

FRAMINGHAM STATE UNIVERSITY
THE MCAULIFFE CENTER

PART I: VISION



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FRAMINGHAM STATE UNIVERSITY
THE MCAULIFFE CENTER

PART I: VISION



Part I: Vision

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3.0 PROPOSED PROGRAM

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1.1

Executive Summary

Twenty-five years ago the McAuliffe Center was established for the purpose of bringing innovative space simulation learning experiences to Framingham State University (FSU) and the MetroWest community. Faced now with the need to address inevitable major repairs and its own advancing obsolescence, the Center has a unique opportunity to strengthen its impact within the University and expand its engagement of K-16 students, educators and FSU faculty, as well as the greater community.

The McAuliffe Center proposes to reconceptualize its scope of service in order to create a suite of multifunctional, technology-enabled learning spaces, along with supporting office spaces, while continuing to host a Challenger Learning Center through which to serve students from across the Commonwealth.

The Center seeks to maximize the flexibility of its learning environments in order to facilitate a diverse offering of programs, including differentiated learning, distance learning, project-based learning, college courses, corporate professional development programs, faculty and staff training events, and other public events. The concentration of diverse user groups in a single space will encourage spontaneous meetings and collaborations among people of vastly different backgrounds.

Collaborative spaces will be a key component of the renovation, positioning the facility as a center for multi-disciplinary partnerships across different departments within the University. These boundary-crossing cooperative projects will be able to leverage the uniquely engaging power of dynamic simulation and multimedia visualization technology at the re-imagined Center.

A creative, collaborative and welcoming environment will also support the McAuliffe Center in its strong commitment to promoting and increasing diversity and equity in STEM education, and participation of historically underrepresented groups.

The McAuliffe Center will deliver a strong return on investment through greatly expanded service to the University and the community. The proposed reconceptualization addresses many of the goals stated in the University's Strategic Plan, as well as FSU's core values of academic excellence, personal and professional growth, global stewardship, public purpose, and the desire to encourage an inclusive and collaborative community.

With your support, the McAuliffe Center can become a landmark of innovative and unique learning that will set Framingham State University apart from other institutions.

OPEN



1.2

Visioning Prelude

*“I have a vision of the world
as a global village, a world
without boundaries.”*

- Christa McAuliffe

With the knowledge and insight acquired through a quarter-century of dedicated service to the Commonwealth of Massachusetts, the McAuliffe Center is now ready to move forward and embrace a bold, new vision of service for the next 25 years. *A service whose scope and reach will have no boundaries.*

Central to this vision is the creation of a suite of flexible and adaptive integrated learning environments, conceived as catalysts to learning and collaboration. The Center will serve the diverse populations of MetroWest and beyond, through equity-focused, inclusive learning experiences that are entirely unique in the region. Reconfigurable physical spaces will allow multiple users to work simultaneously on a wide range of projects, increasing the Center's programming capacity and making it available seven days a week. Most of all, the Center will become home to the invaluable MetroWest ecosystem of people, organizations, and ideas that provides the architecture for cross-sector learning, and access to stimulating learning environments important for the development of skills and mindsets that are critical for engagement in the intellectual life and the economy of the 21st Century.

An expanded audience base including early childhood education, K-12, FSU undergraduate, graduate and continuing education students, FSU faculty, industry professionals, community groups, and lifelong learners will find a welcoming and inspirational environment that helps to make visitors comfortable with uncertainty and stimulates new ideas, growth, and transformation. New technology will provide much-needed accessibility support for English language learners, hearing and vision impaired users.

The McAuliffe Center will give FSU an innovative and entirely unique learning environment that sets the university apart from many competing institutions. Demonstrations of simulation-based learning experiences for prospective students, and the very real opportunity for them to learn and intern in this unique environment will augment the university's recruitment and retention efforts. The Center will leverage the uniquely engaging nature of instructional simulation, inspiring students to apply their own skills, interests, curiosity, and spirit of discovery to the solving of shared problems in a highly collaborative setting. FSU staff will

benefit through dynamic professional development programs related to inclusive excellence, accessibility, and global education. A technology-enabled distance learning lab will empower FSU students to collaborate with peers, scholars, and industry professionals from around the world, allowing them to enrich their academic preparation with international experiences without requiring them to leave their campus.

The new suite of spaces will continue to facilitate the Center's most popular programs, including the Challenger Learning Center (CLC) mission simulations. A re-imagined CLC simulator will replace the Center's 25-year-old CLC installation. Students visiting the McAuliffe Center will enjoy a more dynamic, multi-faceted learning experience, exploring some aspects of a topic in the hands-on environment of the redesigned CLC simulator, others in the immersive learning environment of the FSU Planetarium, and still others within the self-guided environment of an expanded exhibit area. This multi-environment approach to learning will increase engagement and improve overall understanding.

A forward-looking reconceptualization of the Center's facilities will enable new and as yet unimagined programs, and significantly improve the quality, relevance, and educational impact of existing programs. It will grow FSU's reputation for innovation by bringing to fruition untapped potential for collaboration among FSU students, faculty, industry, and the community. It will increase the engagement and personal investment in the learning process of college students, K-12 educators, and college professors alike. Finally, it will adapt with the changing needs of visitors and evolving instructional practices, serving as a model facility well into the future.

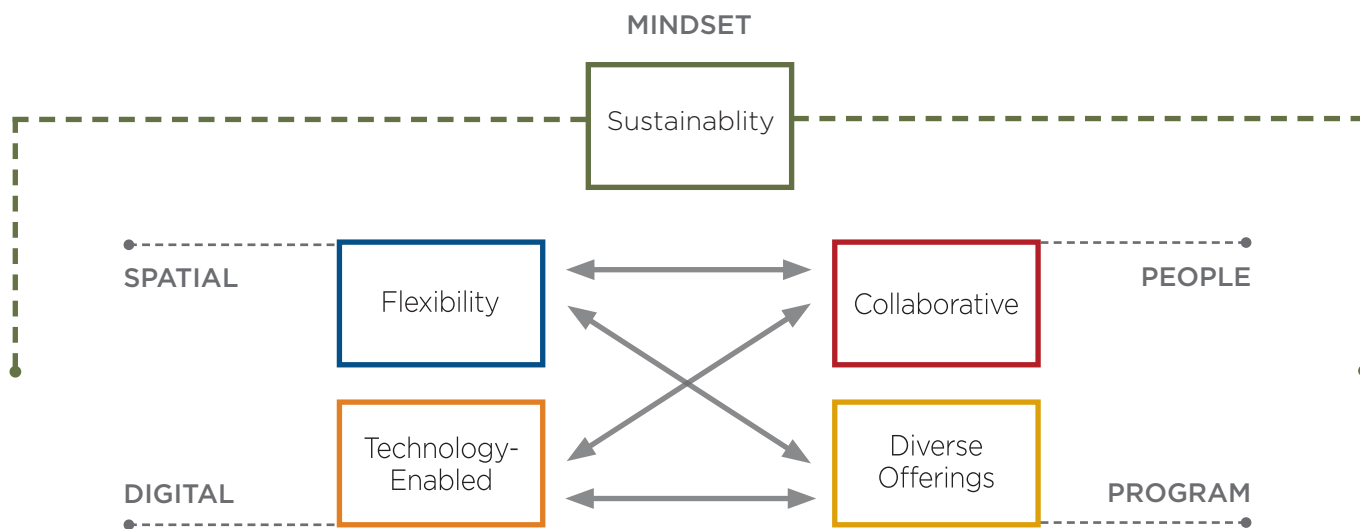
I have a vision of the world as a global village, a world without boundaries In the next 25 years of service the McAuliffe Center will keep striving to fulfill the commitment that motivated the first teacher in space. Any genuine commitment to Christa's vision must reflect her own actions, beginning with ideas and facilities that are free of boundaries, unconstrained by convention, and ready to evolve with the changing needs of all learners. Now, more than ever, the McAuliffe Center chooses to put its energies into pursuing what Christa first envisioned.

