An Asset Approach to Broadening Participation: Tips and Tools for Strategic Planning

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Dr. Adrienne Smith is a social scientist by training and an evaluator in practice with over ten years of experience leading evaluations in the areas of STEM education, collective impact, and teacher preparation. Adrienne started her evaluation career at top evaluation and policy organizations in North Carolina (Horizon Research and the Education Policy Initiative at Carolina) before founding Cynosure Consulting. Adrienne's commitment to high-quality evaluation is born out of a personal desire to broaden participation of women and other underrepresented students, including students in rural areas and those who learn differently, in STEM education from pre-K through graduate studies. Her current work focuses on supporting and evaluating the construction of collaborative communities and building evaluation capacity within organizations and large-scale programs. In all efforts Adrienne works to (a) truly understand the purpose and needs for the evaluation or research undertaking, (b) develop feedback cycles that support continuous program improvement, (c) make implementation and impact data available and interpretable for program implementers, and (d) select the most rigorous, yet feasible analytic designs that are tailored to the unique needs of each program context. She has published in scholarly and practitioner-focused journals on topics including evaluation design, instrument validation, and the effectiveness of policy change. After graduating from the University of North Carolina at Chapel Hill with a B.S. in Psychology Adrienne completed a Masters of Education in Curriculum and Instruction at UNC Greensboro. She taught third grade before returning to UNC Chapel Hill to complete a PhD in Education. In addition to her evaluation work Adrienne has worked on multiple research projects, taught doctoral- level research methods and statistic courses, and mentored undergraduate and graduate students.

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AN ASSET APPROACH TO BROADENING PARTICIPATION

TIPS AND TOOLS FOR STRATEGIC PLANNING

ADRIENNE SMITH & REBECCA ZULLI LOWE

INTRODUCTION

- All too often when thinking about recruiting, supporting, and retaining diverse students in our STEM majors and programs, the situation is approached from a **deficit mindset**; that is, one that focuses on what students or environments lack that must be remedied.

- In our work supporting STEM departments with their broadening participation efforts, we focus on fostering an **asset-minded approach to strategic planning**.

- This approach is grounded in the rich framework of **asset mapping** that is widely used in community development efforts.

Our presentation will provide an overview of asset mapping and the asset-based mindset as a foundation for promoting significant and sustainable improvements in the recruitment, retention, and development of underrepresented students in STEM undergraduate programs.

ASSET MAPPING IS RELEVANT ACROSS STEM UNDERGRADUATE SETTINGS

We are deliberately broad in our description of the appeal of asset mapping because we see it's relevance across multiple higher education setting

- Research 1 institutions or departments
- Teaching colleges
- Community colleges
- Technical colleges

All face problems of recruitment and retention of women and racial/ethnic minorities.

ASSET VS. DEFICIT MINDSET

Assets vs Deficits

Assets thinking

- Strengths based
- How can we create community spirit?
- What can I do?
- We're all in this together
- We're getting there
- Work with engaged people
- People have the answers
- People control their lives

Deficit thinking

- Problem orientated
- How to fix this problem?
- Someone needs to sort this out
- Us versus them
- Problems are embedded
- Do things to people
- People are a problem
- People can't be trusted to decide/be in control

TAKING OWNERSHIP OF ASSET IDENTIFICATION WITHIN HIGHER ED

- STEM faculty often blame **external factors** (society, high school instructors) for the lack of diversity in STEM.

- By taking the time to inventory assets, STEM departments will be able to **identify action steps** and take **greater responsibility** for broadening participation in STEM.

- This can serve as a wonderful **beginning to a larger cultural shift**. The skills and exercises developed through the use of an asset mindset in relation to the intuitional environment may provide the groundwork for identifying and leveraging assets within underrepresented students.

ASSET MAPPING

A TOOL FOR STRATEGIC PLANNING AND SHIFTING MINDSETS

Asset mapping is a process of documenting the people and resources available within a community that support or enhance a specific goal.

Asset mapping emerged from **community development**, but there are applications for universities and departments to help them take better advantage of their own institutional context.

