LEARNING-CENTERED ENVIRONMENT FOR AEC EDUCATION
GUIDELINES FOR THE BREAKOUT SESSIONS ON NOV. 17, 2021

INTRODUCTION

Figure 1 depicts a ***technology-enabled learning-centered environment*** for AEC education, which is the focus of this project, particularly on ***Human Stakeholders, Lifelong Learning, and Technology***.
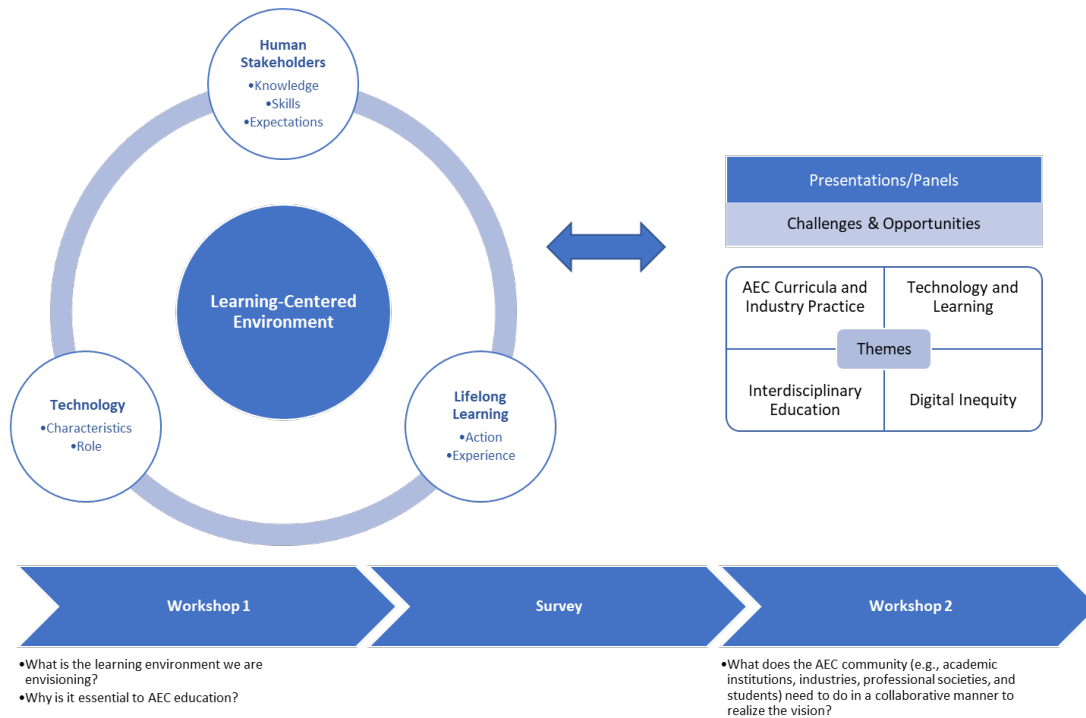

Figure 1: Technology-Enabled Learning-Centered Environment

1. ***Human Stakeholders***: architecture, engineering, construction students and educators in community colleges and universities, and industry professionals.
2. ***Lifelong Learning***: "the 'ongoing, voluntary, and self-motivated' pursuit of knowledge for either personal or professional reasons" – Wikipedia; ***Learning:*** 1) the act or experience of one that learns; 2) knowledge or skill acquired by instruction or study; 3) modification of a behavioral tendency by experience (such as exposure to conditioning). - *Merriam-Webster Dictionary*
3. ***Technology***: 1) the use of science in industry, engineering, etc., to invent useful things or solve problems; 2) the machine, piece of equipment, method, etc., that is created by technology. - *Merriam-Webster Dictionary*
   o Examples: information communication technologies (ICTs), visualization, data acquisition, artificial intelligence, robotics, etc.

OBJECTIVE

Based on the talks, presentations, discussions during the first two days, participants will *draft a description of the learning-centered environment for AEC education in the future*. The nature of the environment, its role in AEC education, opportunities it brings, and learning challenges it faces will manifest in its three main dimensions, Human Stakeholders, Lifelong Learning, and Technology.

PROCESS

The entire group of participants will be divided into several sub-groups. Each sub-group will have a moderator and around eight participants. Each sub-group will reflect on what they hear during the first two days and discuss among sub-group members regarding *the characteristics of the learning-centered environment considering the three dimensions, Human Stakeholders, Lifelong Learning, and Technology*.

Each sub-group will, for each of the four themes corresponding to each of the four breakout sessions:

1) Discuss and document theme-specific learning challenges and opportunities for AEC education in response to pedagogical and industry needs (minimum three challenges or opportunities),

2) Determine characteristics of the learning-centered environment to address each identified challenge or opportunities considering its three dimensions, Lifelong Learning, Human Stakeholders, and Technology,

3) List any metrics for measuring the success of the learning-centered environment, and

4) List any other significant comments and suggestions.

The above information will be the deliverable produced by each group for each breakout session.

Suggested Tools for Online Collaboration, Discussion, and Brainstorming

Google Docs, Google Sheets, Google Slides, and Jamboard

Deliverables

Each group will deliver a document containing descriptions of the challenges and opportunities, and characteristics of the learning-centered environment for each theme.