- IRENE PORRO

1.3

Themes

- **FLEXIBILITY**
- **COLLABORATION**
- **TECHNOLOGY-ENABLED**
- **DIVERSE PROGRAMS**
- **SUSTAINABILITY**



FLEXIBILITY ENABLING COLLABORATION

A space with flexible dimensions and reconfigurable furniture allows the space to be adaptable to many forms of collaboration and learning.

TECHNOLOGY ENABLING COLLABORATION

Usage of interactive and visualization technology to support collaboration among users, both onsite and offsite.

FLEXIBILITY ENABLING DIVERSE PROGRAMS

A space with flexible equipment and reconfigurable furniture allow the space to support diverse programs and events.

TECHNOLOGY ENABLING DIVERSE PROGRAMS

Usage of flexible and adaptable technology allows the center to be flexible in the curriculum and programs that it can offer to the community.

OVERARCHING: SUSTAINABILITY

Sustainability should be incorporated both programmatically and physically, into all daily operations of the center.



1.0 PREFACE

2.0 BACKGROUND



3.0 PROPOSED PROGRAM

4.0 KEY FINDINGS

History and Mission 2.1

Current Programs 2.2

Partnerships, Affiliations, and Initiatives 2.3

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2.1

History and Mission

The Christa McAuliffe Center for Integrated Science Learning is a vibrant educational facility part of Framingham State University (FSU), a higher education institution, located in Massachusetts MetroWest region. FSU was established by Horace Mann in 1839 as America's first public teacher preparation school.

The McAuliffe Center was created in 1994 to honor the legacy of the first teacher in space and FSU alumna, Christa McAuliffe, one of seven crew members selected to fly on the space shuttle Challenger STS-51-L mission. She and her companions tragically died when the vehicle malfunctioned shortly after lift-off, on January 28, 1986.

The McAuliffe Center began offering simulated missions to space in its Challenger Learning Center facility, along with associated teacher professional development programs, in early 1994. Today, the McAuliffe Center functions as a hub for much of the University's informal STEM education activity and outreach. Each year, approximately 10,000 K-16 students participate in the Center's programs which feature in-school and after-school mission simulations in the Challenger Learning Center, FSU Planetarium presentations, and learning experiences in a versatile exhibit area. Activities also include teacher professional development workshops, public science exhibits, science festivals, learning investigations tailored for college courses, and a robust internship program.

The Center's vision is to foster a community of life-long learners by providing innovative, integrated STEM pedagogies, practices, and programs that are accessible to all audiences. The Center's mission is to be a leader across the Commonwealth of Massachusetts in K-16 integrated STEM learning through the sharing of resources, building of partnerships, and the advancement of educational practices.



2.2

Current Programs

CHALLENGER LEARNING CENTER

Installed in 1994, the McAuliffe Center's CLC facility provides space mission simulation programs for middle/high school students, out-of-school time programs, FSU undergraduate students, and industry professionals. Participants assume the roles of astronauts and mission controllers, applying problem-solving, decision-making, communication, and other essential skills in the pursuit of common goals linked together through one of three mission scenarios.



FSU PLANETARIUM

The McAuliffe Center manages the University's digital planetarium, a 30' domed theater that provides multidisciplinary programming to a range of audiences including K-12 and FSU students, out-of-school-time groups, and the general public. Programs may include a full-dome film, earth science data models, a live night sky presentation, special guest speakers, Q&A sessions, or kinesthetic learning activities. Monthly public programs appeal to different age groups, including pre-K, age 6 and up, and age 14 and above.



PUBLIC SCIENCE EXHIBITIONS

The McAuliffe Center's open spaces combine to create a flexible exhibit area that may also host a reception or serve as classroom space. Some exhibits are provided through the Center's partnerships, including a display of fascinating images of the universe provided by the Chandra X-Ray Observatory, and an interactive virtual tour of the International Space Station, provided by ISS U.S. National Laboratory, a NASA contractor. Exhibits are incorporated into daily school visits and are open to the public during monthly planetarium programs, open houses and science festivals.



2.3

Partnerships, Affiliations, and Initiatives



PARTNERSHIPS

Programs offered by the McAuliffe Center are fueled by powerful relationships with the Harvard-Smithsonian Center for Astrophysics, Massachusetts Institute of Technology, Chandra X-ray Observatory, Massachusetts Space Grant Consortium, Smithsonian Affiliations Program, Challenger Center, ISS U.S. National Laboratory, MetroWest STEM Education Network, etc., that make the McAuliffe Center one of the premier sites for STEM education in the Commonwealth of Massachusetts.

PROFESSIONAL AFFILIATIONS AND INITIATIVES

The Center also supports other professional collaborations including serving on the advisory board or leadership teams of Big Brother Big Sister/MySTEM, Catalyst Collaborative@MIT, Massachusetts Association of Science Teachers, and The Human Space Program. The Center's director and staff members organize and implement high profile public events such as Science on State Street (MetroWest's annual science festival), Massachusetts STEM Week in MetroWest, promoted by the Massachusetts Executive Office of Education, and the Moon Landing in Context project, in partnership with the Arts & Ideas program at FSU.

2.4

Friends

METROWEST REGION

- Arts and Ideas at Framingham State University
- Big Brothers Big Sisters of Central Mass/MetroWest
- Framingham Cultural Council
- Framingham Public Schools
- Framingham State University
- Framingham State University Foundation
- Marlborough Public Schools
- MassBay Community College
- MathWorks
- MetroWest Chamber of Commerce
- MetroWest Life Sciences Network
- MetroWest STEM Education Network
- Milford Public Schools
- Pelham Housing Authority
- Regis College
- Wellesley College

MASSACHUSETTS REGION

- Boys and Girls Club of Fitchburg and Leominster
- Catalyst Collaborative @ MIT
- Center for Astrophysics | Harvard & Smithsonian
- Education Development Center
- Girl Scouts of Eastern Massachusetts
- Girls Inc. of Worcester
- Massachusetts Association of Science Teachers
- Massachusetts Executive Office of Education
- Massachusetts Institute of Technology
- Massachusetts Regional STEM Education Networks
- Massachusetts State Grant Consortium
- TERC
- The Virtual High School
- University of Massachusetts - Lowell
- Worcester State University

NATIONAL

- Challenger Center
- Global Oneness Project
- ISS U.S. National Laboratory
- NASA's Universe of Learning
- National Institute on Out-of-School Time (NIOST)
- Smithsonian Affiliations Program
- Smithsonian's National Air and Space Museum
- Space Station Explorers
- STEM Learning Ecosystems



Framingham
State University



WELLESLEY
W



Big Brothers Big Sisters
of Central Mass/Metrowest



BOYS & GIRLS CLUB
OF FITCHBURG AND LEOMINSTER

**girls
inc.**

Girls Incorporated
of Worcester

CENTER FOR
ASTROPHYSICS
HARVARD & SMITHSONIAN





Pelham Housing
Authority

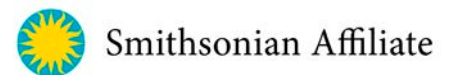


WORCESTER
STATE
UNIVERSITY



The Virtual
High School

TERC



CURRENT PARTNERS AND AFFILIATIONS

Framingham State University

- Arts and Ideas at Framingham State University
- Framingham Cultural Council
- Framingham Public Schools
- Framingham State University
- Framingham State University Foundation

MetroWest Region

- Big Brothers Big Sisters of Central Mass/MetroWest
- Marlborough Public Schools
- MassBay Community College
- MathWorks
- MetroWest Chamber of Commerce
- MetroWest Life Sciences Network
- MetroWest STEM Education Network
- Milford Public Schools
- Pelham Housing Authority
- Regis College
- Wellesley College

