HISTORY... NEVER REPEAT YOURSELF! BREAKING THE 'HISTORY OF ARCHITECTURE' PEDAGOGY IN UNIVERSITY EDUCATION

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ABSTRACT

This paper asks the following question: ***can university architecture students benefit from a change, more engaging and fun approach to learning history of architecture through drama?*** It presents the findings of a 5-year old pioneering project to spear-head a mood-change in teaching History of Architecture for university architecture students in Egypt. The approach, to be called "Collaborative Character Dramatization or CCD"; puts the student at the steering wheel of the course through a number of exciting activities that involve integrating drama and multimedia production of many types into their learning cycle. Rather than just memorizing a style or a school, student self-learn about the architect, institutions, society and events that shaped the architect's style in an exciting and creative media production of their choice. Pre-and-post-drama surveys, word-clouds and personal observation of the students showed amazing results: a group of very inspired and learned students, whose course objectives fulfillment rates were very high, and with impacts on their own awareness and personality exceeding the course boundaries. The findings were consistent and progressing throughout the years, producing a new breed of motivated, confident and creative students.

Key words: Architecture Education, History of Architecture, Drama, Teaching techniques

1 INTRODUCTION

“Tell me and I forget. Show me and I remember. Involve me and I understand.”

Confucius Chinese Proverb around 450 BC.

If “History repeats itself” was true, then, teaching History of Architecture in the university is the living proof. University pedagogy for certain architecture courses have been stagnant since Fletcher authored his biblical reference in the 1920’s; In Egypt, as well as elsewhere, this meant students studied history of architecture by memorizing dates, plans of temples and churches up to the exact number of columns, and perhaps making some building mock-ups. In the current day and age of ICT and social media generations, surveyed students of architecture have developed a stereotypical impression of the History class as being boring, silly and irrelevant. As a former victim of this method, I wanted to break this stagnant mental image. Modern day students attention span is probably 10 minutes or less, so using powerpoints and educational videos was no help either.

History within the design curricula has survived the test of time since architecture became a university degree. The central position of history in architectural and interior design education is reflected in the expectations outlined in both fields’ accreditation standards such as CIDA and NAAB. The taboo of the course is to hand down a list of monuments and plans to be memorized and their description learnt by heart. The impact of this traditional approach on the student was a demotivated, bored and depressed student who only took the class because it’s a core course. Any relation to the design studio or to the formation of his/her architectural personality is completely ignored.

The critique of this approach has Creese, (1980) noting that the meticulous study of masterworks of the master builders might not be the only avenue for reaching aspiring architects and interior designers. He says: “Novice architects should be permitted to move off into as many realms as their imaginations can legitimately command...To have the students correlate only one building type out of the past to their new assignment, is to leave them without the power of reconciling themselves within a much larger inheritance”. Hadjiyanni and Zollinger, (2010) call for faculty to re-envision exercises and pedagogies adopted, translating them into ones that account for students being able to take ownership of the subject and use history as a tool to find answers to questions that emanate from their own experiences and lived realities. They claim, “History is not ‘what happened in the past;’ rather, it is the act of selecting, analyzing, and writing about the past. It is something that is done, that is constructed, rather than an inert body of data that lies scattered through the archives” (Davidson & Lytle, 1986). It is this dynamic nature of history that makes it exciting for both instructors and students. As material that is not static or stagnant, but instead it is subject to interpretation and critical analysis (Flores, 2003), historical content can serve as the fertile ground on which creativity and originality can flourish, thereby turning the subject of history into one of interest for the students and the faculty.

Of course, creative teaching of the subject matter is neither prohibited nor discouraged. Hadjiyanni and Zollinger, (2010) have employed techniques such as *digital games* and *free-hand sketching* to engage the students. By tying a design project into a history course, they present students with the opportunity to conceive ways to bridge the past, present, and future. Infusing history classes with creative and critical thinking that encompasses and responds to pressing

social concerns reinforces the meaning of history classes. Likewise, integrating drama within the architecture university classroom should not be awkward. Yet, in Egypt it is a novelty that approaches heresy, for teaching history is passed down from generation to generation.