Once inventories and depicted on a map, you can
1. Make assets more accessible to students and faculty
2. Strategically collaborate with and utilize assets
3. Target resources to avoid redundancy
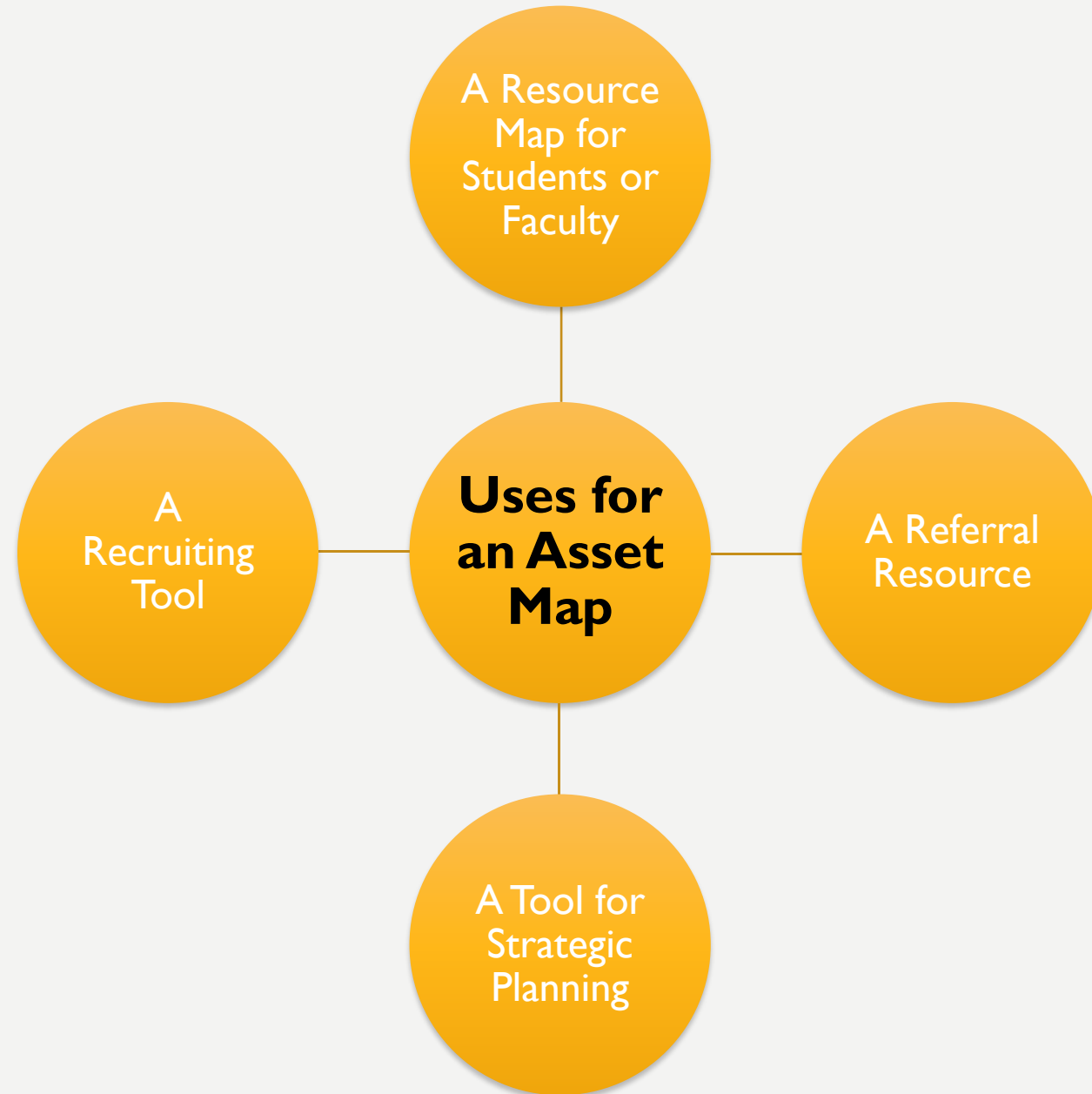
SO WHAT ARE ASSETS FOR RECRUITING AND RETENTION?