Massachusetts

- Boys and Girls Club of Fitchburg and Leominster
- Catalyst Collaborative @ MIT
- Center for Astrophysics | Harvard & Smithsonian
- Education Development Center
- Girl Scouts of Eastern Massachusetts
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- Challenger Center
- Global Oneness Project
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- National Institute on Out-of-School Time (NIOST)
- Smithsonian Affiliations Program
- Smithsonian's National Air and Space Museum
- Space Station Explorers
- STEM Learning Ecosystems

CATEGORIES FOR OPPORTUNITY FOR PARTNERSHIPS, AFFILIATIONS AND COLLABORATION

CHRISTA MCAULIFFE CENTER

FSU Academic Departments

Institutions of Higher Education

Life Science Organizations

Aerospace Organizations

Tech Industry

OST Program Sites

Global Education Organizations

Climate Education Organizations

Massachusetts School Districts

Informal Science Education Centers/Museums

Massachusetts Artists

Manufacturing Industry

R&D Industry

Cultural Councils

Professional Association Networks

Education Outreach Groups

Professional Societies

Danforth Museum

Local Chambers of Commerce

- FRAMINGHAM STATE UNIVERSITY
- METROWEST REGION
- MASSACHUSETTS
- NATIONAL



1.0 PREFACE

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3.0 PROPOSED PROGRAM

4.0 KEY FINDINGS

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| Proposed Program | 3.1 |
| Program Flow Charts | 3.2 |
| Vision Collages | 3.3 |

3.1

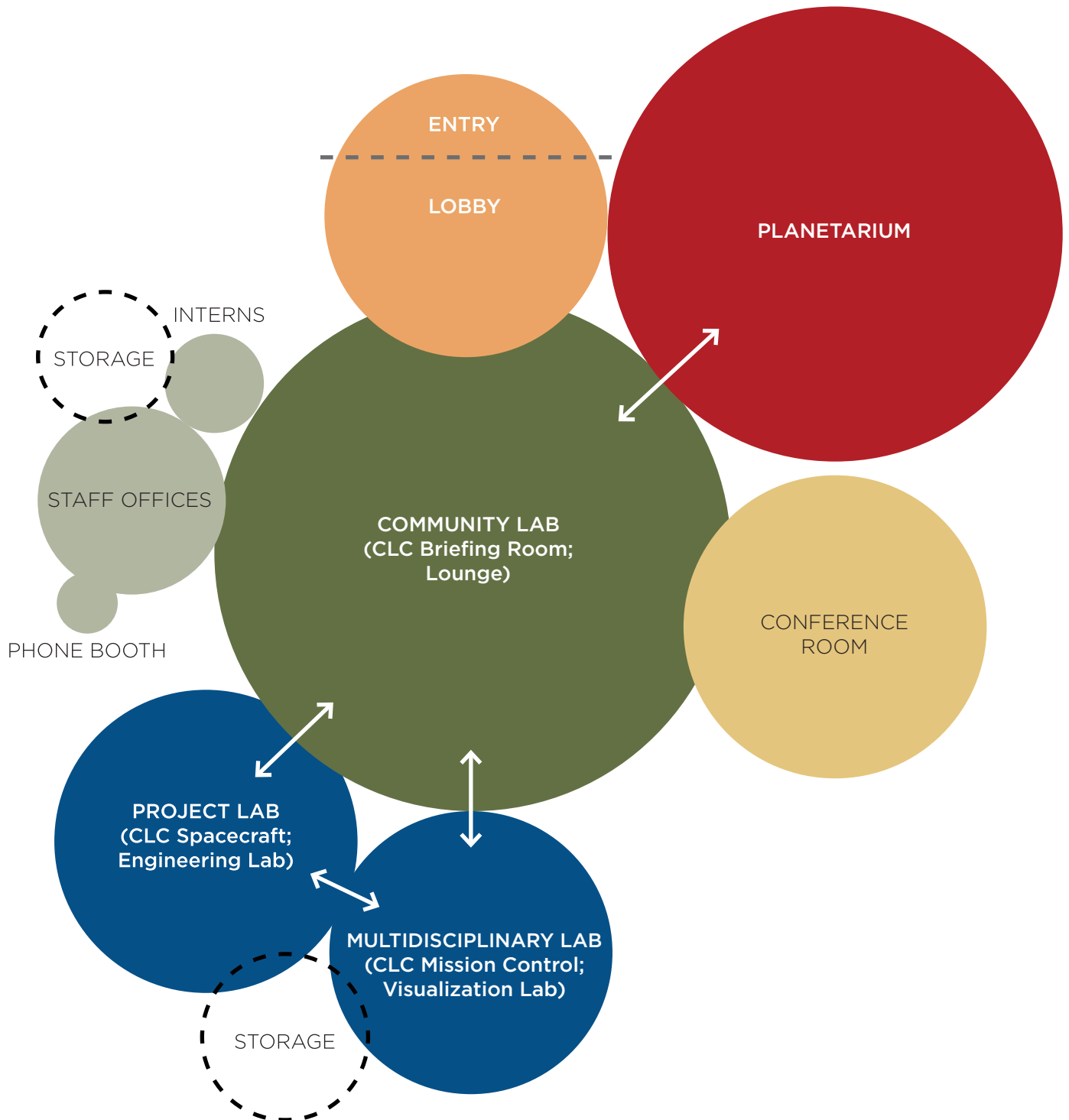
Proposed Program

| | COMMUNITY LAB (Briefing Room, Lobby and Lounge) | PROJECT-BASED LAB (Spacecraft) | MULTIDISCI- PLINARY LAB (Mission Control) |
|---------------------------|---|--|--|
| PROGRAMS & ACTIVITIES | Reception, waiting space for visitors, lounge, casual working/collaboration, casual eating space, exhibitions, professional conferences, workshops and events | CLC Spacecraft, engineering lab, distance learning | CLC: Briefing/mission control, multidisciplinary collaboration, college classes, distance learning, training/workshops |
| PROJECTED OCCUPANCY RANGE | 80-100 | 20-30 | 20-30 |
| EXPECTED TIMES OF USAGE | 7 days a week 8am-10pm throughout the year | 7 days a week 8am-10pm throughout the year | 7 days a week 8am-10pm throughout the year |
| TARGET USER GROUPS | K-12 students, FSU students, Metrowest professionals, conference attendees, events visitors | K-12 students, FSU students, other FSU/community members | CLC: K-12 students, FSU students, Metrowest community, professionals |
| QUALITIES | Spacious, open and inviting. Relatively casual atmosphere | Focused, collaborative learning environment | Focused, collaborative learning environment |

