Instructor's Personal Qualities and Meaningful Behaviors That Positively Impact Students' Intrinsic Motivation in Studio-Based Disciplines

Zinka Bejtic
American University of Sharjah

While the studio model's complexity has been acknowledged for the informal teaching and not-scripted approaches, it is still unclear what constitutes teaching that promotes students' intrinsic motivation. Increased individual interaction opportunities between the instructor and a student in studio classes highlight the instructor's ability to form create positive learning environment, form meaningful relationships and intrinsically motivate students. The current study reports on the personal qualities of studio instructors that are found to positively impact students' intrinsic motivation. The study's findings conclude that instructors who can express specific unique qualities succeed in intrinsically motivating their students.

INTRODUCTION

The pedagogies of vertical teaching imply that the instructor is only assessed based on their ability to deliver content in their area of expertise (Brewer, 1997). Alternatively, the pedagogy of studio-based disciplines implies a more student-centered approach to teaching, with limited formal lectures as a mode of content transmission, and increased demonstration, articulation of ideas or intention, analysis-synthesis organization, and process-oriented feedback (Dutton, 1991).

Studio-based pedagogy accordingly relies on instructors to construct processes and experiences in order to ensure students' active learning. Mor and Mogilevsky (Y. Mor, O. Mogilevsky, 2013) argue that instructors usually teach based on their intuition and have difficulties relating their experiences to pedagogical theories. Therefore, they suggest that the best way to deliver content through practical work is to undertake the role of "designer of learning experiences." (Y. Mor, O. Mogilevsky, p. 14). As such, the impact of the studio instructor in studio environments is very different compared to other traditional learning models. Because of the extended amount of time studio instructors spend with their students individually, their role in the teaching process and knowledge transfer becomes integral.

Several factors influence the relationship between a studio instructor and their students. Personalities of instructors, abilities to form meaningful relationships with students, as well as cultural backgrounds, all have a profound impact on the studio educational dynamics. Depending on the interaction of all given factors, the setting can become either relaxed or tense (M.V.Gregory, 2016). Many studies have investigated intrinsic motivation in educational settings (Higbee, 1996; Dickens and Perry, 1982; Brophy, 1987). While some scholars argue that it is the students' responsibility to self-motivate, others disagree, claiming that it is the responsibility of the instructor to motivate students (Glasser, 1992). Small (R.V. Small, 1996) supports this interpretation proving in his research that it is the instructor whom the students will ultimately evaluate, and determine whether the class has been stimulating or dull.

One of the main objectives of this study was to gain an understanding of the specific personal qualities of studio instructors that have a positive impact on students' intrinsic motivation. Additionally, the study aims to challenge the acknowledged role of the instructor as a content provider and present them as a pivotal figure informing a more authentic and valuable learning experience. Comprehending the ways to impact students' intrinsic motivation in the context of studio-based teaching is not only crucial for creating a positive and productive learning environment but is equally essential for acknowledging teaching techniques in order to educate instructors on ways to improve and advance studio pedagogies.

Challenges of Teaching a Studio Class

Recent studies argue that, due to digital advancements, instructors across disciplines are finding ways to innovate their teaching and develop learning activities to complement lectures (Beetham, 2014). The experiential learning, however, relies heavily on instructor's ability not just to deliver content, but to develop meaningful relationships with their students and promote them through dialogue rather than one-directional instruction. This process creates space for uncertainty and "open-ended nature of creative production" (Shreeve, 2010) while contextualizing new knowledge, and making it available to students. Mewburn (Mewburn, 2012) argues that project reviews and critiques held during studio classes represent a cornerstone of the studio education and as such, could be implemented in other disciplines. However, he also concludes that additional research needs to be undertaken to investigate the studio-based pedagogy and its construct of teaching and learning. Because teaching that occurs in a studio is framed in the context of "relaxed practice," its pedagogical approaches are often regarded as "without specific criteria" (Littman, 2000). Therefore, the entire experience relies on instructor's teaching abilities, techniques but more importantly, their personal qualities, which help constitute a productive, positive, and comfortable learning environment.

Self-Determination Theory (SDT)

Motivation is a fundamental factor that stimulates an individual to pursue and accomplish their goals. It seems almost impossible to find a person, exceptionally successful in their field, without a very high degree of self-motivation. Self-Determination Theory (SDT) is a cognitive motivation theory first proposed by Edward Deci and Richard Ryan (Deci, 1980) through their analysis of the relationships between human motivation, personality, and optimal functioning. Lange, Kruglanski, and Higgins (Lange, 2011) argue that Self-Determination Theory examines the character and its connection to motivation within a specific environment.

