

Hyperspace: A First Week Experience

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- Keywords:** Collaboration, Charrette, Risk taking, Communication, Mentoring, Student Retention, Studio Culture, Engagement, Teaming
- Category:** CIT: Collaboration and Interdisciplinary Teaching
CO: Communication
CDP: Creativity and Design Process
GHD: Global Perspective and Human-Centered Design
MF: Materials, Finishes, Fixtures and Furnishings
- Type:** Studio project
- Level:** Undergrad – first, second, third, fourth year
- Duration:** 5-7 Days
- Abstract:** Building interdependent student relationships within educational programs is key to establishing learning environments that support strong studio cultures and a sense of belonging. According to research, the key to supporting engagement, and student retention is to support a sense of belonging: without it, academic performance and self-esteem suffer, depression may set in and student retention rates decrease. Student performance levels and retention are increased when students are bonded with their peers. Hyperspace is a means to support these interdependent relationships: a department wide first week experience teaming students from all year levels to complete a 5 to 7-day project. Formatted as a design charrette, this annual learning experience facilitates departmental and potentially interdisciplinary collaboration and mentoring for students of all levels. Learning objectives focused on programmatic development, design process, rapid development ideas

and most importantly, effective teaming. Post project surveys supported the evaluation of student experiences and successful learning outcomes. Building morale, emphasizing teaming and tearing down the traditional hierarchal, territorial separation of students serves to not only to increase student retention but enforce the strength of the department as a whole.

Learning Objectives:

- Students develop peer mentoring relationships
- Students foster positive working relationships with department cohort
- Students develop collaboration skills
- Students develop skills to mediate ideas and opinions of collaborative team
- Students apply the design process to develop a creative program, synthesize information and generate evidence-based design solutions.
- Students develop awareness of new products, materials and systems.
- Students evaluate their performance and experience through self-reflective post project surveys

Criteria:

Timeline:

This project requires approximately one to two months lead-time for preparation and establishing schedule, then five to seven days for application.

Determining Project Scope

Projects should be large enough to allow valuable investment by the students but not so large as to overstress and overwhelm in the time period allowed. Selecting topics that will both engage and excite the students is important to maximize team engagement. Projects should have a physical space in which implementation is proposed to connect with the given design dictates (as per project brief).

Integration into Curriculum:

Incorporation into the curriculum requires a department wide commitment to the project. This project is implemented the first week of spring semester annually. This allows freshmen to have a semester to integrate into college culture before endeavoring the experience.

In order to support a more diligent level of engagement by students, the charrette was given as an academic requirement. Grading was applied within a single studio for each year and integrated into the syllabus as part of the final grade. Initial applications did not include this factor which resulted in a lackluster showing by upperclassmen. It is recommended to apply grading in studios in order to keep all years equally engaged in the process

Judging:

Depending on the project brief given, including field practitioners, invested individuals, community members and faculty give a greater breadth and depth to evaluations of final outcomes. A hosted final exhibition allows both a social and professional interaction with the students. Projects are judged based on practicality of application, creativity and adherence to the design dictates.

Process:

Phase 1: Preparation

Pre-planning

Dates were determined to be the first week of spring semester. This allows for freshmen to have a semester to integrate into the college culture before being put under the stress of a rapid design project.

All department faculty, were briefed on the format and process and the team collaboratively ideated project brief and conditions. Department faculty integrated the charrette into their course schedules for the first week in order to allow students to commit their full attention to the task. Faculty roles were clearly delineated: serving as mentors only. Student were expected to run and manage projects independently. Faculty were available during their scheduled studio times, office hours and additionally scheduled hours to give guidance and mentor as required.

Project timing varies according to project scope. Three to five days are given for the design process, with two to three days for production of final physical artifact.

Space was booked for the final exhibition and invitations to the public/judges were planned.

Project Brief Development:

Project briefs were developed by the faculty cohort with multiple problems developed in order to give variation to the final outcomes

(appendix 1). The problems consisted of a short paragraph or single sentence; an intensive experiential learning assignment. A set of simple design dictates were required to be expressed within the projects: tenets of form, space and order, sense of place, brand identity, support teaming/community building and sustainability. Limitations were intentionally kept simple, and requirements broad in order to drive team creativity and a wide range of solutions to the problem.

Team Development:

Students were grouped in teams of 4-5 from all year levels (freshman to senior). A brief evaluation of strengths and weaknesses was applied so as to assure each team had one strong performing upper classman to mentor weaker students. Juniors were tasked with project management in order to challenge the seniors to concede leadership to a subordinate: diminishing the potential for a dictatorial environment. They had enough knowledge to lead but generally, did not dominate due to educational status. Low performing juniors were teamed with stronger seniors with personalities that would help guide them in their management tasks rather than dominate.