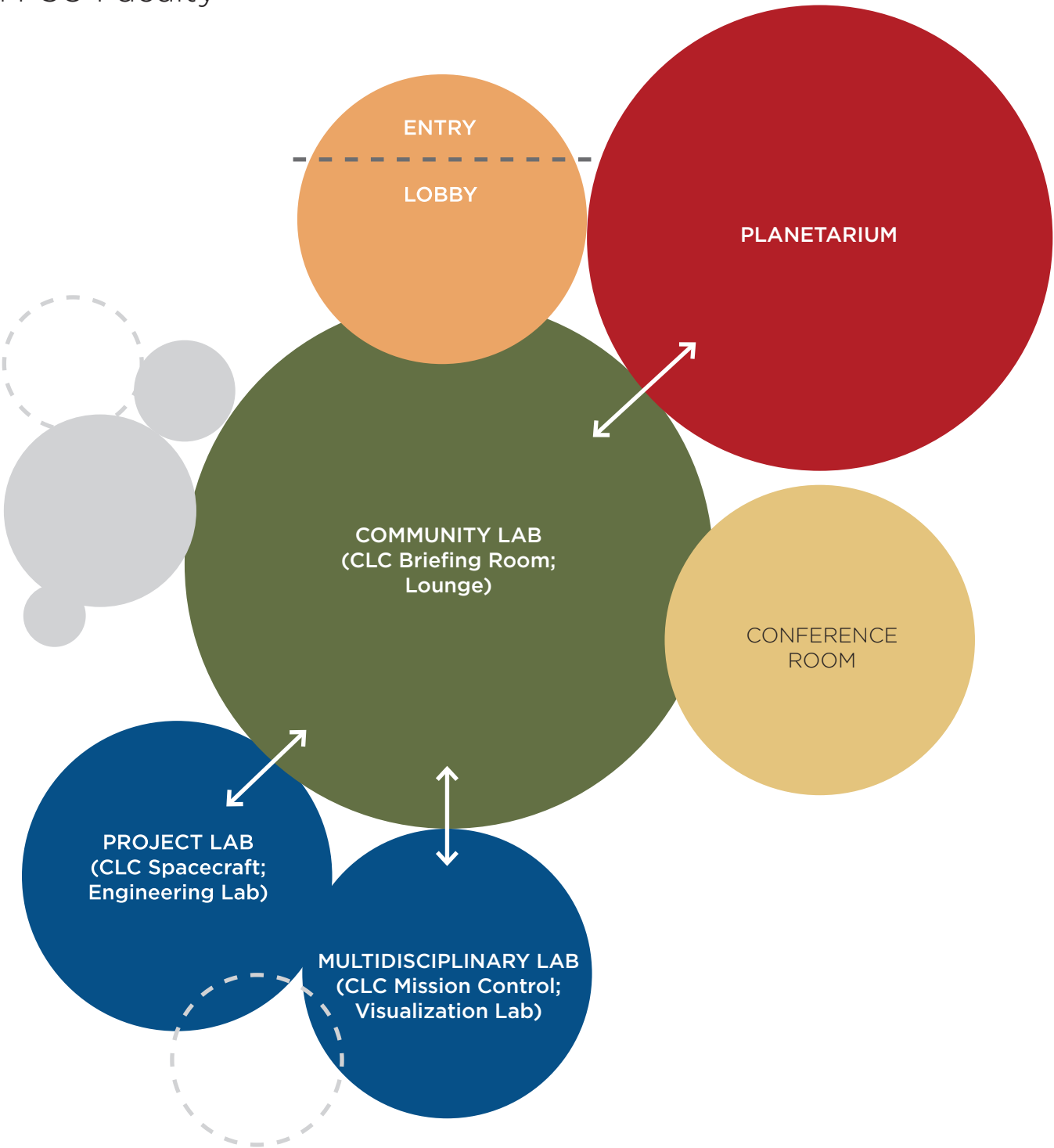
| CONFERENCE ROOM | PLANETARIUM | FULL-TIME STAFF OFFICE | PART-TIME STAFF OFFICE | GENERAL STORAGE |
|---|--|--|---|--|
| Formal meet-ups, conference meetings, presentations, McAuliffe staff meetings | Planetarium shows, lectures, VR/AR black box | Staff independent work, private conference calls | Intern work space, flight director locker space | Temporary storage, permanent storage |
| 20-30 | 50-70 | 5-10 | 10-15 | N/A |
| 7 days a week 8am-10pm throughout the year | 7 days a week 8am-10pm throughout the year | 5 days a week 8am-5pm throughout the year | 5 days a week 8am-5pm throughout the year | 24/7 |
| McAuliffe staff, professionals, general public | FSU students and staff, general public | Full-time permanent staff | Interns, flight directors | Full and part-time staff |
| Focused, collaborative learning environment | Inspire a sense of awe | Focused, comfortable work space | Focused, comfortable work space | Neat, easy to find things, large material staging area |