The central premise of the theory is the differentiation of motivation as either autonomous or controlled. As Self-Determination Theory is concerned with quality rather than quantity of one's motivation, it is dependent on the autonomous types of motivation based on the concept of competence, relatedness, and autonomy. In case these needs are not fulfilled, one turns to a controlled type of motivation that is regulated by external factors. The theory gained importance in the research of motivation within the educational setting as it facilitates studying learning experiences and ultimately leads to findings that could be used to improve students' abilities to become self-determined (Deci, Ryan, 2000).

Alternatively, the extrinsically motivated student has external goals such as acquiring knowledge to receive a higher grade, continue their education without complications, or get a higher paying job upon graduation. Unfortunately, students who are extrinsically motivated often forget the knowledge acquired as soon as they meet their goal and when they receive their reward (Ryan, 1982). One of the more contemporary theorists in the field of motivation, Daniel Pink (Pink, 2009) suggests that three basic drives fuel human motivation: the need for autonomy, mastery, and purpose. It seems clear that behaviors demonstrate the levels of motivation, but it is not easy to understand the reason behind this motivation. Students whose goal is focused around generally succeeding achieve better results than those students whose goal is to avoid failure (Elliot, McGaryor, 1999).

STUDY

Research Design, Setting and Sample

This study aims to identify levels of a) students' intrinsic motivation in studios; b) studio instructors successful in promoting that intrinsic motivation; and c) studio instructors' personal qualities that have a positive impact on their students' intrinsic motivation.

Phase one of the research relied on a quantitative deductive approach, and phase two was based on phenomenological qualitative research that applied an inductive approach in data analysis used to identify codes and themes in order to ultimately provide an understanding of participants' perspectives and reach the findings.

Research Setting and Sample

The study was conducted at the College of Architecture, Art and Design (CAAD) at the American University of Sharjah in the United Arab Emirates. The college has two departments: Architecture and Art and Design, with five undergraduate programs Architecture, Interior Design, Visual Communication, Multimedia Design, and Design Management. Instructors teaching studio courses within all disciplines took part in the study. The college has been recognized for two decades as a leading regional educational institution in the field of creative disciplines. The standard of education at the American University of Sharjah is equivalent to one of the prominent universities in the US.

The recruitment involved indirect methods using a purposive total population sample; participants were not recruited on a personal basis. Undergraduate students (N=719) enrolled in five majors participated in this study. Essential sample characteristics are revealed in Table 1 below.

TABLE 1
QUANTITATIVE SAMPLE SUMMARY

		F	%
Gender	Male	236	32,82
	Female	483	67,18
Year of studies	1	80	11,13
	2	148	20,58
	3	144	20,03
	4	203	28,23
	5	144	20,03
Total		**719**	**100,0**

Summary of the qualitative research participants is shown in Table 2 below.

TABLE 2
QUALITATIVE SAMPLE SUMMARY

Pseudonym	Gender	Age Range	Years of Teaching
Instructor 9	M	30-40	15-20
Instructor 8	M	60-70	25-30
Instructor 6	M	50-60	15-20
Instructor 5	M	50-60	15-20

Instructor 4	F	30-40	0-5
Instructor 22	M	40-50	15-20
Instructor 2	M	30-40	0-5
Instructor 19	M	30-40	0-5
Instructor 16	M	60-70	15-20

RESEARCH METHODS

Quantitative Methods

The quantitative data were collected using the scale instrument Intrinsic Motivation Inventory (IMI) established as a measuring device that provides a framework to study Self-Determination Theory (SDT) further. The quantitative data collection was based on the implementation of a modified version of the IMI scale with a total of 30 out of 54 items used from the original instrument. Students were informed that the study was external, anonymous, and would have no implications on students' achievements in that particular studio class.

Qualitative Methods

The qualitative data was obtained through subsequent interviews with the faculty members who scored the highest, based on findings from the quantitative study, for their ability to intrinsically motivate students. The mixed methods approach enabled the researcher to investigate a phenomenon and more importantly, use it in order to do both – test and build a theory based on the findings from the qualitative methodology. The data was generated through video recordings of the semi-structured qualitative interviews with individual instructors.