2 BENEFITS OF USING DRAMA

Using drama is one of the innovative techniques that could be used to infuse life and meaning into the classroom. Utilizing drama as an approach to enhance learning is not new. Aristotle (384-322 BC) believed that theatre provided people a way to release emotions. Progressive movements in architectural education emphasized hands-on education and integration of disciplines, and of “doing” rather than memorizing (Kacmar, 2014).

More recently, Dr. George Belliveau, and Dr. Monica Prendergast, from Canada have written extensively on the subject. Usually, teachers and students are encouraged to use drama-based lessons as adaptable stimuli, which they can build, alter or strengthen with their own ideas and activities. The term drama is deliberately used instead of theatre. The term drama emphasizes that the activities focus on classroom-based work rather than building towards a performance for an outside audience. Reasons for that trend are outlined in Cornett and Smithrim, (2001). These benefits which - were observed on school level students - have not yet been tested on university level architectural education. The table below groups them according to their value on 3 spheres of student development.

Life Skills	Personal Self Esteem	Specialization Skills
1. Prepares students to deal with real life's problems	1. Enhances students' psychological well-being	1. Engages students in creative problem-solving and decision making
2. Develops verbal and nonverbal communication skills	2. Develops empathy and offers new perspectives	2. Assess Intended Learning Outcomes
3. Builds cooperation and develops other social skills	3. Helps students consider moral issues and develop values	
4. Enhances concentration and comprehension through engagement	4. Provide entertainment	

Table 1 - Perceived Benefits of Using Drama in pre-university Education (adapted from Cornett and Smithrim, 2001)

These benefits are further explained as follows:

- **Drama is part of real life and prepares students to deal with life's problems:** Drama simply allows students the opportunity to rehearse roles, further giving form or shape to the individual and personal ideas and feelings they are naturally experiencing. Overall, this allows students to make sense out of their 'real' life problems.

- ***Drama engages students in creative problem-solving and decision making:*** Deep experiences through drama guides and supports student's problem solving skills, while at the same time, works to encourage an increasing awareness in how to solve issues at hand. Drama turn their college life into a deeper experience in thinking, further motivating students to question, respond, and explain what they are being taught
- ***Drama develops verbal and nonverbal communication skills:*** Through different characters, students share the opportunity to expand their problem solving skills both verbally and non-verbally, making room for a sense of creativity. As well, students practice and build upon various communication skills through the use of body language, facial expressions and different voices.
- ***Drama can enhance students' psychological well-being*** Under different characters, students can express their true feelings or sense of personality without fear of being judged or criticized. They can work on personal issue or solve personal problems while in character, which can simply help their overall well being. Essentially, what this does is allow students to get things off their mind, further releasing emotion and tension and allowing students to be who they are.
- ***Drama develops empathy and new perspectives*** Taking on various roles in character allows students to use all senses and characteristics in order to understand the character, as well as, the scenario or story at hand. Learning how to express oneself in different ways and through different means, helps build a strong character and personality.
- ***Drama builds cooperation and develops other social skills*** Working together as a group promotes, encourages and motivates cooperation. Drama simply brings students together, allowing them to find different characters that best suits them, different roles to express who they are, and different ways to build upon and develop social awareness.
- ***Drama increases concentration and comprehension through engagement*** Students always learn best when they are engaged and interested, as well as, when they are actively involved. As students are strongly focused and concentrating, their overall understanding simply increases.
- ***Drama helps students consider moral issues and develop values*** Drama simply helps students further understand the importance of values they are already aware of, as well as, it guides them in developing and forming additional values.
- ***Drama is an alternative way to assess Intended Learning Outcomes*** Drama can be used to evaluate what actually precipitated in their minds. Watching what areas, situations, stories makes the ILO's crystal clear for the instructor.
- ***Drama is entertaining*** Fun is learning, and learning is fun. A happy student is a motivated student who will definitely enjoy the learning process. Students enjoy dealing with and discussing real life issues and

problems, they like figuring things out, doing interesting things, doing things differently - drama gears towards this and more.

In summary, using drama as a teaching tool is beneficial and not new to pre-university levels. However, the topic is relatively new and has not been tested in university education and specifically Architecture. Can the same benefits be expected from college students in an engineering discipline?