3.2

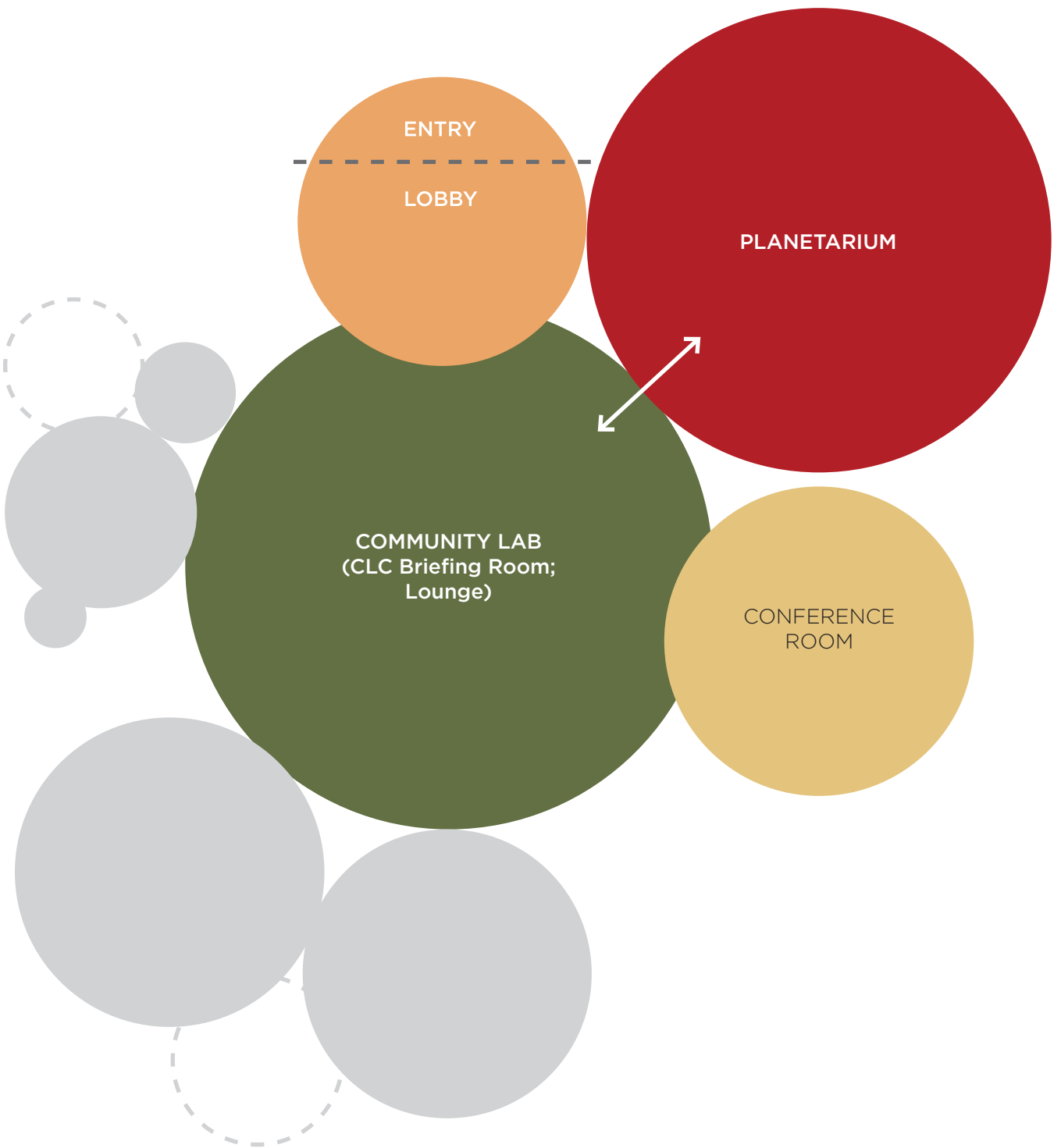
Program Flow Charts



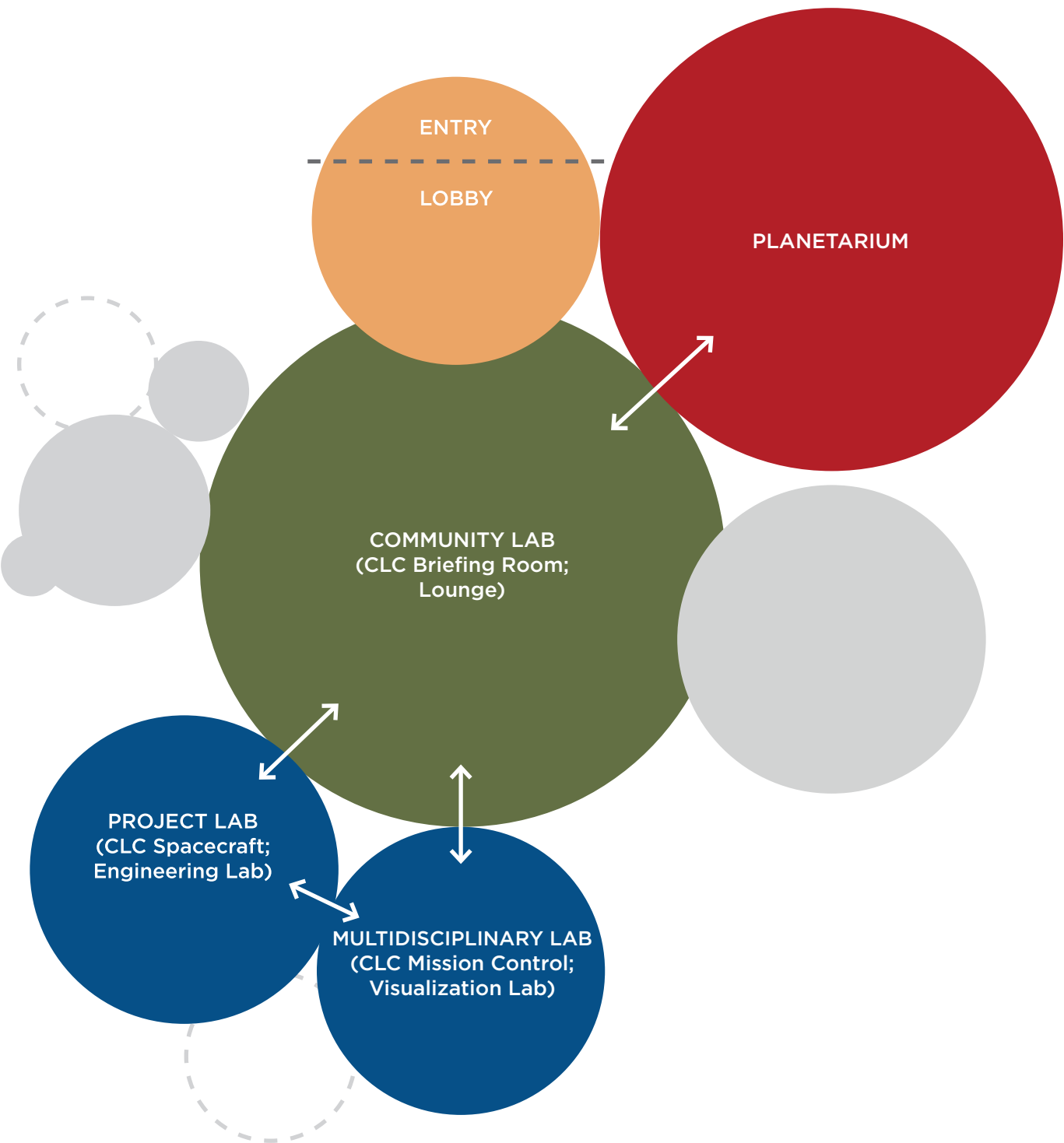
Program Flow:
Undergraduate Students
and FSU Faculty



