College Access: How Do We Support Student Access to Higher Education?
by Victoria Cabal

Students will be designing…

In these lessons, college students will design components of a college access program for diverse younger students.

Through engaging in this challenge, students will learn…

- To use empathetic interviewing skills
- To break barriers to college access
- To use ideation techniques
- To prototype
- To learn the value of feedback
- To design for another's needs

Lesson 1

Introduce the design problem space. Use statistics to introduce students to the reality of inequality in access to college. Open dialog about student experiences to build a foundation for empathic interviewing with authentic users. Build teams to begin the design thinking process. The goal is to provide an introduction to the problem space and to get students to begin considering appropriate questions for the users.

Lesson 2

Provide students the opportunity to interview high school juniors and seniors about their experiences with preparing for and applying for college to move toward creating an empathy map for future design use.

Lesson 3

Provide students the opportunity to define the needs of their users by creating a definition chart and completing needs statements based on empathy maps.

Lesson 4

Provide students the opportunity to brainstorm 20+ ideas for meeting the needs of their users based on the needs statements.

Lesson 5

Provide students the opportunity to prototype an idea based on their ideate session.

Lesson 1: Defining the Problem Space
by Victoria Cabal

Grade Level(s)

College Freshmen

Lesson Overview

Introduce the design problem space. Use statistics to introduce students to the reality of inequality in access to college. Open dialog of student experience to build a foundation for empathic interviewing with authentic users. Build teams to begin design-thinking process. The goal is to provide an introduction to the problem space and to get students to begin considering appropriate questions for the users.

Learning Objectives

- Goals: define the problem space, build foundation for empathic interviewing, and develop teams.
- Outcomes: students will be able to understand the overall issues facing students in accessing college and they will have a foundation for developing empathetic questions*.*

Standards

- Comprehensive Counseling and Guidance Program, Standard 13: The professional school counselor is a student advocate, leader, collaborator and a systems change agent.

- Utah Core State Standards for English Language Arts & Literacy, Speaking and Listening Standards 6-12:
    - Engage effectivity in a range of collaborative discussions
    - Interpret information presented in diverse media and formats and explain how it contributes to a topic.

Preparation

- PowerPoint & handouts with National & State Statistical information on collage access
- Outline for experience discussion

Materials and Resources

- Print outs of statistical information
- Paper, markers, pens to write out own experiences
- Journals for assessment

Activity 1: The Problem (*10 Minutes*)

- Introduce the problem by letting students know they will be focusing on the issue of college access for students of diverse backgrounds.
- Pull up the PowerPoint and let them know you are going to present national and local data on college enrollment and degree attainment. Ask that as they observe the data they focus on the following key questions…
    - What did you observe in the data?
    - What surprised you in the data?
    - What questions did the data evoke?
- Present the statistical information (*see PowerPoint for example) showing the cultural/racial difference in college enrollment and degree attainment

Activity 2: The Data (*20 Minutes*)

- Ask students to take some time to journal about their reaction to the guiding questions.
    - What did you observe in the data?
    - What surprised you in the data?
    - What questions did the data evoke?

- Once everyone has responded bring the group back together to discuss what they observed in the data with relation to the guiding questions.
- Allow students to ask questions and help clarify any concerns.

Activity 3: Your Experience (*20 Minutes*)

- Based on the discussion ask students to journal about their own experiences of applying to and attending college. Have them focus on the following guiding questions.
    - What barriers, if any, did you face when applying to college?
    - What feelings to the application process evoke?
    - What was the one thing that pushed you to persevere in completing the process and being here today?

- Ask students to pair up and compare their experiences and rank their common experiences according to highest barrier to lowest and from highest support to lowest in the college application process.

Troubleshooting

Students may feel emotionally overwhelmed at discussing their experiences. Setting ground rules at the start of the activity, students will understand we need to provide a safe space for discussion. If a student feels unsupported or overwhelmed provide an "out" clause for them to take a break.

