IDEATION JAM SESSIONS
HARNESSING THE POWER OF PEOPLE THROUGH COLLABORATIVE SKETCHING

George K. Chow
University of Houston
gkchow@uh.edu

1. INTRODUCTION
Sketching is a primary means for designers to rapidly visualize their ideas (Eissen, 2016). One of the most effective ways to develop or refine sketch ideas further is by seeking feedback from people who are different from us because they may approach or react to the ideas differently. “As iron sharpens iron, so one person sharpens another” (Proverbs 27:17, NIV Bible, 2011). We can sharpen each other by seeking and giving constructive feedback to each other. In Design schools, this feedback generally happens in the form of in-class critiques. Students will usually sketch and “pin up” their concepts and wait to receive feedback from the instructor, fellow classmates or a combination of both. The feedback given in class is usually helpful, however, is there a fun and spontaneous way to simultaneously receive feedback and ideate collaboratively to more efficiently leverage the power of different peoples’ knowledge and perspectives?

In the world of jazz music there is a concept known as improvisation where musicians will spontaneously create new music over musical frameworks known as chord progressions. Talented jazz musicians can improvise individually or collectively with other members of the band and have musical conversations with each other over the course of a song. Can the same concept of collaborative jazz improvisation be applied to the sketch ideation process? This paper explores the possibility through the documentation of a case study, its results and analysis.

2. INSPIRED BY JAZZ IMPROVISATION
In jazz improvisation, musicians have musical conversations with each other through “call and response” where one musician plays a “phrase” or “sentence” and another musician will respond back with a musical phrase or sentence (Mezzrow, 2016). When a musician plays four or eight measures and then another musician responds with the same amount of measures it is known as “trading fours” or “trading eights”. They can continue “conversing” back and forth and take listeners on a musical journey, which forms a “story”, poem, or song that they have created together. “Jam sessions” are when jazz musicians informally gather together to play songs and improvise (Szwed, 2002). This concept is the inspiration for “Ideation Jam Sessions” where one designer will sketch a form or idea and another designer will respond back, adding to or iterating on the form or idea. The journey would be collaborative and could result in a fun, effective and efficient process whereby higher quality ideas are developed. The Ideation Jam Session concept was tried with students at an Industrial Design school and documented below.

3. CASE STUDY
The Ideation Jam Sessions were completed with students in a first year level Industrial Design studio course. There was a total of 26 students equally divided into two sections. The students were task with a four-week project to design a product of their choice with the following constraints: 1. has at least one demonstrable function, 2. inspired by a contrasting word pair of their choice (i.e. ancient vs. modern, symmetric vs. asymmetric, etc.), 3. cannot utilize electronic components, 4. incorporates organic (compound) surfaces and 5. size: minimum of 10” to a maximum of 20” in any one dimension.
The students completed initial brainstorming of their word pairs, mood boards based on their word pairs, initial ideation of 20 sketch concepts and refinement down to five final concepts before we tried the collaborative sketching exercises. The sketching exercises were divided into two main rounds- round one: sketching in pairs and round two: sketching in small groups. The next sections detail out the specifics of the exercise preparation, sketch rounds, results and analysis of the exercises.

3.1. PREPARATION
Two sets of 8.5x11” (landscape) sketch paper sheets were prepared for the collaborative sketching exercises- one set for participants working in pairs and another set for small groups (3-4 participants).

3.2. SKETCHING IN PAIRS
Students were asked to pair up with a student from the other section whom they did not know or know very well. This was done to encourage the students from each section to get to know one another better and for greater cross-pollination of ideas since the previous in-class critiques were done with their own section. Several collaborative sketching sheets were distributed to each student. Each student took two
minutes to show and explain to their partner one of their top five concepts. After both students explained their concepts to each other, they wrote their name on their respective collaborative sketching sheets and were given two minutes to sketch their reaction or refinement to their partner’s concept. After the two minutes were up, they swapped sketching sheets with their partner and sketched for another two minutes based on their partner’s new sketch. The whole process was repeated again except with a different concept selected from their final five concepts.

![Figure 3. Students explaining one of their final five concepts to each another. (Chow, 2018)](image)

### 3.3. SKETCHING IN SMALL GROUPS

After sketching in pairs, students were placed into small groups of 3-4 by random drawing of names from each section. The collaborative sketching sheets were handed out to each group and each member was given two minutes to describe to the rest of the group another one of their final five concepts (different than the concepts shared in the pair exercises). Once the sharing of concepts was complete, each student wrote their name on a sketching sheet and sketched their reaction or refinement of the concept of the person to their right. Each student sketched simultaneously with their small group for two minutes on their respective sheets and then passed the sheets to the person on their left (clockwise). This process repeated until the sheet reached the originator of the concept and he/she also sketched refinements based on his/her classmates’ sketches. This exercise was repeated two more times until all five of their final concepts had gone through a collaborative sketch revision process.