Program Flow:
Public Visitors



Program Flow:
CLC Missions

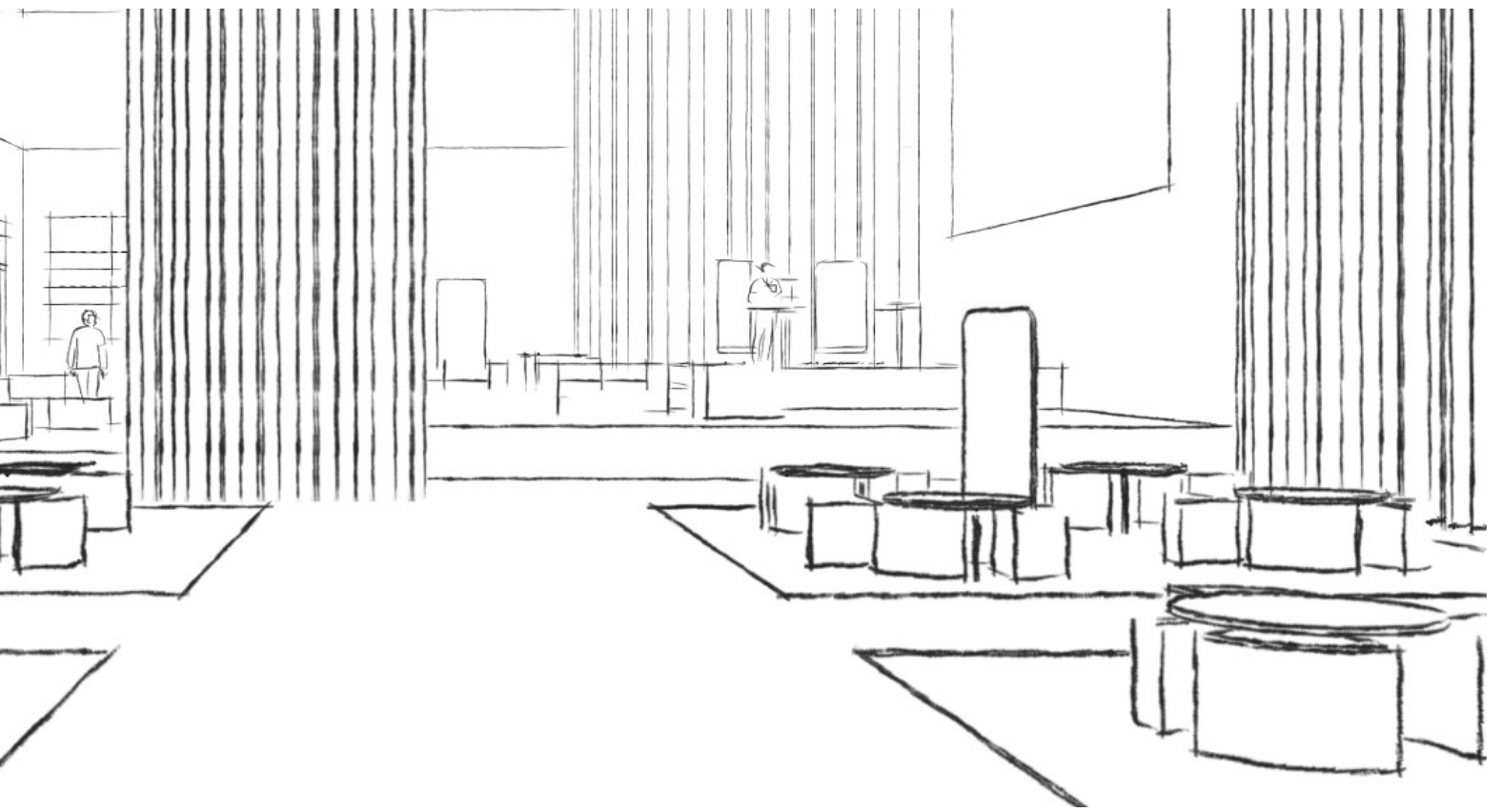


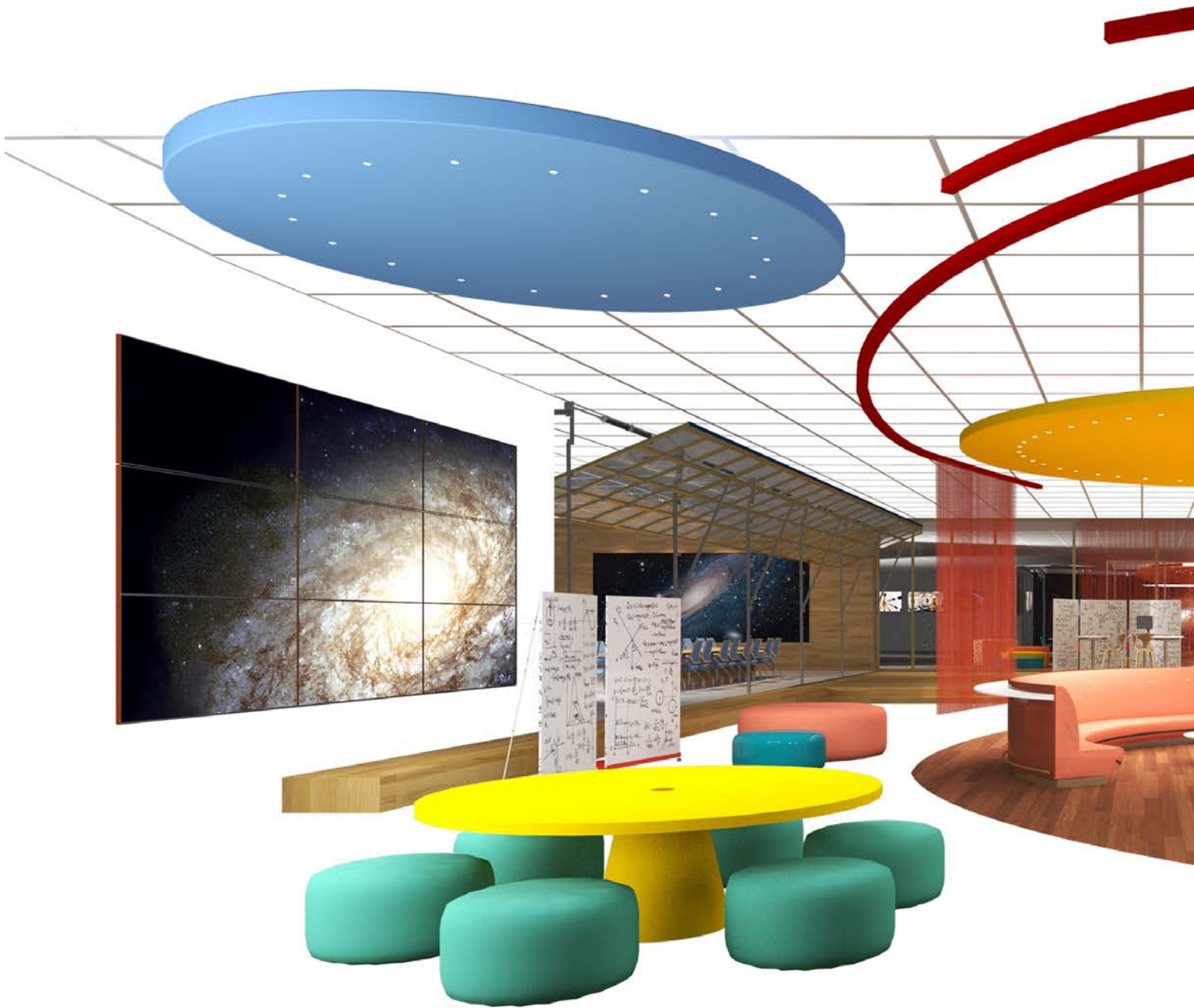
3.2

Community Lab Vision

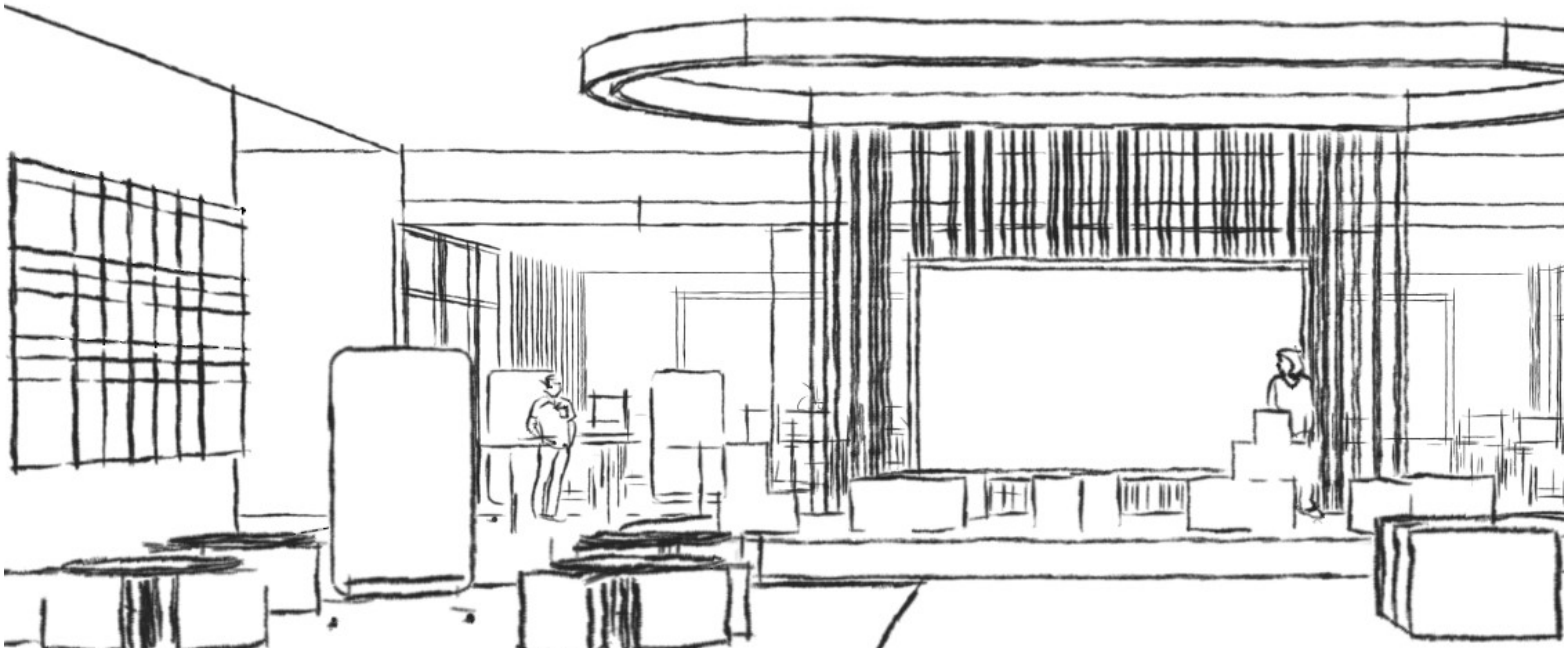
The Community Lab is an open, inviting central lobby space, serving as a combination of reception, waiting area, lounge and casual workspace for all visitors. The Lab includes a stage area with surrounding seating, which serves as the briefing space for CLC missions, but can also become a place for lectures or presentations. The Lab also includes a conference room that can open as part of the larger central space if necessary. Features of the space include a variety of movable seating, lounge furniture, and rolling whiteboard partitions, encouraging casual, spontaneous collaboration through the flexibility of setting.

