

COME TOGETHER - RIGHT NOW: UNITING THE DEPARTMENT

Amos SCULLY

Rochester Institute of Technology, Rochester, NY, USA

ABSTRACT

How does a department create a kinship in its students to counterbalance exploding enrolment numbers and operationally distinct year levels? Can we accomplish a sense of belonging and a personal affinity to a university program without rewriting curriculum? Our department of Industrial Design was faced with a quandary: How to establish a bond among students in all year levels. These questions prompted us to undertake an experimental project, one that would serve as a proverbial ‘shot in the arm’: We would involve every student in a week-long project, with teams vertically composed of students from different years. This paper chronicles how injecting a sweeping department-wide project can provide opportunistic learning experiences and create a communal bond. Our project, entitled ‘T minus 151,’ is a one-week project that counts down 151 hours from the moment of content launch to final presentations. The project reveals how self-guided team dynamics, dissolving hierarchy, instituting rapid timeframes, can build affinity, breed mentoring, create a sense of belonging, and promote creative outcomes. This paper overviews the pedagogical premises that embrace an approach of student led teams with rapid time frames.

Keywords: Collaboration, foundations, teams, timeframes, business partnership.

1 INTRODUCTION

Our department of Industrial Design is comprised of approximately two hundred and sixty students, more than twice the size it enrolled a decade ago. This large shift in numbers and scale is an example of the shift in enrolment numbers in our college’s various design programs over the past ten years – overall growth, with some programs growing while others have shrunk. Our long established graphic design program, for example, has reduced in size by half while our new three-dimensional digital image design (3DDD) has expanded to surpass graphic design in size. The size change we experienced in our department has stressed our need for space accommodations, but more importantly the problem of growth was eroding a sense of department community. The structure of departmental course offerings, as well as higher numbers of students, also contributed to a sense of fragmentation. Within each year level we had moved from offering two sections per course to scheduling four sections in an attempt to accommodate larger numbers of students. Established faculty no longer knew many of the graduating students, and a new graduate program comprised of thirty students inflated the issue. The department curriculum is structured so that graduate student course work does not overlap with undergraduate courses. In addition, freshman courses operate as a separate ‘Foundations’ year of study before entering the major. The department was functioning very well; strong work was being produced and students continued to spend hours enjoying time in the studio. However, the department lacked cohesion. We had a higher percentage of adjunct faculties, graduates never knew undergraduates, and faculty became positioned to teach certain year levels. We could proceed, or we could answer a call for a better sense of community.

2 THE PROJECT: T-MINUS 151

In answer to this dilemma, our department faculty decided to experiment with an innovative project: one project, one week, involving an outside sponsor and every student, with teams comprised of a member from each year level (first through graduate). That means forty-eight teams, each comprised of five members, with a student from the junior year level serving as team manager. The project is titled T-Minus 151 for the (T)ime of 151 hours from start to completion. T-Minus 151 is intense,

unique, and therefore bonding. This disruptive, atypical project approach spans the entire department for the first week of the term. It establishes a different set of departmental conditions, creating a shared experience. It is doing the impossible – creating community in a week. As Allen Cohen, the acclaimed strategy consultant, asks, “How do you do the impossible – for example how do you herd cats? Change the conditions on which cats operate - tilt the floor!”

‘Tilting the floor’ means a week where all regular coursework in the major is suspended, allowing for total dedication and a ‘deep dive’ approach with all students and all faculty members engaged. The project is scheduled the first week of the second term, placing it in the middle of the academic year. It disrupts the students’ return to second term, but adds one week of integration to their year [level]? While T-Minus 151 is well advertised to the students, the actual sponsor, content, and teams are held secret until the day the project is launched. The premise is that secrecy adds to intensity and anticipation. Teams are each given a name that is derived from the sponsor; for example, team names may be the names of sponsor product lines. On the presentation day all 48 teams present work simultaneously, with several pairs of judges moving between team displays receiving a three-minute pitch of concept and solution.

3 COMMUNITY

The project adheres to several conditions of defining community as defined by McMillan and Chavis:

- **Membership** – a sense of belonging and identity, personal investment, boundaries, emotional safety, and a common symbol system
- **Influence** – individuals influence the group and the group in turn influences the individual
- **Integration and fulfilment** – members feel benefits through their community participation
- **Common emotional connection** – (critically important) shared history and shared participation

Examining the conditions of T-minus as a community building event, we can see these four rules applied: Put this section into bullets that match the order of the bullets above.

Enrolled students in Industrial Design attend T-Minus project kick-off (integration and fulfilment of needs). Students are placed into teams (influence) The team is given a name and assumes the interest of the sponsor (common symbols) The project utilizes in the department studios for team meetings (membership boundaries). They generate concepts and decide and refine a solution (shared emotional connection). The team puts together a presentation for judges, department faculty and other teams to view, awards are given (Integration and fulfilment). After an intense week they return to normal classes (Common emotional connection)

4 TEAMS

4.1 Community Small Groups

In typical academic settings, such as our own, students study, work, and are graded individually, rarely working in a small group teams. Individual students’ study experience is limited to their enrolled course section, in which generally 15 - 25 attend. Individual students produce projects presented only to those enrolled in the course section. Their academic efforts are generally not seen or voiced beyond the walls of the course classroom. Where they may feel a sense of connection to the particular faculty or peers in a course, they live as individuals who are defined by the course projects and faculty input.