3 DRAMA AND ARCHITECTURE: COMPLEMENTS OR OPPOSITES?

While some may rightly question the relevance of drama to teaching architecture, other famous architects have not. In fact, Michelangelo (1475-1564) saw no strict division in tasks between architecture, interior design, sculpture, painting and even engineering. The Bauhaus school (1919-1933) combined theater, sculpture, stained glass, ceramics, or other arts and crafts with architecture (after 1927) in a collaborative learning environment. Gropius (1883-1969) contention was that artists and architects should also be craftsmen, and that they should experience working with different materials and artistic mediums (Figure 1). Thus, the term 'Gesamtkunstwerk'¹ was brought into relevance. It is used in architecture to signify circumstances where an architect is responsible for the design and/or overseeing of the building's totality: shell, accessories, furnishings, and landscape. The hypothesis is that creativity is inseparable and indivisible. If a student can excel in one form of creative and imaginative process, he/she can excel in another (Figure 2). Sitting on a stool in a studio over a drawing board or using a laptop for hours may be frustrating and boring at times. Physical movement and collaborative team work is more engaging (Ismail and Soliman, 2012²⁰).

Figure 1 - Hannes Meyer Director of the Bauhaus used Co-op Theater to propagate his social ideas about Co-op Architecture Source: Borra, B 2013

Figure 2- Experiential Learning after Kolb, 1984, 2014

There are also risks in using drama as a teaching tool. These include loss of class control, diversion away from the class objectives, disengagement with a rigorous content, difficulty of formulating assessment tools based on the class product, and ridicule of others. However, any new teaching tool is likely to face such risks. But, when these risks were carefully weighed against the perceived benefits outlined above, especially as previous evaluations of traditional methods showed almost total detachment of the students from the material studied. Thus, the decision was taken to go ahead and test it.

4 RESEARCH OBJECTIVES:

The primary research question is **whether university architecture students can benefit from a changed approach to learning history of architecture through drama**. The secondary objectives were to test the following:

- 4.1 Which of the **drama tools** is more popular and effective among students?
- 4.2 Does the method of teaching change their **perception of History of Architecture**?
- 4.3 Does the new method of teaching result in **higher retention** of their knowledge-base?
- 4.4 Do the students **academically benefit** by the information they obtained in other classes – especially the Design Studio?
- 4.5 What are the lessons that could be learnt from the experiment?

The first two objectives could easily be measured through the course of the class. However, the other three should be measured by continuous observation and assessment after the end of the class.

5 METHODOLOGY

In order to answer the primary research question of whether university architecture students can benefit from a changed approach to learning history of architecture through drama, an interpretive approach was chosen based on multiple qualitative preparatory activities and evaluations. Interpretation refers to the “analytical step in naturalistic inquiry in which the investigator examines the derived categories and develops a conceptual understanding of the phenomenon” (DePoy and Gitlin 1998). Additionally, typical statistical analysis was chosen to evaluate student’s responses in pre-and-post drama

survey polls. Narrative design (word clouds) is used since the sets of words chosen by the students in their proposals and survey answers form data sets of which the project impact could be analyzed. Observation data was collected real-time as the author was personally taking part in the course activities (participant observer and as a researcher).

6 CASE STUDY – HISTORY 3

The methodology was applied to successive classes of History of Architecture 3 which forms the middle course within a module of 5 history courses. October University for Modern Sciences & Arts (MSA) and Misr University for Science and Technology (MUST) are the two private universities in Cairo, Egypt where such experiment was carried out and results recorded since the academic year 2010/11 till 2014/15. History 3 covers the period from end of 18th Century till mid 20th Century Europe and USA (Rococo – International School). The number of student in each year ranges between 190-220 students (Table 2). The Project was code named Architects Got Talent, seasons 1-5.

Season Year	AGT -1 (10/11)	AGT -2 (11/12)	AGT -3 (12/13)	AGT -4 (13/14)	AGT -5 (14/15)	Total over 5 years
Projects	20	20	21	22	37	120
Students	190	195	193	205	219	1002

Table 2 - Progression of the Number of Projects Submitted Each Year

During the course of the term, the following tools were used to assess the level of goal achievement:

- **Surveys:** Class-based *Pre and Post survey* of the students.
- Written **Project Objectives** and Evaluation Points:
- Social-Media and **Online Voting**
- Class-based **cooperative games**

After the end of the class, the following tools were used.

