COMPASS

TEACHER MANUAL

SUMMER 2021

SCHEDULE

9:00 - 9:10 a.m.

Introductions

Students and teachers will introduce themselves to the class and share a few interesting facts about themselves.

9:10 - 9:30 a.m.

Hopes & Fears

Students will begin the Hopes, Fears, & Norms protocol by writing and sharing their hopes and fears for the program.

9:30 - 11:30 a.m.

Capture the Flag (With a Twist)

Students will be divided into two teams to play Capture the Flag. The twist is that teams will need to find five flags instead of one. Once teams have gathered all five flags, the puzzle will have to be solved.

11:30 - 11:40 a.m.

Driving Question Reveal & PBL Introduction

Teachers will discuss the driving question with students and will provide an introduction to PBL. The driving question is:

How can we create an EPIC summer program through engaging learning, activities, and experiences?

11:40 - 11:55 a.m.

Norms

Students will complete the Hopes, Fears, & Norms protocol by developing norms that everyone agrees to follow throughout the program (ex. Being Respectful).

11:55 - 12:00 p.m.

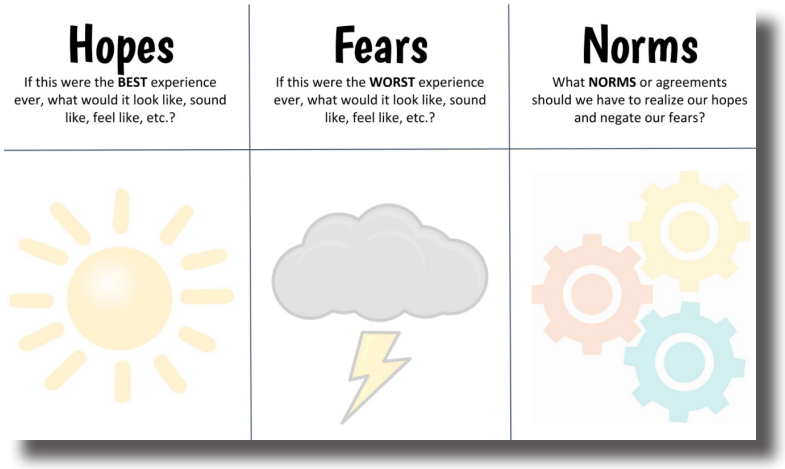
Homework

Teachers will explain that for homework students must gather 3-5 items that display their passions, interests, and hobbies.

HOPES, FEARS, & NORMS

Hopes, Fears, and Norms is geared towards developing a safe environment and culture for your teams to thrive. Prepare chart paper in advance with three columns (Hopes, Fears, and Norms) as shown below. To begin the protocol hand each student a pack of Post-It notes and a pen or pencil if necessary. Then follow the steps below.

DIRECTIONS



1. Give students 1-2 minutes to write down their hopes (one per Post-It note) by presenting the prompt below. After the time is up, discuss hopes, and place the sticky notes on the chart paper in the hopes column.

If this were the BEST experience ever, what would it look like, sound like, feel like, etc.?

2. Give students 1-2 minutes to write down their fears (one fear per Post-It note) by presenting the prompt below. After the time is up, discuss student fears, and place the sticky notes on the chart paper in the fears column.

If this were the WORST experience ever, what would it look like, sound like, feel like, etc.?

3. *After completing the Fears, transition students to Capture the Flag. At the end of the day, come back to complete the norms section.

4. To complete the norms section, give students 1-2 minutes to write down potential norms (one norm per Post-It note) by presenting the prompt below. Discuss norms and determine classroom norms (ex. Respecting Others). Have all students agree on norms before end of class.

What norms or agreements should we have to realize our hopes and negate our fears?

MATERIALS

- Chart Paper or Butcher Paper with pre-written columns (Hopes, Fears, Norms)
- Post-It Notes (1 pad per student)
- Pens or Pencils
- Markers
- Timer
- Projector (Optional)

CAPTURE THE FLAG

Divide students into two teams for Capture the Flag (With a Twist). Capture the Flag will serve as the entry event for the PBL project and will end with the reveal of the driving question for the week. Have teams place bandanas visibly on them for easy identification of teams (ex. on the wrist). Explain the rules to students as listed below.

RULES

- Each team will hide the other team's five flags (the twist!) on their side of the field. Teams will have 15 minutes to strategize and the opposing team's flags.
- Cones will divide the field into the two sides. If players are on their own side they are safe, and therefore cannot be tagged. If a player enters the other team's side he or she may be tagged by an opponent. If a player is tagged by their opponent, he or she must tag up at their team's home base (a specified cone or location as noted by the teacher).
- To win the game, a team must collect all five of their flags and return them to their home base. Once a flag is at the home base, members of the team can trade the flag in for a puzzle envelope. When all puzzle envelopes have been collected, the team must then work to solve the puzzle. A winner may be declared after the puzzle has been solved.
- Teams will have no more than 1 hour and 45 minutes to retrieve all five flags and solve the puzzle.