T-minus thrusts five students, representing each year level and who may have never met before, together as a team at the project launch hour. A team in a department-wide project is akin to what a small group is to a community. “The small group is the bridge between our individual existence and the larger community.”(Block) T-minus creates a sense of belonging to the department by not only putting students together in small groups operating beyond normal course structure, but by requiring them to stand united for a final presentation of posters and models in the three minute pitches of their concept as to various judges, faculty, and peer students moving through the exhibits. “The key is to structure a way of crossing boundaries where people become connected to those they are not used to being in a room with”(Block). The individual becomes part of a team and the team showcases work to the entire department. The teams review the work of their peers.

4.2 Team Diversity

There are also different types of "diversity" in a team. Positive diversity benefits from hearing differing voices, while negative diversity can cause disunity or separation within the team. Research studies on team diversity distinguish negative outcomes through situations of *separation*; i.e. differences in values, beliefs or attitudes that lead to interpersonal conflict and distrust. Positive outcomes are instead explained through situations of *variety*; i.e. differences of knowledge and experience (Cerilla et al). T-minus considers the diversity in students experience, familiarity, and hierarchy as a contributing benefit. Hierarchy is disrupted by the enacting junior year members as team managers instead of traditional logic that would put the seniors or second year graduates students in that role. The thought is junior year members as managers have sufficient design education to lead a team, but disrupts hierarchy that may lead to separation by beliefs or attitudes that may come with the entitlement of students in their final year of study. Conceptually this disruption in hierarchy fosters diversity, but the effectiveness of juniors as managers is questionable as noted in the survey below.

One of the project goals is the creation of a bonded department, to which diversity of year level and personal background plays an important factor. Research studies in diversity demonstrate it as an important contributing ingredient in developing community (Mcqueen et al). Teams are diversified as the team lists are made, spreading gender, background, and other factors such as our deaf population of students. Students naturally tend to align with peers at year level in the department as part the curriculum the same year level toward shared coursework. In T-minus, teams are structured with a representative of each year, from first year to graduate level, creating new kinds of communication and community. For example, freshman are able to voice ideas and have conversations with students from all year levels; a unique scenario that would not happen except in elective coursework. In a small group, with the pressure of a time limit of only a few days, the need to accomplish a goal takes over and every member is needed. The conversations between graduates and first year students, between seniors and sophomores, are both intimate and intense. "The small group is the structure that allows every voice to be heard. It is in groups of 3 to 12 that intimacy is created; this intimate conversation makes the process personal. It provides the structure where people overcome isolation and an experience of belonging is created." (Block) Building this diversity within the team has positive outcomes that we believe outweigh the negative risk of separation that can arrive from the differences as stated above. In a short time frame teams may experience difficulty communicating with differing voices, both in simple logistics of where to meet and how to message each other, but also in conceptual language that may not be shared. However, teams benefit from diversity. It provides alternative insight and variety of viewpoints, and has been demonstrated to have positive outcomes both in research and in project surveys.

4.3 Teams in Academia

While the project premise is to use teams to advance a sense of belonging to the department, it also benefits creativity and prepares students for industry use of teams. Industrial Design students work in a creative field, yet they need to see the potential of creativity in teams. The use of teams to develop creative output is a hallmark of Tim Brown's definitive book on design thinking Change by Design, particularly his company's sayings "All of us are smarter than any of us" and "Fail early, fail often" (Brown). His concepts tie closely to the creative virtues of 'Brainstorming,' in which a team of individuals suggest creative ideas are familiar to most of us. Brown certainly extols the importance of teams to creative thought and industry, and recent researchers agree on the need for creative teams in higher education [sources?]. While novel and creative thoughts usually fall on the designer, the dynamic of groups that are untrained in team creative thinking can stifle innovation (Taggar). The effective use of team dynamics takes time to build, and the more frequently it happens the more effective team members are. This dynamic is especially important with creative output. This ability of teams to embrace creativity is referred to as 'stickiness' and can result in team cohesion with great rewards when it does stick. Academic teams also benefit in gaining problem-solving skills useful in industry by developing the ability to read others' reactions to ideas, to reduce ambiguity, and to provide support when faced with risk of uncertainty (de Vellers Scheppers & Marlee). It is the knowledge of creative process and expression of novel ideas within team that becomes familiar or 'sticky' as T-minus becomes an annual student event within the department and allows students to speak to future employers about their ability to function within a team setting.