- Personal *interviews* about the next History course.
- Personal Follow up of the design studio work and grades in the semester that followed.

The time-schedule and sequence of the activities are shown in the following chart (Figure 3).

Figure 3 - Time-Schedule of Activities (author)

Guidance and Drama Techniques: Students were given a briefing of the core issues they need to cover in their work. Namely: life, influences, style, major works and critique. Special emphasis (and grade weight) was placed on both influence and critique to bring a new dimension into the work (Table 3). Similarly, creativity (a non-boring work) was highlighted and restrained by time not to exceed 15 minutes. Students were guided through the TA's by the drama techniques the literature had to offer. The most common types are shown in (Table 4).

Figure 4 - Key Principles of Learning that Apply to Drama

Task	Choose One or Compare between 2 Architects or Schools
Content	Life (short bio) Influence (who or what affected his style/works) Style/ Works (what characterizes his works, samples of 2-4 major works) his architecture inventions Critique: what were the problems with some of his works/designs? What others think of him? What do you think? Why?
Tool	One of the Drama Styles presented
Grading	Total Grade: 20 Individual: 5 Group: 15 (10 for Content 5 for Originality/Creativity)

Table 3 - Project Objectives and Outline

7 RESULTS

During the course of 5 years, 120 different projects have been submitted in this class produced by over 1000 students. Each class, students were divided into 4 groups and followed up by 4 TA's and 1 instructor (the author). Naturally, during the years the course has developed to adapt to the lessons learnt as well as the changing technology. However, the primary 5-objectives of the drama remained the same: a creative dramatized project that covers the life, influence, style, works and critique of an architect of your choice. University resources have been opened to all students as they were allowed to use the graphics, studios and audio labs of other faculties. They were also permitted to get the assistance of any other student from any major as long as their role was secondary.

No.	Type and description	Example
	a. Animation and Sketching: Computer animation has become a tool that became notably popular in the last couple of years. Students sketch a story board and film it, or use computer-based animation programs to model the whole scenario. Common programs include SIMS3
	b. Back to the Future: Students like to travel to an imagined place (such as the past or another country) to explore the environment and its influence on the architect through drama.
	c. Contest Show: Famous TV contest programs like The Millionaire, American Idol, Britts Got Talent and others have become an attraction to students while switching the content to suit the objective of the project.
	d. Debates/Trials: This technique involves holding a debate on a contentious issue the architect has brought, allowing the students to consider and express multiple viewpoints. For example, one group takes the position of the accused (the architect and his followers), while the other takes the role of his opponents. Trials offer students to be the prosecution or defense lawyers, jury members, witnesses and experts to prepare and deliver a case. They learn the structure and rules of debating.
	e. Play-building: Play-building is one of the most advanced drama activities that move students towards the art form of creativity. It involves the collective creation of an original script or improvised performance. It brings together multiple processes including scripts, filming, directing and production. They are very demanding and require commitment, creativity and co-operation in order to succeed. But in the end they produce a very entertaining and creative project.
	f. Documentary: Perhaps the easiest and least creative form of drama is to create a documentary of the character, using voices and narration of the students. While usually just a step better than a traditional PowerPoint presentation, it can prove to be the most direct way of delivering the content of the project
	g. Mantle of the Expert: This dramatic process was developed by British drama educator Dorothy Heathcote. In Mantle of the Expert [MoE], students take on adult roles of experts, such as a historian, another peer architect or a private investigator who can describe, analyze and criticize the character.
	h. Interviews: Interviews may take place with an architect of their choice to extract the information they wish to highlight. Students may move between being an <i>interviewer</i> and being a <i>subject</i> , so they can experience both roles. Interviews are most often done in-role as characters involved in a dramatic situation and journalists who want to know their stories.

Table 4 - Types of drama that can be used by students

They used students majoring in Mass Com, Arts, Graphic and Industrial Design, and Engineering. They used their friends, family members (younger brother / sister, mom/dad in the acting) and even used other Architecture Faculty members in the act. A reputation has been building and it has become one of the most awaited courses in Architecture. The final jury was designed carefully to fit the goals of the course. It was a festivity almost mimicking a mini-academy (Oscar) event. Veterans of the class were invited to assist and become judges of newer products.