ADOPTING THE LENS OF A STUDENT

Let's take a moment and put ourselves in the perspective of a female or otherwise underrepresented student in STEM.
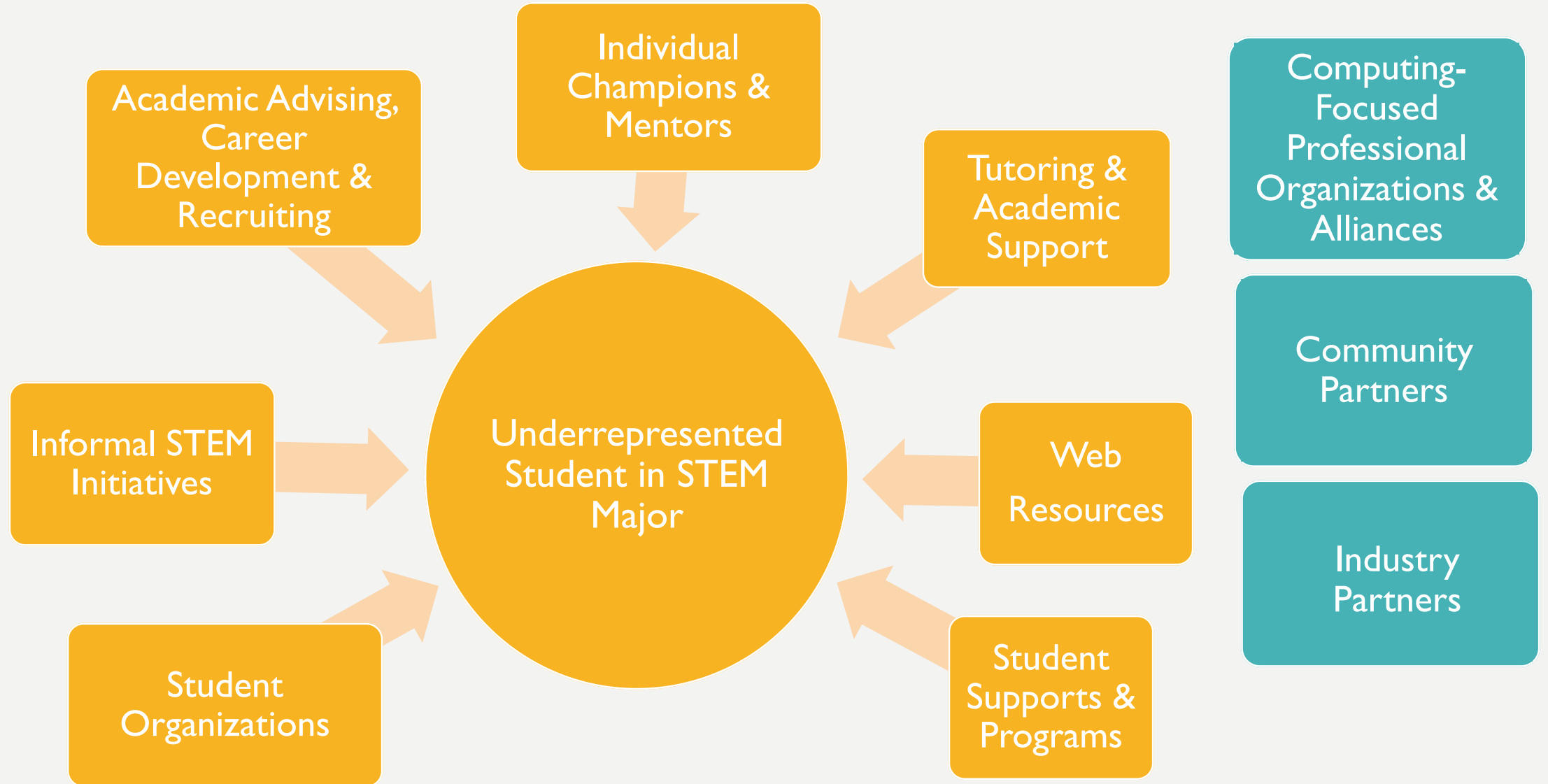
- Think about your campus community.
- What services, activities, programs, and resources you would want this student to know about?

IDENTIFYING BROAD ASSET CATEGORIES

Let's take a moment and think about the categories of assets that may exist. Identifying categories is helpful:

1. As a starting point for thinking about available resources to include in an asset map
2. In creating a comprehensive map of available assets
3. In promoting a broad lens when looking for assets
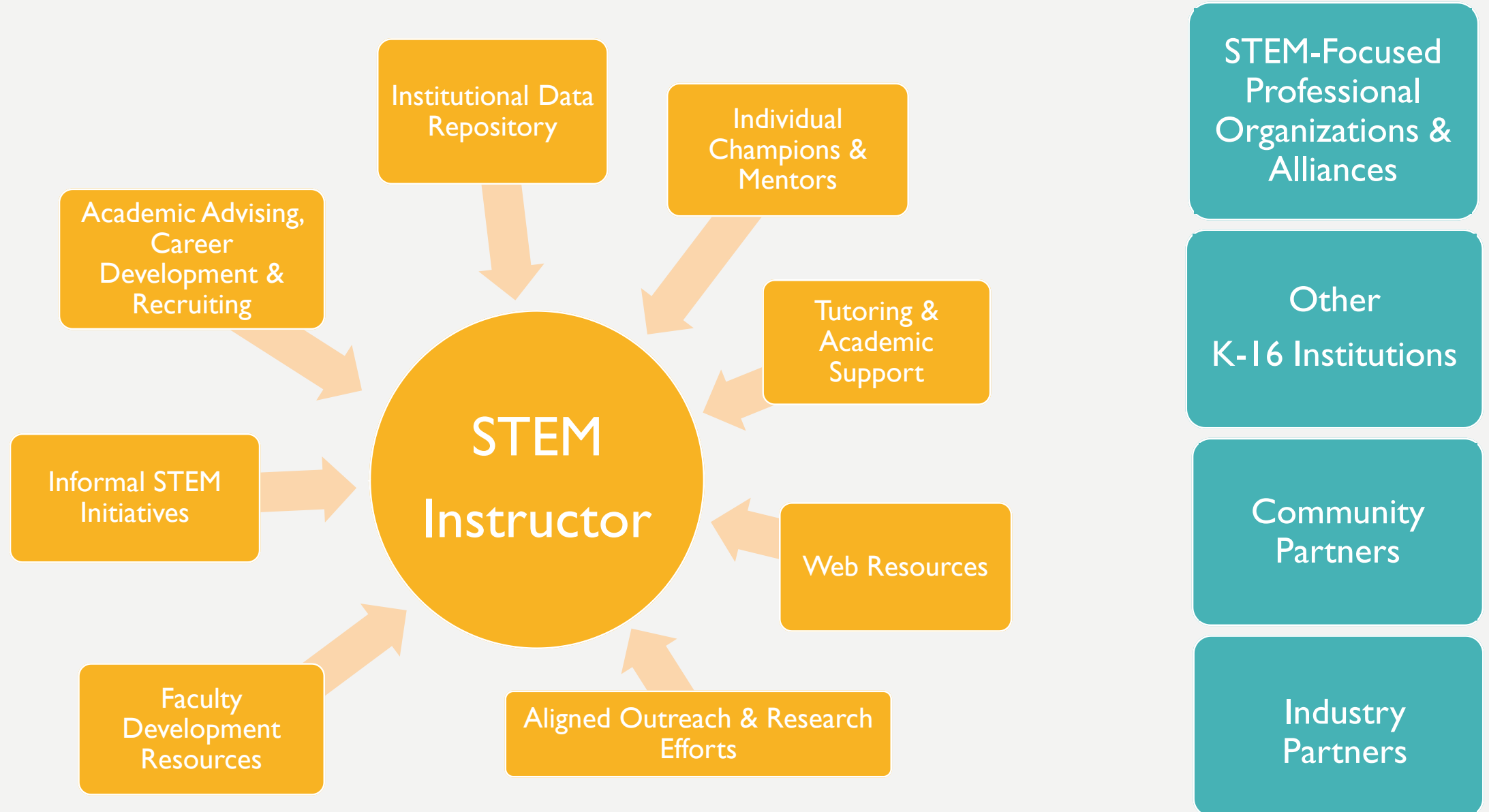
CATEGORIES OF ASSETS: STUDENT LENS

Individual Champions & Mentors

Academic Advising, Career Development & Recruiting

Tutoring & Academic Support

Computing-Focused Professional Organizations & Alliances

Informal STEM Initiatives

Underrepresented Student in STEM Major

Web Resources

Community Partners

Student Organizations

Student Supports & Programs

Industry Partners

ADOPTING THE LENS OF FACULTY

Let's take a moment and put ourselves in the perspective STEM department or STEM faculty member wanting to improve recruitment and retention of underrepresented students.

- Think about your work across institutions
- What categories of assets would it be helpful for them to take stock of or connect with on their campuses?