5 THE SETTING

The setting is an important factor in creating community. Setting, location, and spaces both big and small affect interactions. Researchers list a geographic entity or a specific gathering place, such as a recreation centre or church, as the number one contributing factor in the creation of community (McQueen et al). In our project, almost everything happens in two spaces. The launch and final exhibition space are the same, a large open gallery format, but most of the week is spent on the Industrial Design department building floor. The energy of teams gathering is generated on the open floor plan of our studio spaces. This open floor is a setting of rows of studio desks without walls or partitions, and much of the space consists of desks and meeting tables with few items above bench height. Walking through the space toward the workshops one can peer across the student studio desk spaces of sophomores, juniors, and seniors. Graduate studios immediately adjoin, and freshman coursework is two floors below. The open space of the department helps to build community in its normal use, but with T-minus it becomes particularly effective. Gathering spaces are important for creating community but more specifically the architecture of buildings and material forms are social fabric bonded by the design of spaces, walls, hallways, etc. to create community (Block). After the project launch, teams gather in any space they find convenient on the department floor; freshman find themselves seated in a junior or senior studio discussion team, or teams may ‘camp out’ in the graduate studios. The productive energy is pervasive, with all manner of students meeting, discussing, sketching, making prototypes, or handling the sponsor’s product samples. The architecture of the floor supports understanding and belonging, where students can visibly see peer classmates in discussion with students unfamiliar to them, in places atypical to their routines. During typical coursework within class session, students would be in discussion or at working at their own benches surrounded by their peers, next to another course of a distinct year level operating separately. With T-minus the whole floor is energized with the same project. Research suggests that the environment is critically important, but the environmental space is also important to team effectiveness. “When team processes are aligned with environmentally driven task demands, the team is effective; when they are not, the team is not” (Kosloski and Egan). The energy of the environment feels demanding - breeding a sense of urgency and excitement.

6 SURVEY RESULTS

Sample surveys taken by the author with students after the T-minus experience asked them to respond to the “Outcomes of the Industrial Design T-minus project.” These paper surveys were small and targeted at the student population newest to the department, freshman and 1st year graduates who both had completed only one term in the department, the premise being that they would therefore feel less of a sense of ownership and belonging. A smaller sampling of sophomore year students – the first year with studio time on the department floor - was also included. These quantitative score surveys were solicited informally during normal class time without preparatory statements and collected without identifying names. Students were asked to score the questions by circling on a 1-5 scale in the following manner:

not at all		somewhat		definitely
1	2	3	4	5

The survey results below are represent: thirteen first year graduates, eight sophomores, and thirteen freshmen. While the thirteen graduates represent 93% of the 1st year graduate student class, the freshman and sophomores are representative of 19% and 14% respectively. Below are the averages of the 1-5 scale of each response:

	graduate	freshman	sophomore
Have you previously had significant experiences with other year level students in the department ?	2.8	2	4.5
Did the T-minus project build you sense of belonging in the department ?	4.5	4.6	3.9

Would you equate T-minus as enhancing your sense of community ?	4.2	4.5	4.1
Did you experience team members with less design experience given equal consideration ?	3.7	4.2	4.1
Was T-minus a unique learning experience ?	4.8	4.8	4
Did your junior as manager effectively facilitate and create unity ?	3.2	3.8	3.6
Did you see or experience students within the team provide mentoring ?	4.2	4.3	3.3

7 CONCLUSIONS

Students in Industrial Design having operationally distinct year levels, with multiple sections, and prolonged project timeframes can be enhanced by the project T-minus 151. The T-minus project finds the benefits from diversity by employing teams of all year levels tasking them with a project outside industry sponsor. Use of industry relationship and working with diversity in year levels has reported benefits in academia. Others, such as J. Loy and S. Archer at Griffith University have found this to have creative benefits for students and faculty while building connections (Loy, J & Archer, S.) Our T-minus project benefits in similar ways but notably adheres to the premise of community belonging of a common emotional connection by shared participation and shared history. These conditions as reported by McMillan & Chavis can be employed in the project. Research also suggests the need for team creativity in higher education is important and can be coupled with community building with: small group teams, team diversity, and advantaging architectural space. When viewing the successes as perceived by students, we can consider potential positive outcomes of T-minus as reported in the survey results. This cumulative question responses report a positive validation of 4.1 out of 5 excluding question one which reverses the scale. Key questions of this survey demonstrate a “unique learning experience” of 4.8 of 5 for the newest students, reducing to 4 for second year students. In regard to students building a “sense of belonging in the department” the newest students scored 4.55 out of 5 and 3.9 for second year students through the T-minus project. The score a 3.9 is not surprising having experienced the benefits of T-minus previously and advancing into dedicated coursework in the major. Team unity may be threatened by the juniors as managers’ effectiveness, in scoring managers rate 3.5 only ‘somewhat’ effective. This suggests the juniors as managers may not serve teams well, and should be reconsidered.

The conclusions of this survey indicate the project does advance a sense of belonging and department community. As students continue in the program they will experience the project on an annual basis having furthering its community building. It must be noted that effectiveness may be determined each year by student enthusiasm for the project sponsor and project parameters. However, if sponsors continue to generate excitement it seems the project is a tool toward department community, and may potentially benefit increased alumni connections.

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