MATERIALS

- Flags x 10 (2 colors)
- Cones (Amount depending on field size)
- Bandanas x Total Students (2 colors)
- Puzzle Envelopes x 10
- Timer
- Whistle
- Water and/or Snacks for Students

SCHEDULE

9:00 - 9:10 a.m.

Creative Sequence Introduction

Teachers will introduce and discuss the steps of the Creative Sequence with students.

9:10 - 9:30 a.m.

Personality Assessment

Students will take a personality assessment to identify their strengths and passions within the Creative Sequence. Results will help to determine balanced teams.

9:30 - 9:50 a.m.

Artifact Analysis

Students will place their items out on a table or desk. All students will travel around the room and make inferences about the artifacts such as individual interests.

9:50 - 10:00 a.m.

Who Are We: Class Interest Inventory

Students will examine information from the Artifact Analysis and create an interest inventory diagram for the class.

10:00 - 10:30 a.m.

Forced Connections

Students will be handed an artifact (such as a ticket for a baseball game) and will be asked to answer how the artifact could relate to the driving question.

10:30 - 11:30 a.m.

Jigsaw Research on Class Interests

Students will divide into pairs and each pair will select an interest from the class interest inventory. Pairs will research local attractions and/or opportunities that would fulfill those interests. Students will then present findings.

11:30 - 12:00 p.m.

Announce Teams & Team Building

Based on the personality assessments, teams for the remainder of the week would be created and announced to students. If time allows, a team building activity could be run.

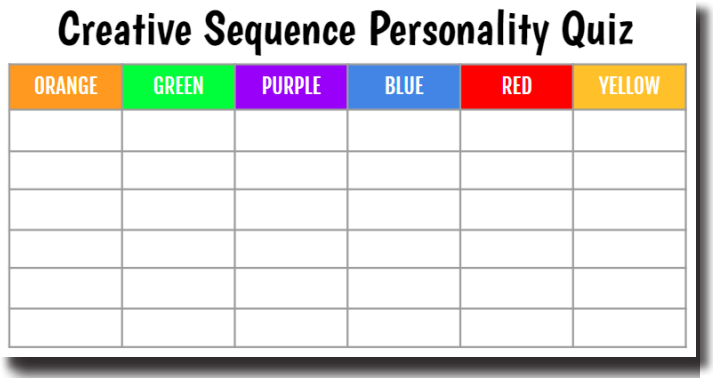
PERSONALITY ASSESSMENT

The Creative Sequence Personality Assessment is a great way to see where students are strong within the Creative Sequence. By answering a series of questions and completing the graph students will have a quick visual as to their preferred stages of the Creative Sequence. Assessment results can then be used to make balanced teams based on student strengths.

DIRECTIONS

1. Explain to students that they will be reading a series of questions and possible answers. Students will need to identify the answer that they MOST agree with of all the possible answers.

2. For each question students should color one rectangle on the graph to represent the color of the answer that they most agreed with for that question.



3. Once students have completely answered all of the questions, explain the meanings behind the different colors in the graph. Discuss the results in small groups.

4. After discussion, one teacher should collect the results with names on them. During the next activity, teachers should use the results to create teams of 6 or 7 students. Teachers should try to create balanced teams based on the strengths identified by the assessment.

MATERIALS

- Creative Sequence Personality Assessment Graphs x 14
- Pencils or Pens
- Colored Pencils, Markers, or Crayons (Each student will need the colors listed on the assessment graph)
- Projector or printed copies of the

ARTIFACT ANALYSIS

An artifact analysis is an opportunity to examine objects that are significant to an individual or group. By analyzing and making inferences about artifacts presented by classmates, students will have the opportunity to create inferences on the interests, passions, and hobbies of their peers.

DIRECTIONS

1. Give each student a note card with a number on it (1-14). Students will place their objects in a designated place with the note card.

2. Students will then number a piece of paper 1-14 or will be handed a worksheet with a grid for each number. The teacher will explain that students are to make inferences about the objects and the interests of students in the class.

3. Students will have 15 minutes to walk around and examine the artifacts. Students should take notes on each artifact and make inferences regarding student interests.

4. After students have examined all the artifacts, each student will have the opportunity to briefly explain the artifacts that they brought in. While listening, classmates should make adjustments as necessary to their notes.

5. As a whole class, with their notes, students will then create a class interest inventory, in the form of a list or a graphic organizer on chart paper at the front of the room.