CATEGORIES OF ASSETS: FACULTY LENS

STEM Instructor

Institutional Data Repository

Individual Champions & Mentors

Academic Advising, Career Development & Recruiting

Tutoring & Academic Support

Informal STEM Initiatives

Web Resources

Faculty Development Resources

Aligned Outreach & Research Efforts

STEM-Focused Professional Organizations & Alliances

Other K-16 Institutions

Community Partners

Industry Partners

OTHER LENSES TO CONSIDER?

This about anyone responsible for connecting students to college and university resources.

- Outreach specialist
  - Outreach activities can be lead at multiple levels (e.g., university, college/school, department, or individual). What assets exist that focus on the recruitment and connecting with the larger community?
- Student advisor
  - How can advisors be privy to all of the resources and opportunities available to a student with specific needs and interests?
- Teaching assistant
  - Sharing institutional knowledge about existing assets should be a part of onboarding new instructors

Think about anyone who would benefit from connecting to college and university resources. Underrepresented faculty member in STEM
- What supports are available to help underrepresented STEM faculty members flourish?

CREATING ASSET MAPS FIRST STEPS

SOME QUESTIONS TO CONSIDER

Who will be using this map and for what purpose?

What information do we want to include in the map (e.g., email, phone, location etc.)?

Do we want to use a physical (i.e., campus map) or conceptual map?

Is it important to have a electronic version of the map so individuals can easily access additional information?

Do we need to use visual aids to help users to understand different categories of assets?

HOW TO START IDENTIFYING ASSETS

- Look at the categories and jot down all the **places to which you refer** students, faculty, or colleagues in relation to each of the categories.

- List all of your **current partnerships and known collaborations**. Use your online contact lists, mailing lists, list serves, followers, etc.

- **Ask your connections** about any other assets of which they are aware.

- Print out a **campus map** and start to circle places where supports are located.

- Do an **internet search of your campus**/organization looking for key words.

- Read through the **university directory** and highlight offices whose work would support your mission and the individuals you serve.