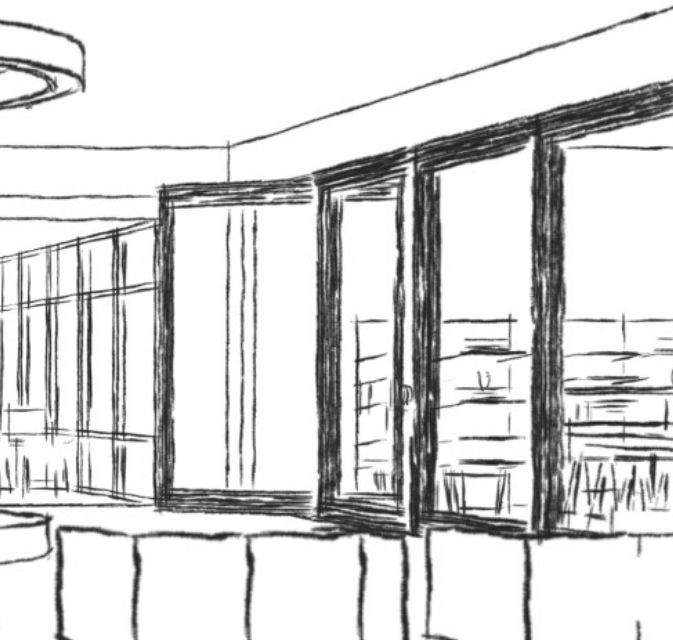












Multidisciplinary Lab Vision

The Multidisciplinary Lab is a high-tech visualization and computer lab, as well as a collaborative workspace. The main feature of this room is floor to ceiling LED panel screens that can be used for a variety of visualization purposes across many disciplines. Trapezoidal rolling desks and chairs can be quickly rearranged to accommodate groups of all sizes. Half of the desks are equipped with computers for the mission control portion of the CLC Missions but can also be used by students or faculty for classes or research purposes. While the space is enclosed by glass walls and doors, curtains can be drawn to provide visual privacy. The flexibility of the space and technology provides opportunities for multidisciplinary collaborations, as well as workshops, and professional training.

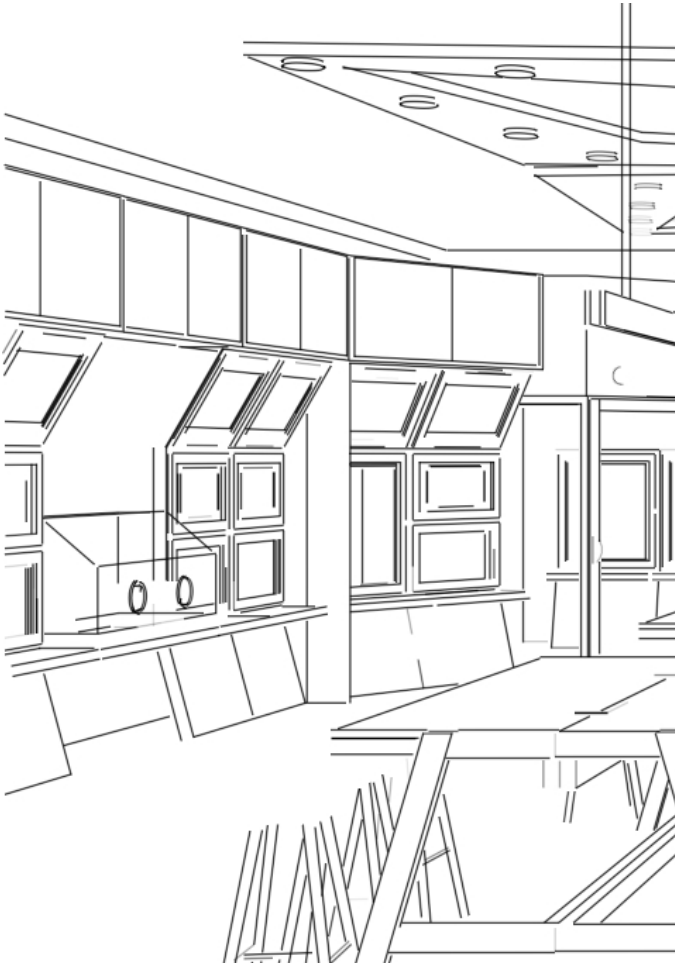


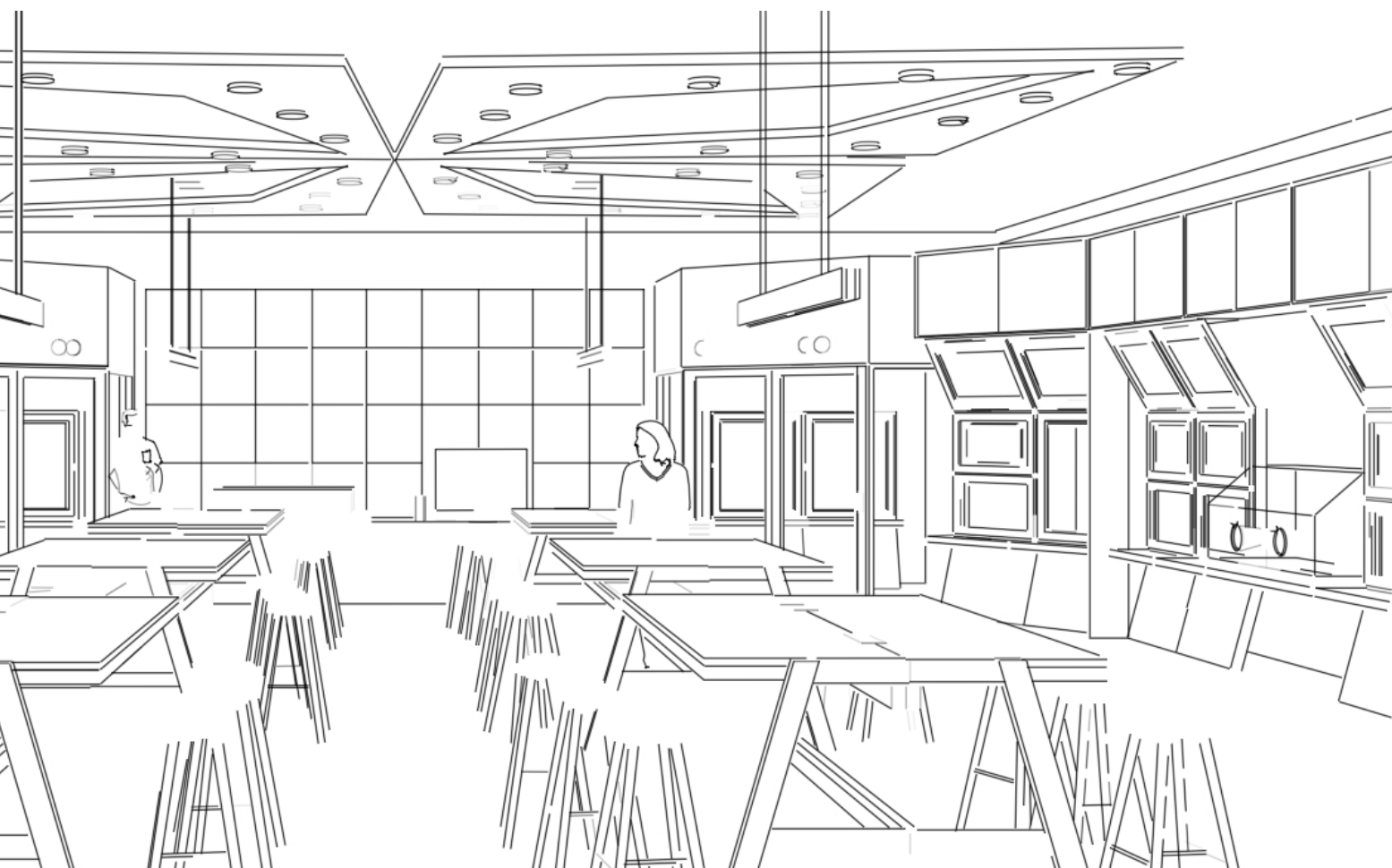




Engineering Lab Vision

The Engineering Lab retains the equipment and purpose of the CLC spacecraft components of the missions but also serves as an engineering lab and distance learning classroom. The CLC mission consoles are situated along the edge of the room, opening space in the middle for movable lab tables and chairs. The CLC commander station doubles as a general teacher station for engineering classes. Suspended ceiling power carrier allows for users at individual tables to have access to an outlet if they need, without cluttering floor space with wires.









The background of the page is a complex, abstract geometric pattern. It consists of a network of thin, light gray lines that connect various points, creating a series of interconnected triangles and polygons of different sizes. Some of these points are highlighted as larger, solid gray circles, while others are smaller dots. The overall effect is a sense of a dynamic, interconnected structure, possibly representing a network or a molecular model. The text is overlaid on this pattern in a clean, sans-serif font.