Pre-drama mobilization

1. Pre-drama Survey
2. Activities
3. Project Outline
4. Evaluation Criteria

Drama formulation

5. Project Summary
6. Follow up
7. Guidance

Drama Presentation

8. Event Setup
9. Evaluation Form
10. Jury and Organization

Post-drama evaluation

11. Post Drama Survey
12. Personal Interviews
13. ILO and exam results

6. Explain the reasons for your choice for EACH selection you make
1. Because its nice and made me laugh
2. For my first choice group no16 they have mix fun with the information they want to say. For group no27 they have say information that no other groups had and they make a full program with its components from the phone call to the report to every thing I think these two groups are the best
3. Best 3 projects
4. The scandal: they explained the information in a comical way 7 - the best effects 16: best ideas 8: unique idea summation like
5. The informations were delivered in a light and funny way : everything is just perfect
6. Best video
7. Good job and the idea reserved clear
8. In the best project
9. These ideas are good. They are funny while including all the requested items
10. The movie describe very effective moment in FLW life as a human and its influences in his architecture life

ARCHITECTS GOT TALENT SEASON 5 - 2014/2015 BEST PROJECT NOMINATION

My choice for BEST PROJECT award is:

Answer options	Count	Ratio
1. المصطفى الفرنسية - فرقة جازي	15	1.6%
21. دي مرارة - This is a move ... جازي - حروبوس	40	4.2%
16. طير دات - جازي - ناغوروي	131	13.7%
8. جازي جازي جازي - جازي - جازي	35	3.7%
10. جازي جازي جازي - جازي - جازي	90	9.4%
31. Doodling Miles - جازي	40	4.2%
26. جازي - جازي - جازي	15	1.6%
14. جازي - جازي - جازي	21	2.2%
7. جازي - جازي - جازي	50	5.2%
30. جازي - جازي - جازي	47	4.9%
27. جازي - جازي - جازي	45	4.7%
11. جازي - جازي - جازي	32	3.3%

Table 5 – Snap shots of Activities During Each Stage

7.1 Which drama tool is more popular and effective among students?

It would seem that students prefer the full-blown Play-Building technique best, in spite of its over-whelming effort. Perfecting a story that goes along with delivering the primary 5-objectives of the project seems to satisfy their inherent ambitions and diversified ideas that are generated by a multi-person group. Impersonation rate was 73% meaning that most students preferred to include the impersonation of the architect himself in the project rather than do the work about him. The mean grade also is significantly higher than average, meaning the students usually performed well (Table 6).

Drama Type	Percent	Mean Grade
a. Animation	5.4%	19.00
b. Back to the Future	5.4%	18.03
c. Contest	7.1%	18.35
d. Debate	10.7%	17.13
e. Play-Building	35.7%	18.02
f. Experts	5.4%	15.33
g. Interview	16.1%	16.28
	100.0%	17.33

Table 6 - Results of Preferred Dram Tools Correlated to Mean Grade

7.2 Does the method of teaching change their perception of History of Architecture?

The answer to this question was tested using the pre-and-post evaluation survey and word clouds. Students were asked to list their impressions based on the previous 2 classes they took. At the end of the course, the students repeated the survey and the 2 groups were tested using **Student's Paired T-Test**. The results were found to be statistically significant with **P-Value = 0.03**. The following chart depicts how the attitude of students changed from 63% that find that history is boring at the beginning of the class to 94% finding it's either exciting, entertaining or fun (Figure 5).

Figure 5 - Student's Opinion about History of Architecture before and after Drama

It turns out that this approach not only changes their perception about history, but also about themselves and their potentials. Students found new talents, gained self confidence and felt so good about themselves. “.. *its an amazing feeling , this was my first time to win or succeed in anything at this college*” Yara EL-Hakeem posted on facebook following her selection as best actress.

7.3 Does the new method of teaching result in higher retention of their knowledge-base?

Again, the analysis showed that most students have had significantly higher retention rates of the knowledge acquired during the course. When asked about the building or architect they remembered most of the past 2 history classes, only 5% could remember 2 buildings or architect from previous classes. In fact 85% could not remember any. Following the drama, at least 9 out of 30 architects (the 10th mentioned is in fact the course instructor!) taken were vividly remembered and even ranked by preference by over 95% of respondents.