MATERIALS

- Student Artifacts
- Note cards with #1-14
- Chart Paper or Butcher Paper
- Markers
- Paper (1 per student)
- Pens or Pencils
- Markers
- Timer
- Projector (Optional)

FORCED CONNECTIONS

Forced Connections is an effective protocol for allowing students to see a new and fresh perspective on the issue or challenge presented by the driving question. By presenting an object and having students reflect on the objects connection or relation to the driving question, students will gain new insight as they continue to solve the problem.

DIRECTIONS

1. Divide students into small groups of 3 or 4. (Pairs would also be acceptable.)

2. Present students with an object (such as a ticket for a Kalamazoo Growlers baseball game).

3. Refer students to the driving question. Ask students to create a small poster demonstrating how the object relates, connects, or could solve the driving question. Give students approximately 15-20 minutes to complete the task.

4. Have students present posters to the class an explain the connections their groups saw between the object and the driving question.

5. Hang posters around the room for students to view.

MATERIALS

- Object or Artifact ex. Growlers Ticket (1 per group)
- Copy of the Driving Question (1 per group)
- Chart Paper (1 per group) assessment questions
- Markers (1 pack per group)
- Painters Tape to Hang Posters Around Room

JIGSAW RESEARCH

The intent of Jigsaw is shared learning and research. Members of the group become "experts" in a particular area and share their learning/research with the remainder of the group. Jigsaw is an efficient protocol to utilize when a large quantity of research and learning needs to take place in a short time.

DIRECTIONS

1. Divide students into pairs or small groups of three. Review the Class Interest Inventory that was created after the Artifact Analysis.

2. Have pairs of students select one (or two depending upon the total amount of interests) interest to research. Direct students to research local attractions or opportunities that might be enjoyable to a person with their selected interest.

3. Students will have 30-40 minutes to research their selected interest. Students should keep a list of local attractions or opportunities that would suit their interest. (It may be a good idea to have students start a Google Doc and embed links to opportunities found for the interest).

4. After pairs/small groups have researched, each group should create a poster detailing their findings.

5. Each group will take turns reporting their findings to the rest of the class. Posters should be hung around the room.

MATERIALS

- Chart Paper (1 per pair)
- Markers (1 pack per pair)
- Computers (1 per student)
- Painters Tape

SCHEDULE

9:00 - 9:10 a.m.

Review Driving Question & Learning

The class will review the driving question and learning from the initial two days.

9:10 - 9:25 a.m.

Idea Quota and Group & Saturate

Students will generate ideas to solve the driving question individually. Students will then group the ideas from the team.

9:30 - 9:45 a.m.

Combin-Ide-ation

Students will examine ideas generated through idea quota and will work to create new ideas by combining others.

9:45 - 10:00 a.m.

Dot Voting & NUF Test

Students will vote for their favorite idea or ideas. Students will then evaluate top ideas through the NUF Test.

10:00 - 10:10 a.m.

Pitch & Prototype Introduction

Teachers will provide examples of pitches, prototypes, and will review pitch rubric with teams.

10:10 - 10:20 a.m.

Team Plan

Teams will discuss division of work for the creation of the pitch and any necessary prototypes.

10:20 - 11:50 a.m.

Pitch & Prototype Work Time

Students will work to build the pitch and any necessary prototypes. Teachers will continually monitor and check in.

11:50 - 12:00 p.m.

Team Check In & Plan

Teams will check in and create a final plan for work as necessary.

IDEA QUOTA

The concept behind the Idea Quota protocol is the belief that Thomas Edison had that in order to have a good idea you have to generate many ideas. Over the course of his life, Edison was granted 1,093 patents ranging from everything to the light bulb, to the typewriter, to a talking doll, to the motion picture camera.

DIRECTIONS

1. Divide students into small groups within their team (3 or 4 students). Give each student a pad of Post-It notes.

2. The goal is for each small group to come up with as many ideas as possible in a short amount of time. Set an ambitious goal like 200 ideas in 10 minutes. Each student should write one idea per sticky note then place that note into the center of the group.

3. Give students 10 minutes to come up with as many ideas as possible. No judging at this time - any idea is a good idea, no matter how crazy! If students appear stuck, try to prompt them with a different question such as "How would a teacher solve the problem?" or "How would a first grader design a solution?"

4. After the 10 minutes of idea generation, have students group and saturate their ideas. As a whole team (put the small groups back together) have students group their ideas into different categories on a piece of chart paper. Once categories have been created, have students add a label to each category. Give students 5 minutes to complete this task.

MATERIALS

- Chart Paper (1 per team)
- Markers (1 pack per team)
- Post-It Notes (1 per student)
- Pencils or Pens
- Timer

COMBIN-IDE-ATION

Some of the best ideas come from combining two or more ideas. Think of the "spork" from school lunches, the ultimate combination of a fork and spoon. Or consider roller blades - an intentional combination of roller skates and ice skates. Asking students to consider combining ideas allows them to generate new concepts and perspective in relation to the driving question.