![Figure 4. Students sketching in pairs and small groups. (Chow, 2018)](image)

### 3.4. SHARING WITH THE CLASS

Upon completion of the Ideation Jam Sessions, students were asked to share with the rest of the class the refinement progression that their concepts went through.
3.5. PAIR RESULTS

The following images show a sampling of some of the results of the Ideation Jam Sessions done in pairs. In one example, a student’s original concept for a paper towel holder started out cylindrical in form. After working with a partner, it gradually morphed into a more organic leaf-like form. In another example, a utensil holder concept grew taller and eventually became more defined and had thin rods or cables added to the concept as a different method of holding utensils.
3.6. SMALL GROUP RESULTS
The following images show some of the results from the Ideation Jam Sessions done in small groups. In one example, the original concept was for a cake holder that could flip over and turn into a fruit basket. As the concept progressed within the small group, one student suggested making the legs swivel outward or inward to allow for different configurations as a cake stand or fruit basket.

Figure 7. Original cake stand/fruit basket (left) and the results from an Ideation Jam Session (right). (MacTavish, Rich, Gorman, 2018)

In another example, the original concept started out as a small side/coffee table but eventually transformed into a portable laptop stand that could be used on a sofa, bed or countertop.

Figure 8. Original side/coffee table (left) and the transformation to a portable laptop stand (right). (Keymolen, Engler, Cuomos, 2018)

In another example, a toilet paper roll holder concept had a magazine rack incorporated and the rack was moved around in different configurations as shown in Figure 9.
In another small group, the original concepts were plant holders. The fellow classmates suggested a window to view water levels, new forms, and possible areas for different storage.
3.7. ANALYSIS
A six-question online survey was sent to the students and below are the questions and answers:

- **How helpful were the Ideation Jam Sessions in developing and/or refining your concepts?** (scale of 1-5, 5 being most helpful).
  Out of the approximately 70% of the class that completed the survey more than 50% ranked the exercises 4 out of 5 in terms of being helpful in developing and/or refining their concepts.

- **What was the best benefit of the Ideation Jam Sessions?**
  The overwhelming response seemed to be, “getting different ideas and perspectives”. Here is a Wordle (wordle.net) image that shows the most utilized words from the written responses:

![Figure 11. Wordle (wordle.net) created from the responses to question #2. (Chow, 2018)](image)

- **Were there any negatives to doing the Ideation Jam Sessions?**
  The main negative feedback seemed to have to do with the lack of time. For the majority of the exercises only 2 minutes were given to sketch concepts. The short time frame was intentional to get students to react and draw improvisationally, however, many of the students stated that they felt rushed and would have liked to have more time to sketch as well as to discuss what they had just drawn. In retrospect, a little more time seems like a good adjustment as well as having a brief sharing time before passing the sketch on. This could be done as an option in future exercises to see if the results are significantly different. Another statement was, “some students aren’t as helpful, aren’t able to offer a suggestion”. Inevitably, the exercise results will largely depend on the participants involved so this is definitely something to consider, however, it seems the potential overall pros of the exercises outweigh the cons.

- **Did you prefer the collaborative sketching done in pairs or small groups?**
  The majority (57.1%) of the respondents seemed to prefer working in small groups instead of pairs. 21.4% did not seem to have a preference and 21.4% preferred working in pairs.
Is there anything you would have changed about the exercises?

Again, the general response seemed to revolve around having more time. Some other suggestions included using different size paper. One suggested using larger paper that has been sectioned off and another suggested using smaller paper like post-it notes. The larger paper is a possibility, however, it is not as readily available as conventional letter-size paper. Drawing on post-it notes is also a possibility, however, it would not be as easy to keep the sketches grouped together.

Any additional thoughts and/or comments?

There were several comments regarding the exercise as being “fun and helpful” and that it should be done with other future projects. One student summarized the sentiment well commenting, “The exercises were a fun way to create new ideas and helped move the design.” There were also a couple of suggestions for the exercises to be done later in the refinement process rather than earlier in the ideation phase because they felt it was a better refinement tool rather than an ideation tool.

4. CONCLUSION

In the field of Design education, we have a limited amount of class time to pack in lessons and skill development. With sketching being one of our most fundamental methods of ideation, we are in need of engaging, collaborative, efficient and effective methods to achieve high quality ideation results and learning within a short amount of time. Jazz improvisation is a fantastic example of spontaneous, collaborative creativity with which we can incorporate into a collaborative sketch ideation process known as an Ideation Jam Session.

With further refinements such as increasing the amount of time for sketch sessions and having brief discussion periods in between sessions, Ideation Jam Sessions could be improved and implemented as an effective method for spontaneous, collaborative ideation and development.

REFERENCES


