAP

1.4.3 Sub-Initiative and Defining the Work





Transcription:

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
1	High schools or k-12 partnerships	Dual credit course	Establish a communication between high school faculty and ETCS departments	Visit High schools w/ IPFW + Industry team. Professor +business in class		Each department has own liaison-> coordinates w/industry/high schools/faculty to get high school visits w/ teams
2	Provide necessary resources	Industry mentors	Establish a communication between industry and ETCS	Announce the concept		
3	Establish industry partnerships in all programs – outreach, student	Departments tie in to existing campus offices , such as co-op & student success	Have high job placement rates	Within ETCS a liaison between departments + industry for		

#	Steps	Stakeholder Need	FR	Short Term PS	Med. Term PS	Long Term PS
	volunteers, success mentoring			co-op positions +internships		
4	Getting a job	Co-ops + internships				
5	Discovery of major	Career/internship fairs				
6		Onsite visits & projects				
7		Invite industry speakers				
8		Access to job opportunity				
9		Industry reps- -on committees -advising – connecting with faculty				
10		Lunch & Learn, Industry on campus				
11		Plant Tour				
12		Eligibility requirements				