This qualitative data was used to provide an understanding of the positive personal qualities of the instructors identified as successful in promoting intrinsic motivation. Instructors were asked to provide detailed descriptions of the interactions in the studio classrooms as they relate to the scales of interest/enjoyment (a direct measure of intrinsic motivation), as well as positive (perceived value, perceived autonomy) and negative (pressure/tension) predictors. Nine instructors were interviewed using a phenomenology interview protocol. The general techniques employed were aimed at being reproducible, systematic, credible, and transparent.

SUMMARY OF FINDINGS

The objective of the quantitative study was to measure the level of intrinsic motivation in students attending required studio courses. The level of intrinsic motivation is directly measured with a subscale of interest/enjoyment. Furthermore, the objective was also to establish a positive correlation between 'interest/enjoyment' subscale with the 'perceived competence' and 'perceived choice' subscales and a negative correlation between 'interest/enjoyment' and 'pressure/tension' subscales. The IMI scale consists of 30 items, and survey participants were asked to use a Likert scale to mark their answers (with one being equivalent to Extremely Disagree and seven being equivalent to Extremely Agree). A total of 719 students participated in the quantitative research. In order to secure and examine the validity of the results on subscales and ensure that the data collected was valid and sufficient for further analysis, the metric characteristics of each used subscale were inspected. Table 3 below shows that most of the subscales have adequate reliability. The only subscale that does not have adequate reliability is the 'Perceived Competence' subscale, while the other subscales have a sufficient coefficient of reliability as noted in the table, with the overall Cronbach's Alpha = .903

TABLE 3
PRIMARY DESCRIPTIVE DATA OF IMI AND SUBSCALES WITH RELIABILITY

|	Cronbach's Alpha
Interest / Enjoyment	,849
Perceived competence	,514
Effort / Importance	,749
Pressure / Tension	,816
Perceived Choice	,864
Value / Usefulness	,811
Relatedness	,765
IMI total	**,903**

Results of the reliability check enabled the researcher to make appropriate conclusions and valid assumptions, about the instructors' potential to intrinsically motivate their students, through an analysis of the assigned subscales. The modified seven-item Likert type scale consisted of 30 items. Based on this, the expected average result for intrinsic motivation would be 120. The sample item produced a value of 135,5; therefore, it is arguable that most students demonstrated a high level of motivation based on these high values on the IMI scale. The histogram below demonstrates that some of the respondents are grouped in positive values or above the average value, while the others are slightly below the arithmetic mean. (Figure 1)

FIGURE 1
HISTOGRAM – OVERALL IMI SCORES
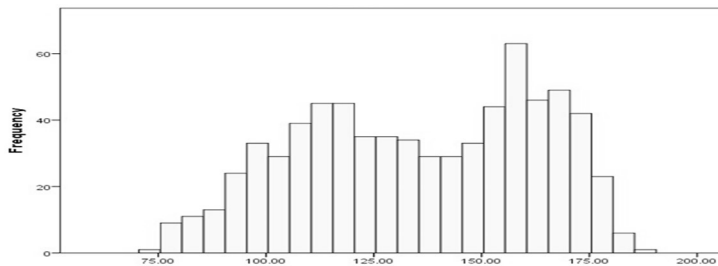
The 'interest enjoyment' subscale was represented through four items. The table shows the average student's score on this subscale is 17.50, which means that students on average have a reasonably high level of intrinsic motivation. Noticeably, students in the subscale are clustered into two fragments of the continuum. (Figure 2)

FIGURE 2
HISTOGRAM – INTEREST / ENJOYMENT SCORES
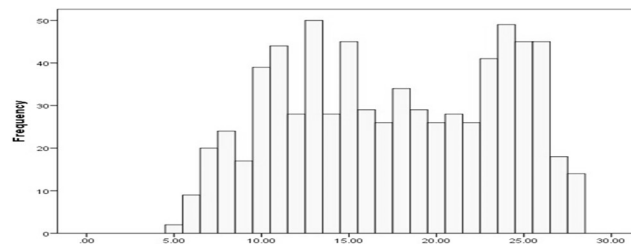
Instructors Successful in Promoting Intrinsic Motivation in Students

In order to identify the instructors successful in promoting intrinsic motivation, the overall results of the IMI (Intrinsic Motivation Inventory) scale were examined. Individual instructor's potential to motivate students is demonstrated in Table 4.