Student Preparation:

The student body as a whole were aware of an upcoming one-week department wide project, but had no information pertaining to the project brief prior to the kickoff date. The date and time of the required department wide meeting was promoted (as required) in late fall. Kick-off was scheduled for early morning on the first day of spring semester classes.

At the end of the prior fall semester, juniors were given a briefing on project management, effective leadership and communication skills. They were aware that they would be entering into a leadership role for a charrette, but with no knowledge of the brief.

Phase 2: Implementation

The design brief was disclosed on the designated kickoff date. Team rosters were distributed and student teams were organized. Team members shared preferred communication methods, determined meeting times and distributed initial tasks.

Students were required to check in with faculty during their scheduled class hours in order to assure active participation.

Presentation

Method:

Final presentation was in the format of a poster. A branded template was distributed to teams to create a cohesive presentation of all work. Posters were to fully express the goals and intent of their design without verbal enhancement and include a written statement of intent and goals.

Evaluation:

Qualitative outcomes were determined at final exhibition. Jurists were given ballot with rating scales determining outcomes for each design dictate, creativity and practicality of application. At the end of the judging session, ballots were returned and a count was given to determine the contenders. One project from each project type was determined a “winner” and students received swag bags from manufacturers product representatives who sponsored the exhibition. This allowed students to perceive the overall quality outcomes of their design.

Ultimately, this project was focused on process over product, the thoughtful completion of the post project surveys took precedence in determination of final applied grades. Student performance evaluations addressed both cognitive and affective domain outcomes. Achievement of affective domain outcomes were determined through post project feedback (appendix). Post project feedback showed students had introspective responses to their own performance and how they related to their peers. Responses were surprisingly honest and there was a clear pattern represented. Findings showed that students’ morale was raised, confidence increased and those who would not otherwise rise to a leadership role embraced the position and learned from their successes and failures. There was a strong understanding that in order to work effectively with others, a proactive work ethic, respect, communication and most importantly; trust, are required. Relationships were gained, giving that sense of belong to many where it previously lacked.

Faculty met post-project in order to identify successes/failures of the process. Issues were identified and flagged for future applications of the charrette.

Lessons Learned:

- Students may initially express high levels of apprehension over time limitations. During initial application, students were unfamiliar with the charrette process so more time was given. After repeated applications, the studio culture becomes more comfortable with the process.
- Concerns over the abilities of freshmen to contribute to the teaming experience were stemmed though discussion with upper classmen.

Although they may lack the requisite studio and technological skills, they can contribute fruitfully through ideation, research, sketching and responsibly given tasks.

- Engagement by seniors over time has been varied. Due to demands of jobs, internships and search for full time design positions, they often become less engaged in the process. It is important to motivate them and set an established repercussion for not engaging. Peer review grades were implemented in order to stem this issue.

Variations:

Incorporate other programs into the process. Suggested disciplines: architecture, graphic design, industrial design, civil engineering, digital arts or specialized programs such as hospitality management and business management. It is important that all faculty are equally invested in the process and students are being evaluated as a whole equally in order to avoid disengagement. The program should be written to suggest aspects that would require the varied skillsets.

Credits: None

References: Strayhorn, Terrell L. *College Students' Sense of Belonging: A Key to Educational Success for All Students*. New York: Routledge, 2012.

Nosheen, Rachel Naseem. "Peer Mentoring: Enhancing Social Cohesion in Pakistani Universities." *Higher Education, Skills and Work - Based Learning* 3.2 (2013): 130-40. *ProQuest*. Web. 23 May 2018.

Documentation: Sample project brief, abridged post project review, student work samples

Appendix 1: sample project brief

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project brief

Objective: To facilitate interrelationships and mentoring between students. Students will develop an understanding of the requirements for effective teaming, programmatic thinking, process, product knowledge and the industry demand for rapid development of ideas.

Method: You will be grouped with peers from all year levels (freshman to senior) and tasked with solving a design problem within the college featuring products from our sponsors. You will have 5 days to accomplish this goal. Juniors will be tasked as project managers. Project managers are responsible for coordinating and managing the design team.

Design Dictates: design elements and functional goals which must be demonstrated within your final designs.

- Projects should express the following elements in their application:
 - tenets of form, space and order
 - sense of place
 - brand identity
 - support teaming/community building
 - sustainability
- Students are expected to develop the program, and support their goals through evidence based design.

Each team will be assigned a problem as follows:

PROBLEM 1: Interdepartmental interaction between students in industrial design and interior design is limited. Supporting a strong bond and relationship between these design cohorts will enhance the conceptual and experimental thinking of students in both departments. Creating space where casual encounter, teaming opportunities and feedback can occur will support this positive outcome. This area should serve as a gateway into the interior design and industrial design departments giving them a visual identity.