DIRECTIONS

1. Have teams examine the ideas created and grouped during Idea Quota.

2. Ask students to look for ideas that could be combined to create a new idea or concept.

3. Have students record their Combin-ide-ations on different colored sticky notes than those used during Idea Quota.

4. Give students approximately 10 minutes to create as many Combin-ide-ations as possible!

MATERIALS

- Chart Paper from Idea Quota
- Post-It Notes (4-5 packs per group)
- Pencils or Pens
- Markers (1 pack per group)

DOT VOTING

Dot Voting allows students to begin narrowing down the numerous ideas that have been created during the incubation stage of the Creative Sequence. Students should ideally be given 2-3 dot stickers, but if there is a large quantity of ideas, up to 5 stickers could be given per student.

DIRECTIONS

1. Give each student 2-3 dot stickers. Prompt each student to "vote" for his or her favorite ideas or combin-ide-ations. Students should be allowed to stick more than one dot to an idea, but it may be a good idea to limit to a max of two stickers per student for one idea.

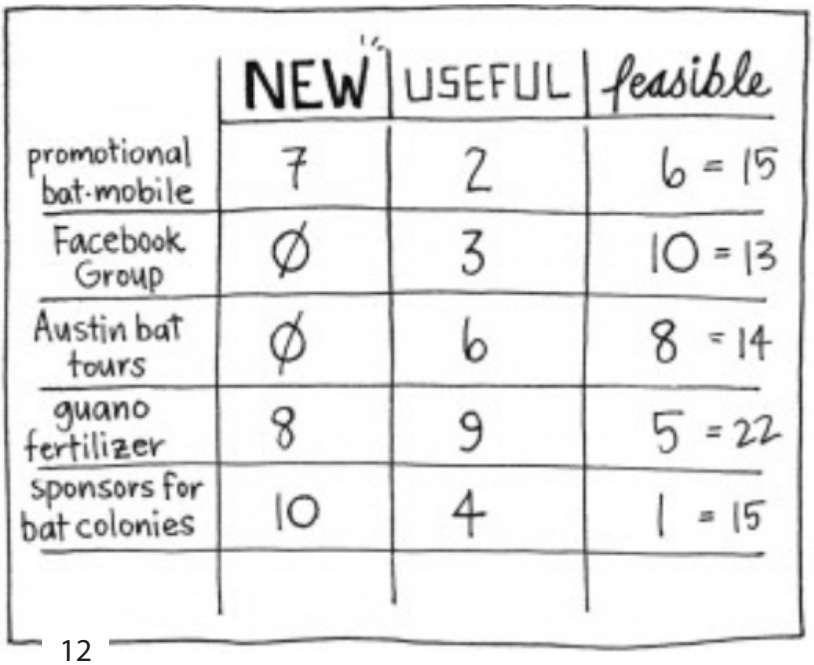
2. After they are done voting, students should discuss as a team the rationale behind the voting process, and the top ideas or combin-ide-ations.

MATERIALS

- Chart Paper from Idea Quota
- Dot Stickers (2-3 per student)

NUF TEST

The New, Useful, Feasible Test or NUF Test is a great protocol to further help students narrow down to ideas that will feasibly solve the driving question. The NUF Test allows students to determine if they are on the right track for solving the problem or whether they may still need some more work.



	NEW	USEFUL	feasible
promotional bat-mobile	7	2	6 = 15
Facebook Group	∅	3	10 = 13
Austin bat tours	∅	6	8 = 14
guano fertilizer	8	9	5 = 22
sponsors for bat colonies	10	4	1 = 15

DIRECTIONS

1. Have each group create a table on a piece of chart paper with five columns. The titles of the columns from left to right should be: ideas, new, useful, feasible, and total score.

2. Each team should write down the top 5-10 ideas from Dot Voting. Then the students should discuss and give each idea a score from 1-10 for each category.

3. Students should then total the points for each idea and determine the final idea for the group.

MATERIALS

- Chart Paper from Idea Quota
- Markers (1 pack per team)

SCHEDULE - DAY 4

9:00 - 9:10 a.m.

Team Check In & Plan

Teams will check in on work and determine a plan to complete any additional materials necessary.

9:10 - 10:30 a.m.

Pitch Rehearsal

Students will rehearse pitch for presentation.

10:30 - 11:30 a.m.

Pitch Presentations

Students will present pitches to the Superintendent and other panelists. Each group will have a 20 minute presentation and will have five minutes of questions from the panel.

11:30 - 12:00 p.m.

Pitch Reflection

Students will reflect on their pitch presentations and will review the rubrics completed by the panelists.

SCHEDULE - DAY 5

9:00 - 12:00 p.m.

Celebration of Learning

Teams will learn how solutions will be implemented based on the pitches. Teams will celebrate learning throughout the week with an activity such as bowling.