

Pre-Assessment for ART 4365-001: Technology in Art Education Spring 2019

Start of Block: Makerspace Equipment Familiarity Pre-Assessment Revised

MSE1.1 Which level of experience with makerspaces best describes you?

- Before taking this course, I had never heard of a makerspace, and am pretty sure I've never worked in one. (1)
- Before taking this course, I had a general understanding of makerspaces, but I had never worked in one. (2)
- Before taking this course, I was familiar with makerspaces and had worked in a makerspace on a project at least once. (3)
- Before taking this course, I was a frequent user of at least one makerspace. (4)

Display This Question:

If Prior Makerspace Experience = Before taking this course, I was familiar with makerspaces and had worked in a makerspace on a project at least once.

Or Prior Makerspace Experience = Before taking this course, I was a frequent user of at least one makerspace.

MSE1.2 Before taking this course, have you ever used the equipment in the UTA FabLab?

- Yes (1)
- No (2)

MSE2.1 Please rate your level of experience with the types of equipment found at the UTA FabLab and other makerspaces:

	Non e (1)	Beginne r (2)	Novic e (3)	Intermediat e (4)	Competen t (5)	Advance d (6)	Exper t (7)
3D Printers (MSE2.1.01)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3D Scanners (MSE2.1.02)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CNC Mills and Routers (MSE2.1.03)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CNC Vinyl Cutters (MSE2.1.04)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laser Cutters/Engraver s (MSE2.1.05)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sewing Machines / Sergers (MSE2.1.06)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CNC Embroidering Machines (MSE2.1.07)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screen Printing Press (MSE2.1.08)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MSE2.2 Please rate your level of experience with the types of equipment found at the UTA FabLab and other makerspaces:

	Non e (1)	Beginne r (2)	Novic e (3)	Intermediat e (4)	Competen t (5)	Advance d (6)	Exper t (7)
Software for File Preparation for Digital Fabrication (MSE2.2.09)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woodshop equipment such as table saws, bandsaws, drills & presses, grinders, and hand tools (MSE2.2.10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronics fabrication tools, including soldering irons, multimeters, microprocessors , and PCB printers (MSE2.2.11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ceramics and/or glass working tools, including kilns (MSE2.2.12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 01 Identify the Need to Invent Pre-Assessment Revised

C1.1 How well does this statement describe you?

I can identify a need to invent, design, fabricate, build, repurpose, repair, or create a new derivative of some “thing” in order to express an idea or emotion, to solve a problem, and/or teach a concept.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C1.3 The following statements are about identifying the need to invent. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can recognize unmet needs that may be filled by making. (C1.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can tinker and hack to learn how things are made and how they work. (C1.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can evaluate the costs and benefits of making as an alternative to buying or hiring. (C1.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can investigate how others have approached similar situations. (C1.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 02 Analyze the Idea, Question, and/or Problem Pre-Assessment Revised

C2.1 How well does this statement describe you?

I can analyze an idea, question, and/or problem.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C2.3 The following statements are about analyzing an idea, question, and/or problem. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can define the idea, question, and/or problem. (C2.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can break the idea, question, and/or problem into its constituent parts. (C2.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can question assumptions. (C2.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 03 Explore the Idea and Potential Solutions Pre-Assessment Revised

C3.1 How well does this statement describe you?

I can explore an idea, question, and/or problem and potential solutions.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C3.3 The following questions are about exploring an idea, question, and/or problem and potential solutions. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can garner input from stakeholders and peers. (C3.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can research existing relevant products and ideas. (C3.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can brainstorm a variety of solutions and pursue the most promising one. (C3.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can evaluate the costs and benefits of using off-the-shelf parts or kits as opposed to making from scratch. (C3.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 06 Produce Prototypes - Pre-Assessment Revised

C6.1 How well does this statement describe you?

I can produce prototypes.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C6.3 The following statements are about producing prototypes. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can determine the method of creation most suited to the project. (C6.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can gain confidence with technologies and processes required for creation. (C6.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can specify functional requirements for prototype vs desired finished product. (C6.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can divide design into individual components to facilitate testing. (C6.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can document a design process. (C6.3.5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 07 Utilize Iterative Design Principles Pre-Assessment Revised

C7.1 How well does this statement describe you?