A QUICK EXAMPLE
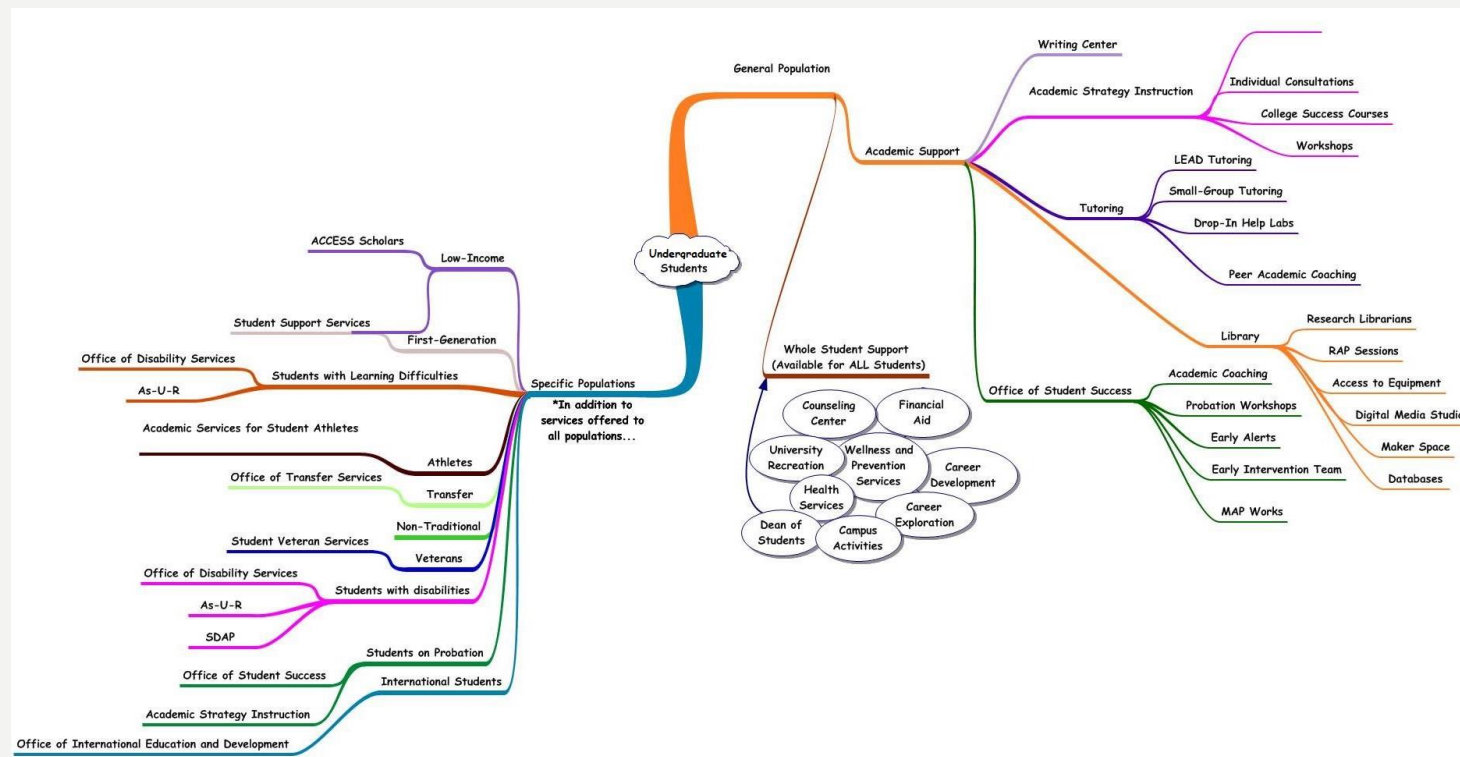
GO EXPLORING FOR ASSETS

START NOW BY ASKING YOURSELF AND YOUR COLLEAGUES THE FOLLOWING QUESTIONS

WHO IS TALKING TO THE STUDENTS YOU WANT TO ATTRACT?

WHAT ARE THEY SAYING?

- Who talks to students on your campus about your major?
- Do you know what they are saying about your major – are they promoting the message you want?
- Would it be helpful to provide them with talking points and/or collaborate with them?

ARE YOUR INSTRUCTORS EQUIPPED TO TEACH THE NEXT GENERATION OF STEM PROFESSIONALS?

IS THE CLASSROOM ENVIRONMENT SUPPORTIVE OF LEARNER VARIABILITY?

- Where does expertise exist for advancing pedagogy?

- Do we know of faculty who are doing really well implementing innovative pedagogy?

- What campus organizations provide access to pedagogical resources, training, and funding to support faculty pedagogical advancement?

HOW CAN DATA INFORM YOUR COURSE OF ACTION?

WHAT DATA DO YOU NEED? WHO HAS IT OR HOW CAN YOU COLLECT IT?

- What data is available that could help identify problems and track progress?

- Who has access to departmental and course data? What data is collected?

- Who collects data at the institutional level? What data is collected?

- What should we be collecting?

- Who or what can help us in accessing, collecting, and analyzing data?

BENEFITS OF ASSET MAPPING

- The Process
  - Initiating conversations
  - Generating new relationships between assets
  - As a brainstorming exercise to help strategize areas for growth

- The Product
  - Physical or virtual resource used by the intended audience
  - As a training tool for new staff or faculty/teaching assistants
  - Part of a communication package to recruit students/faculty
  - A reflection of university's values

ASSET MAPS AS AN EVALUATION TOOL

A way to track progress and increase connectivity

Asset maps can be used for **documenting impact** and **tracking growth** by charting the number and nature of connections to assets over time; especially relevant for those forming alliances and working to promote collective impacts.

These kinds of living documents will be **helpful for strategizing** next steps for growing your campuses supports and can fulfill **accountability purposes** for tracking your organizations efforts.

IN SUM

- **Each institutional context presents a rich set of resources**, individuals, and programs that, when properly identified and leveraged, can substantially bolster departmental efforts to broaden participation.

- By **creating and examining an asset map** resources can be targeted to build on existing efforts rather than create redundancies.

- Similarly, utilizing an **asset-minded approach** ensures that the best available expertise is brought to bear by **illuminating existing expertise** and encouraging inclusion and connectivity.

- Asset-based thinking enhances morale as well by **nurturing collaboration** and helping to break down "silos" that may occur unintentionally. In their place communities of practice, networks, and partnerships can flourish.

RESOURCES

- Most of the online resources available on asset mapping are related to community development:

    - vistacampus.gov/what-asset-mapping

    - www.everyday-democracy.org/resources/asset-mapping-activity

    - https://resources.depaul.edu/abcd-institute/resources/Pages/tool-kit.aspx

FOR MORE INFORMATION

PLEASE FEEL FREE TO CONTACT US

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