1.0 PREFACE

2.0 BACKGROUND



3.0 PROPOSED PROGRAM

4.0 KEY FINDINGS

1

LEVERAGE PRESENCE ON CAMPUS

Most FSU students fall into two categories: (1) those who are unaware of the McAuliffe Center's existence, and (2) those who have heard of it but are unaware of the Center's offerings and opportunities that serve the broader FSU population.

First-time visitors have trouble finding the Center due to its lack of visibility from any road. Creating an external signature, improving visibility, and wayfinding are essential to establishing the McAuliffe Center as a welcoming, community-focused learning hub.

- Exterior signage on O'Connor Hall
- Solar-powered signage
- More visible signage on main roads (State Street and Maynard Road) and parking lot
- An appropriately themed exterior exhibition that heralds the Center's location, while also serving as an educational asset
- Space art park on the exterior landscape

2

PROMOTE A WELCOMING ATMOSPHERE

The current McAuliffe Center may seem intimidating to FSU students, as its doors are typically locked, with no indication that students are welcome to visit the Center. The lobby space discourages drop-by visitors who might otherwise gather for casual conversation. Making the Center more open and welcoming is a crucial step in drawing in and engaging visitors, particularly those who are unfamiliar with STEM.

- Provide a variety of comfortable seating
- Welcoming colors
- Clear signage and directions
- Interactive exhibitions
- Pockets of space for people to gather informally
- Indoor temperature control
- Acoustic-spatial consideration
- More efficient and well thought out waiting areas
- Better positioning of coat storage space within the flow of program uses
- More efficient spatial layout
- Expansion of lobby
- Softened boundaries and open architecture to flow art and science seamlessly together
- Curved spaces with pale colors and circular motifs

3

CREATE A FLEXIBLE SPACE

The current layout of the McAuliffe Center is inefficient and rigid, severely limiting the types of events that can be supported as well as the comfort and flow of those attending. There is no space large enough to comfortably host a large group of visitors. Many of its rooms serve only one purpose, for only a brief period of time each day. A flexible environment will allow spaces to be better utilized for a variety of programs and audiences.

- Open space layout
- Removable and reconfigurable furniture
- Collapsible and stackable furniture
- Configurable and movable partitions
- Sliding ceiling partitions
- Sliding walls
- Planetarium should have flexible seating to allow for different configurations and to function as an auditorium for speaker events



FOSTER A COLLABORATIVE ENVIRONMENT

Due to the inflexibility of space and furniture, the McAuliffe Center does not currently have an efficient work environment that can facilitate collaboration.

- Provide flexible and reconfigurable seating
- Provide both individual and group work stations to accommodate a variety of working styles
- Provide reconfigurable temporary partitions (rolling whiteboard partitions) to configure different sized spaces depending on group needs
- Provide brainstorming tools (whiteboards, markers) that will encourage discussion and productivity
- Provide technological tools that will facilitate presentation and visualization (LED screens, pointers)



ESTABLISH A MODERN HUB FOR INTEGRATED LEARNING

The McAuliffe Center is well-positioned to become a key player within the MetroWest STEM Education Ecosystem.

- Frequently updated exhibitions
- Provision of latest educational technologies, such as virtual reality, augmented reality, and other visualization tools for students to explore and develop job-related skills
- Furniture should be selected with the flexibility to easily upgrade technological components, in anticipation of future obsolescence issues
- Showcase multidisciplinary connections with space exploration, e.g., biomedical research in space
- An engineering lab, robotics lab or maker space that could be used by surrounding high schools and various college majors, including computer science and engineering
- Virtual reality cafe and content library
- Challenging people to be “comfortable with uncertainty”



PROVIDE SKILL DEVELOPMENT AND CAREER SUPPORT

The McAuliffe Center has the potential to become a career center and youth skill development center for under-served communities.

- Internship opportunities for FSU and other nearby college students
- Raise career awareness
- Create a career pathway for interns, i.e., opportunities for advancement through multi-year placements at the Center
- Offer technology skills workshops
- Provide a sense of real world connection (showing how the skills learned have real uses and are relevant to future careers)



RETAIN AND ENHANCE THE INSPIRATIONAL POWER OF THE CHALLENGER LEARNING CENTER

The current Challenger Learning Center (CLC) mission simulation rooms, although outdated, have a unique ability to inspire by transporting students to another world. This is one of the Center's core strengths, and visitors to the CLC must continue to sense that this is a special place where extraordinary things happen; where excitement, engagement, and the willing suspension of disbelief empower students to learn by doing.

- Update furnishings and decor to keep a futuristic/modern look
 - Transition spaces need to be carefully considered as they are particularly important in lifting the audience out of everyday life
 - Acoustic-spatial considerations for multi-sensorial, fully engaging experiences
 - Space for visitors to explore freely without supervision
-



INCREASE ENGAGEMENT WITH FSU COMMUNITY

The McAuliffe Center is currently underutilized within the FSU Community but can serve as a valuable resource for students, faculty, and staff, through both multidisciplinary academic programs and the provision of much-needed amenities.

- Provide internship opportunities by offering services that can be facilitated and supported by students
 - Have classes held in the planetarium for an improved student learning experience, and utilize dome visualization experience
 - Facilitate cross-departmental programs and activities
 - Lounge area with 24/7 access will provide one of the few gathering spaces on campus after hours, helping to address lack of after-class and weekend life
 - Provision of food as an additional dining alternative on campus
-



INTEGRATE AUDIENCES TO INCLUDE LOCAL PROFESSIONALS

The McAuliffe Center has the opportunity to broaden its reach beyond serving primarily middle school students in the region. In particular, engagement with the MetroWest life sciences industry provides the potential for revenue generation through corporate training programs, as well as enhanced career networks for FSU students.

- Facilitation of meetups, conversations, and relationship building by increasing public access to the Center
- Engage with surrounding Biotech industry
- Provide conference spaces
- Host workshops and conferences
- Provide collaboration and co-working spaces that are open to public
- Potential for revenue generation through corporate training programs
- Engage with the larger scientific community, ranging from MetroWest region to international



IMPROVE WORKING ENVIRONMENT FOR STAFF AND INTERNS

The McAuliffe Center has the potential to become a career center and youth skill development center for under-served communities.

- Larger office that can accommodate all staff in a single room, to facilitate collaboration
 - Provide adequate storage in needed locations
 - Prepping areas for specific programs
 - A private booth for calls in the staff office
 - Private and group work stations for interns, including both permanent and hot desk configurations
 - More and larger windows for increased natural light
 - A Café
-



PROMOTING SUSTAINABILITY AWARENESS

As climate change becomes a more pressing issue faced by humanity, the McAuliffe Center should strive to create a space where people can learn about sustainability and climate change.

- Raise awareness regarding sustainability through displays and exhibitions
 - Sustainability data visualization through simulation technologies
 - Offer climate change education programs
 - Visible acts or signage of sustainability throughout the center
 - Installing solar panels
 - Green walls
 - Vertical gardens
 - Architecture should be in tune with cycles of the planet
-



CREATE AN ENVIRONMENT FOR LEARNING THAT IS INCLUSIVE AND ACCESSIBLE

As an informal science education institution, the McAuliffe Center has the potential to offer alternative entry points to STEM engagement and to complement the STEM learning that takes place in the classroom. ISE settings, though, suffer from their own sets of access and equity issues, and the McAuliffe Center is not immune.

- Products and services are based on digital visualizations available to all who access the Center
- Content is shared through modalities designed to be inclusive of audiences from non-dominant cultures
- Language, props and examples are designed to be understood by learners with diverse cultural and educational backgrounds (accessibility, translational learning)
- Explicit connections of specific content and skills to other STEM and non-STEM disciplines (transdisciplinary learning)
- The environment allows relating the learning experience to the personal and socio-cultural experience of the learner (contextualization)



**McAuliffe
Center**

Integrated Science Learning



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