I can utilize iterative design principles.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C7.3 The following statements are about utilizing iterative design principles. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can apply measurable criteria to determine whether my creation meets the specified needs. (C7.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can revise and modify my prototype design over multiple iterations. (C7.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can gather prototype feedback and input from stakeholders and mentors. (C7.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can rework a design to include insights from feedback. (C7.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can take intelligent risks, use trial and error, and learn from failures. (C7.3.5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 08 Develop a Project Plan Pre-Assessment Revised

C8.1 How well does this statement describe you?

I can develop a project plan.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C8.3 The following statements are about developing a project plan. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can identify who the relevant stakeholders are. (C8.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can specify actionable and measurable project goals and requirements. (C8.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can utilize time management and project management tools. (C8.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can outline project milestones, including sequential action items. (C8.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can anticipate time for multiple prototype iterations. (C8.3.5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can work effectively within project constraints, be they financial, material, spatial, and/or temporal. (C8.3.6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: Custom Block for Assembling Teams Homework Assignment

CQ01 How do you recognize opportunities to collaborate with others to solve a problem?

CQ02 What kinds of opinions and feedback do you seek from your peers when collaborating on a project?

CQ03 Are you a good listener?

- Yes (1)
- No (2)

Display This Question:
If Custom Question 3 = Yes

CQ04 How do you practice good listening?

CQ05 How do you gauge the costs and benefits of whether to work on a problem alone or in a team?

CQ06 If given the chance to choose team members, how do you choose your partners?

CQ07 How do you know when your skills are sought out and needed by others?

CQ08 Do you regularly solicit advice, knowledge, and specific skills from experts?

- Yes (1)
- No (3)

Display This Question:

If Custom Question 8 = Yes

CQ09 Please provide examples of when you have solicited advice, knowledge, and specific skills from experts.

CQ10 Please explain a time when you had issues being disrespectful to others in your team, or when anyone in your team has been disrespectful towards you.

CQ11 As part of a team, when asked to complete a portion of the work, do you always follow through with your commitments?


Yes (1)

No (3)

CQ12 Please explain how you provide substantive, actionable feedback to help your team mates improve.

CQ13 How many hours per week are you available outside of class time for ART 4365 assignments and projects?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Number of hours ()	
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CQ14 How much do you enjoy working in teams?

- None at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

CQ15 How many years of experience do you have working in teams? This could include on-the-job experience, course work, or extracurricular activities.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Number of Years ()	
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C9.1

How well does this statement describe you?

I can assemble effective teams.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C9.3 The following statements are about assembling effective teams. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can recognize opportunities to collaborate with others who provide diverse experiences and perspectives. (C9.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can gauge the costs & benefits of “Doing-it-Yourself” (DIY) or “Doing-it-Together” (DIT). (C9.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can recruit team members with diverse skills appropriate for specific project requirements. (C9.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can join a team where my skills are sought and valued. (C9.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can solicit advice, knowledge and specific skills from experts. (C9.3.5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: 10 Collaborate Effectively Pre-Assessment

C10.1

How well does this statement describe you?

I can collaborate effectively with team members and stakeholders.

- Does not describe me (1)
- Describes me slightly well (2)
- Describes me moderately well (3)
- Describes me very well (4)
- Describes me extremely well (5)

C10.3 The following statements are about collaborating effectively with team members and stakeholders. How well do the statements describe you?

	Does not describe me (1)	Describes me slightly well (2)	Describes me moderately well (3)	Describes me very well (4)	Describes me extremely well (5)
I can listen to others. (C10.3.1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can learn from and with others. (C10.3.2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can communicate respectfully and clearly with team members and stakeholders. (C10.3.3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can follow through on team commitments and responsibilities. (C10.3.4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can practice accountability both personally and with team members. (C10.3.5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can appraise contributions to the success of the team. (C10.3.6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>