Assessment

Have students journal about what they observed in the data, how the data relates to their experience and what types of questions they may ask in an interview with a high school junior or senior. Review journal for understanding.

Lesson 2: Interview and Empathy Map
by Victoria Cabal

Grade Level(s)

College Freshmen

Lesson Overview

Provide students the opportunity to interview high school juniors and seniors about their experiences with preparing for and applying for college to move toward creating an empathy map for future design use.

Learning Objectives

- Goals: Students will understand interview best practices, and the importance of empathy in the interview process. Students will interview high school students and begin empathy map process.
- Outcomes: Students will be able to articulate what their interviewee said, did, and what they infer from these verbal and non-verbal communications.

Standards

- Comprehensive Counseling and Guidance Program, Standard 13: The professional school counselor is a student advocate, leader, collaborator and a systems change agent.

- Utah Core State Standards for English Language Arts & Literacy, Speaking and Listening Standards 6-12:
  - Engage effectivity in a range of collaborative discussions
  - Interpret information presented in diverse media and formats and explain how it contributes to a topic.

Preparation

- Prepare an empathy map graphic organizer
- Prepare sample interview questions as well as guidelines for interviewing

Materials and Resources

- Empathy map graphic organizer
- Sample interview questions as well as guidelines for interviewing

Activity 1: The Interview Process (*20 Minutes*)

- Provide students an outline of the interview process and sample interview questions.
- For students who have not been exposed to Design Thinking consider modeling appropriate interviewing.
- For students experienced with Design Thinking have them share sample questions and encourage them to consider new questions as they interview their user.
- Assign tasks to each member of the team for the interview process (i.e. verbal observer, non-verbal observer, note taker, questioner).

Activity 2: Classroom Visit (*10 Minutes*)

- Take students to visit high school.
- Introduce students and assign high school students to their college Design Thinking team.
- Allow for casual introduction and conversation as the teams and students become acquainted.

Activity 3: Interview (*20 Minutes*)

- Once students have become familiar, introduce the interview time.
- Provide each team with a space to conduct an interview with their student or students.
- Ask students to take note of as much of what they hear and see as possible.

Activity 3: Empathy Map (*10 Minutes*)

- Provide students with a copy of the empathy map organizer.
- Ask each member of the team to complete the "say" and "do" portion of the map, based on what they observed during the interview process.
- Have the teams discuss their findings and make inferences based on individual observations.
- Have team complete the empathy map together, making inferences of the interviewee.

Troubleshooting

Students, particularly students shy of social situations may find the interview activity challenging. Having the college students work in pairs or teams will help provide support for students apprehensive of the process.

High school students may fear talking about their needs with students they may see as peers or mentors. Work closely with the high school teacher to prep the students for the interview and assure them the students are working with them to understand their unique needs.

Assessment

Empathy map indicating what was said, done and what inferences were made of the interviewee based on observations.

Lesson 3: Define
by Victoria Cabal

Grade Level(s)

College Freshmen

Lesson Overview

Provide students the opportunity to define the needs of their user by creating a definition chart and completing needs statements based on empathy map.

Learning Objectives

- Goals: Students will understand how to use their empathy map to define their user's needs.
- Outcomes: Students will produce needs statements to help them during ideation or brainstorming.

Standards

- Comprehensive Counseling and Guidance Program, Standard 13: The professional school counselor is a student advocate, leader, collaborator and a systems change agent.

- Utah Core State Standards for English Language Arts & Literacy, Speaking and Listening Standards 6-12:
  Engage effectivity in a range of collaborative discussions
  Interpret information presented in diverse media and formats and explain how it contributes to a topic.

Preparation

- Prepare a definition graphic organizer
- Prepare sample definition chart and needs statements

Materials and Resources

- Definition chart graphic organizer
- Sample definition chart and needs statements

Activity 1: Definition Chart (15 Minutes)

- Provide students with a definition chart (see sample)
- Give students time to create statements based on their observations using the definition chart to organize and guide their insights.