1. G. P. Pannini	11. François Hennebique	21. Louis H. Sullivan
2. Eugene Viollet-Le-Duc	12. Frederick Law Olmsted	22. Adler & Sullivan
3. Robert Adam	13. Peter Behrens	23. Frank Lloyd Wright
4. Sir Hans Sloane	14. Le Corbusier	24. John Ruskin
5. Karl F. Schinkel	15. Walter Gropius	25. William Morris
6. Thomas Jefferson	16. Mies Van der Rohe	26. Alphonse Mucha
7. Thornton-Latrobe-Bulfinch	17. Ernest Flag	27. Antoni Guadi
8. James Hoban	18. Daniel Burnham	28. Hector Guimard
9. J. Paxton	19. Henry H. Richardson	29. Victor Horta
10. Gustave Eiffel	20. Frank Furness	30. Charles R Mackintosh

Figure 7 - Architects Most Remembered by Students (author)

Figure 8 - Word Cloud of Most Remembered Building

Figure 9- Most Remembered Buildings

7.4 Do students academically benefit by the information they obtained in the Design Studio?

This is perhaps the most complicated objective to measure, for various reasons. Students go different ways, face different instructors and are influenced by other non-course related pressures and directions. However, the author has followed up on the students works using direct and indirect approaches: first through the design studio that immediately follows the class; second using social media; and third through personal interviews. The following could be stated with a comfortable level of certainty: students were touched by the various concepts and ideas brought by the class and tried to implement them in the design studio. Among the many examples were neo-classical style in library buildings, Le Corbusier's architectural principles of pilotis, roof gardens and ribbon windows in, Frank Lloyd Wright principles of Organic Architecture and the Bauhaus style in designing a Faculty of Architecture building.

7.5 Lessons Learnt

7.5.1 Humanizing Architecture: The focus on the human features of the architect behind the work (such as his life, influences, struggles, etc.), gives the work a soul that complements its physical appearance which usually focuses on the lines, spaces, geometry, technology etc. This approach adds a direct communicative dimension that an average student can relate to. It wipes away the sanctity or holiness of the world renowned architect and makes following his path possible and realistic. None of them were born geniuses. In fact, many had their college education problematic such as Gaudi (described by his mentors as a lunatic) or Gropius (never got his degree) and Frank Lloyd Wright (went to civil engineering).

".. although the data wasn't a lot on our architects, but reading every article and every biography on them opened my eyes to how people get there inspirations and hard work and not by sitting and nagging about how university didn't teach us or these stupid things that students used to say in class."

Nour Abdelaziz

7.5.2 Collaborative Competitiveness: If team work in Egypt is usually unsuccessful, group-work in architectural schools is a disaster. Students complain from all sorts of problems such as free-riders, time managements, arguments, multiple leadership, and group-discord. In this case, the production of a dramatized project was amazingly almost argument-free! It was not smeared by the typical selfishness and individuality that tarnish most other types of group work. The reason was that this type of work was impossible to accomplish individually. It is not possible to carry the camera and act at the same time (selfie). One person must do the data collection, another writes the script, while a third does the editing and so on. Otherwise the end product will be a disaster by all means. Therefore collaborative competitiveness, or competing within a class of somewhat harmonized students forced (or willing) to work cooperatively for a collective benefit, is best applied in drama projects.

".. what we found was that everyone of us loved the other. We spent 15 days shooting and re-taking shots as one team."

Everyone was doing a job in which he/she was best at. We didn't know each other at first, but we ended up really close. "

Mido Ismail

7.5.3 Stimulating Knowledge: Latest research suggests that it is the emotions aroused, not the personal significance of the event that makes such events easier to remember (Fletcher et al 2001, Gray et al.). It does seem clear that, as a general rule, we remember emotionally charged information better than boring ones. From that context; it seems clear that combining comedy and drama with the desired course content is more likely to fixate knowledge more than strict rules and class commands to memorize.

"BTW Doc, I want to tell you something that will make you happy. Those who watched the movie from my friends and family remember the architects and buildings very well." Mohamed Ismail

7.5.4 Comedy Wins: If you want to capture someone's heart, make them laugh. This is a general rule of thumb, and particularly true for Egyptians. In the current political climate, almost nothing at all is cheerful, and this mood has also affected the instructors. Comedy does not only lift the moral of students, but also makes them optimistic and reconsiders their attitude towards the whole educational program: it is not all static, boring and silly. I could also learn while having some fun. Students have not only enjoyed the course, but also loved the architect, his character and history. They have internalized his life and were inspired by his ideology. They will no longer forget the architect after the exam.