- using the space currently used for student lockers in the corridor between the Interior Design and Industrial Design studios, create an environment which will support student interaction and teaming.**
 - create an entry identity for both studios
 - do not impede egress
 - be sensitive to the visual and acoustic impacts to the surrounding classrooms and studios.

PROBLEM 2: First impressions have a great impact on peoples opinion of the professionalism and creativity of a person, business, place or more specifically: our college. Creating a reflection the cutting edge technology and design of **redacted** will establish that first impression. Supporting casual encounter is imperative and will enhance interdepartmental bonding within the multiple schools making up the College of *redacted**. This area should serve as a gateway giving it a visual identity.

- using the space located at the entry to **redacted** you will establish the image of the college.**

hyperspace

project brief

- you may alter the entry facade, vestibule, stair and attached transitions to the University Gallery and classroom corridors as you deem appropriate.

- you must not impede circulation for egress
- you must be sensitive to the visual and acoustic impacts to the surrounding environments

PROBLEM 3: Food is important to the health and well being of college students. It has been proven, that to be an effective learner, you must have a healthy diet. Our physical responses to hunger impede the ability to assimilate information, problem solve and therefore the educational process. Students in **redacted**, unlike most other colleges on campus, have to travel to other buildings if they wish to eat, or are otherwise stuck with the unhealthy options of vending machines. You are tasked with designing a food service area/kiosk for **redacted**. Include areas for seating in order to support casual encounter and interdepartmental student bonding.

- using the space located at the quad entry to **redacted** you will design a food services kiosk which will offer healthy, fresh food options

- you may open and use the enclosed glass area in the entry to student services
- you must not impede circulation for egress
- you must be sensitive to the visual and acoustic impacts to the surrounding environments

Faculty Role:

- Faculty will serve as mentors only.
- Students are to run, and manage projects independently**
- Department faculty will be available during their scheduled studio times, office hours and additionally scheduled hours to give guidance and mentor as required.

Submittals:

- 24 x 36 poster, vertical orientation using the branded InDesign template provided
 - Teams will determine the best method to communicate their designs effectively.
 - suggested: digital modeling/rendering, plans, elevations, axonometric or isometric models
 - projects should include a written element in which to express their design intent, values and methods for achievement.
- Additional elements such as models, videos etc are allowed and recommended
- Presentation must be self explanatory requiring no verbal enhancement**

Appendix 2: abridged post project review

***note, this document has been edited from its original formatting in order to remove aspects of University affiliation**

hyperspace 15: post project review

This post project review is intended to give opportunity for critique on your performance as a team, as a team member and the quality of the final outcome.

Please thoughtfully reflect on your experiences with this week long charrette project and respond to the following questions. Be honest with your reviews. Consider your experiences with process, ideation, execution, communication, work ethic and team work. The informations shared will be kept confidential- your peers will not see these!

Name: _____

Identify your personal weaknesses and strengths as a team player:

What did your project manager do to demonstrate effective leadership? Ineffective leadership?

Identify your team weaknesses and strengths (without naming names).

Was there any behavior from other team members which were negative to the team function (no names please)? If so, how did you deal with it? If relevant, how would you deal with it differently in the future?

How do you believe the overall team's weaknesses affected the final outcome of the project?

What could you have done differently to function more effectively as a team member?

What did you take away from this experience?

Additional Comments?

Appendix 3: Student work sample



Steelcase Furniture

Design Concept:

Located in Gannett, building 7b is Inkwell 3100; a refreshing space for all College of Imaging Arts and Science students to enjoy a healthy meal at a convenient location. The design will be simple and open so that everyone can easily navigate the space. The dining area incorporates a classic color palette with pastel accents that will create a relaxing and interactive space for all busy college students. Students' photography and chalkboard walls will be utilized to inspire creativity.

- The space utilizes updated technology to accommodate the students' needs to study and lounge.
- The Café is designed to be interactive; incorporating movable seating and tables to provide flexibility for all students.
- Using durable and sustainable materials to ensure that the space remains operational for many years to come.



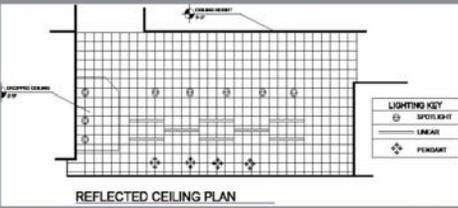
Perspective 1

"I would like to see more couches and maybe even a little deli or mini coffee shop pushed into the corner."

*Rachel Waller
3rd year Advertising Photography*

"I'd like to see a healthier option for food. Vending machines just aren't cutting it. I would like it to feel much more "homey" and colorful."

*Nichole Alvey
4th year Visual Media*



Lighting Fixtures



Perspective 2



Cafe



Finished Floor Plan



Elevations