Activity 2: Needs Statements (10 Minutes)

- Ask students to use their definition chart to create 2-3 needs statements based on what they defined (*see sample)

Troubleshooting

Students may struggle with creating a definition chart or needs statement. Providing samples will help guide them through the process.

Assessment

Definition chart and needs statements.

Lesson 4: Ideate
by Victoria Cabal

Grade Level(s)

College Freshmen

Lesson Overview

Provide students the opportunity to brainstorm 20+ ideas for meeting the needs of their user based on the needs statements.

Learning Objectives

- Goals: Students will understand the process of brainstorming any and all ideas. No idea is a bad one, even crazy ideas!
- Outcomes: Students will produce 20+ ideas for meeting the needs of their user based on the needs statements.

Standards

- Comprehensive Counseling and Guidance Program, Standard 13: The professional school counselor is a student advocate, leader, collaborator and a systems change agent.

- Utah Core State Standards for English Language Arts & Literacy, Speaking and Listening Standards 6-12:
  - Engage effectively in a range of collaborative discussions
  - Interpret information presented in diverse media and formats and explain how it contributes to a topic.

Preparation

- Provide forum for submitting ideas
- Prepare guiding thoughts to help generate ideas

Materials and Resources

- Post its or idea boards for brainstorming organization
- Guiding thoughts

Activity 1: Ideate Session (10 Minutes)

- Provide students the opportunity to brainstorm as many ideas as possible on how to meet the needs of their user.
- Provide guiding thoughts to help generate ideas (i.e. social relationship solutions, million dollar solutions, paper-based solutions, and technology-based solutions)
- After ideate session, ask students to notice any themes and group ideas based on commonalities.

Activity 2: Selection (5 minutes)

- Ask students to identify 1 or 2 ideas they might consider for prototyping.

Troubleshooting

Students may struggle with generating ideas. Providing guiding thoughts may provide different ways of thinking about the need and help generate unique ideas.

Assessment

Students will submit 20+ ideas to an idea board and select 1 or 2 ideas for prototyping.

Lesson 5: Prototype, Test, Improve
by Victoria Cabal

Grade Level(s)

College Freshmen/Concurrent Enrollment Grade 12

Lesson Overview

Provide students the opportunity to prototype an idea based on their ideate session.

Learning Objectives

- Goals: Students will explore how to turn an idea into a product.
- Outcomes: Students will produce a prototype of their idea for feedback.

Standards

- Comprehensive Counseling and Guidance Program, Standard 13: The professional school counselor is a student advocate, leader, collaborator and a systems change agent.

- Utah Core State Standards for English Language Arts & Literacy, Speaking and Listening Standards 6-12:
  - Engage effectivity in a range of collaborative discussions
  - Interpret information presented in diverse media and formats and explain how it contributes to a topic.

Preparation

- Prepare examples of prototypes
- Feedback form

Materials and Resources

- Prototyping materials: glue, boxes, paper, scissors, etc.
- Prototyping space
- Feedback form

Activity 1: Prototype (30 Minutes)

- Provide students with prototyping examples and materials
- Allow them to develop a prototype based on their 1 or 2 ideas from previous session.

Activity 2: Test (15 Minutes)

- Have students share their ideas with their users to receive feedback.
- Allow students to ask questions, clarify needs, and reassess

Activity 3: Rework Prototype (10 Minutes)

- If needed ask students to improve, add to, or rework their prototype based on user feedback.
- Once prototype is reworked share with user again for possible implementation.

Troubleshooting

Students will need to complete lessons 1-5 before completing activity 2 in lesson 5 as a group. Ensuring students are meeting deadlines will help ensure students are prepared for the testing activity in time for feedback meeting.

Assessment

Prototype
Feedback form (see sample)
Rework of prototype