"We will never forget the laughs and fun we had during this project. What we learnt in this course is more than all we learnt so far"

7.5.5 Defeating Ego by Appreciation: It was natural phenomena how students at first feel jealous from each other's grades. This has changed with the constant open and transparent show and critique of their work. When faced with the amount of effort and applause of others, they gradually shift from a suspicious look of the jury to an enticed search for that work's advantages. Finally they take off their ego and join the crowd in their appreciation of each other's work as though it was their own.

"Well the first and the most important thing i learned was how to deal with people in a real group work not just only some paper work or computer work, it was irritating, provocative and a real headache but i learned how to deal with all these things and how to manage myself with confidence and not getting angry. "

Nour Abdelaziz

7.5.6 Judgment Transparency: A series of confidence building steps are needed to reach a needed level of faith in a transparent, clear and objective grading system. Among these confidence building steps is to give personal attention to each project/person with due amount of direction, positive criticism, this gives them self-esteem and drives away the ghosts of generalized comments and mass-criticism. Second, a clear point-grading system should be announced and followed from day one, with a clear bias on the desired objective (creativity

and originality). Third, a focus on quality not quantity (do it well and do it in 15 minutes).

“..The negative part of it is the fact that it's never even or equal work between everyone in the group and that there's always that one person who does most of the work or all of it and others just takes the credit and you can't be a snitch.”

7.5.7 Curiosity Drives Genuine Research: In each Architect, the instructor has inserted a curious observation in the form of a mystery. Why the bones in Gaudi's work? Why did Macintosh's work labeled as art nouveau although it looks so different from Gaudi and other style-famed architects? These questions were often translated into the drama core of the project. Students were enticed by the questions and did 'detective' type of research to reach the answer. This eliminated 'copy-paste' type of projects as each project really thought to answer a unique question.

“Dr. I am so curious I can't sleep.. How can someone like him just give up like that!! I mean when I see his glass and iron works that was amazing! He was shocked by the sudden modernism so he stopped working and he didn't adapt to the new world changing. He spent most of his late life water-coloring.”

“.. I was thinking "what was going on with me to read and search that much?”

Azza Sabri Abed

7.5.8 Creativity is Indivisible: If we manage to succeed in extracting the student's creativity in one dimension, we should be able to do it in other dimensions as well. Success in one form of creativity motivates and generates self-confidence in other forms. This should usually compensate for the frustration students feel during the design studio in which they usually end up feeling an incompetent failure. “If I could prove myself here, I could do it there”.

8 CONCLUSIONS

Collaborative Character Dramatization or CCD is a new approach to motivating architecture students to be emotional attached and involved into a 360° dynamic and interactive project about an architect, or a number of architects who have produced an architectural style. It is a new way of teaching that focuses on using the drama tools and media technology to attach a significant personal stimulus with the knowledge content in a creative oriented single product. The project involved a knowledge base from cognitive psychology, associative and collaborative learning. The aim was to find out the benefits of this approach, if the approach results in better retention rates of their knowledge base, which *drama tools were preferred* and if students **academically benefit** by the information they obtained in the Design Studio. The results were consistent: students following this approach had higher retention rates, better course-impression and were significantly more motivated, and creative. The preferred drama tool was Play-Building; their perception of History was changed to become that of an exciting and fun class; and in addition to several lessons that were observed including that the focus on the human features of the architect are as important as focusing on his works and plans; that collaborative competitiveness was best applied to drama; and that using comedy as a stimulus within the drama

adds value to knowledge retention (associative learning). Furthermore, it was noted that the impact of egoistic self-centered students on projects could be reduced by inducing appreciation of others that comes from transparent and objective judgment; that implanting curiosity within the project may entice students to do deep research; that student success in producing a creative drama project could help their confidence in other design-related projects. While History deals with established facts about the past, they should never be presented by merely repeating them.

9 QUOTES

1 German word roughly translated as total work of art, ideal work of art, or universal artwork.

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