TABLE 4
IMI TOTAL MEAN BY THE INSTRUCTOR;
SPLIT FOR QUALITATIVE SAMPLE SELECTION

Instructor	IMI TOTAL	Interest / Enjoyment	Effort	Pressure / Tension	Perceived Choice	Value	Relatedness	Perceived Competence
Instructor 08	173,37	25,77	25,57	8,07	37,83	25,90	25,70	18,17
Instructor 16	168,00	24,54	25,00	10,73	37,35	25,65	24,27	14,19
Instructor 02	166,44	24,78	23,52	10,04	35,93	25,85	24,37	15,52
Instructor 19	162,69	23,91	23,16	13,34	34,97	25,00	22,75	13,81
Instructor 22	162,21	23,61	24,71	12,14	34,54	25,39	24,25	15,11
Instructor 09	161,33	23,00	24,00	11,87	34,03	25,37	22,37	14,70
Instructor 05	160,89	23,68	23,82	10,29	35,82	22,32	23,54	15,64
Instructor 06	159,73	22,39	23,93	11,43	34,33	24,47	23,03	14,33
Instructor 04	158,57	22,86	23,82	10,89	34,46	22,96	23,48	14,32
Instructor 18	142,76	17,24	22,97	19,76	27,31	20,62	17,28	12,24
Instructor 01	141,89	19,61	21,25	16,50	27,96	19,96	18,79	13,25
Instructor 17	140,23	18,00	21,50	15,87	28,10	19,97	18,17	13,17
Instructor 11	139,97	17,93	22,60	17,73	27,20	22,40	15,37	12,53
Instructor 13	133,00	14,56	20,00	18,11	25,41	23,52	15,48	12,41
Instructor 14	132,70	15,60	21,50	17,07	25,73	22,83	13,80	13,17
Instructor 15	123,04	13,92	17,79	21,38	22,21	20,25	13,00	11,75
Instructor 07	117,27	11,85	17,65	18,31	22,23	18,77	11,54	13,54
Instructor 25	116,93	14,07	16,70	17,00	22,17	16,40	14,13	13,03
Instructor 12	114,35	14,15	18,12	19,08	20,00	15,04	13,35	10,62
Instructor 20	113,94	13,85	16,97	18,91	17,91	17,12	11,56	11,68
Instructor 21	107,50	10,96	13,54	20,54	19,86	15,18	10,46	11,44
Instructor 10	106,57	11,47	17,43	19,97	19,47	14,20	10,83	10,87
Instructor 03	105,97	11,23	19,58	21,58	16,84	12,65	9,68	11,29
Instructor 23	91,96	9,57	10,39	22,21	14,00	10,64	10,21	9,04
Instructor 24	88,28	8,97	11,03	23,17	15,07	9,03	10,86	8,03

Personal Qualities of Instructors Successful in Promoting Intrinsic Motivation

Based on the review of the results and the descriptive analysis outlined above, several significant conclusions can be drawn. The results of the quantitative analysis demonstrate the difference in scores among the 24 instructors. The aim of this study was ultimately to identify and analyze specific personal qualities acknowledged by the qualitative research sample. In order for studio instructor to better intrinsically motivate their students, he or she should:

a) Demonstrate care;
b) Respect students' opinions;
c) Be able to listen to students;
d) Be genuine and honest;

e) Often share personal experiences and make analogies relevant to the context of studio work;
f) Demonstrate enthusiasm while teaching;
g) Be friendly and have a sense of humor;
h) Be accessible;
i) Be open to criticism and feedback about their teaching style;
j) Be adaptive and able to engage in informal teaching;
k) Demonstrate passion and dedication to own creative work and research.

DISCUSSION OF FINDINGS

Most significant accomplishments of writers, painters, and composers were the result of strong intrinsic motivation (Paul, 2004). Participants of this study reported that in order to intrinsically motivate students, they must model passion towards the discipline they teach, as well as their creative work. Design discipline has long been established through a process of collaboration. Visser (Visser, 2010) argues that it was Donald Schön, an early contributor to cognitive design theory, who defined this approach to design and was the first one to recognize it as reflective practice.

Findings of this research reveal that personal qualities supportive of collaborative endeavours also promote intrinsic motivation. Being caring, enthusiastic, vulnerable, and adaptable are all traits that help instructors frame, and reframe design problems, and work with their students to find solutions. Instructors considered good at teaching can create learning environments that are considered positive, respectful, and that promote the dynamic exchange of information. The capacity to listen carefully and synthesize what a student is saying is therefore critical to the success of any instructor. The ability to socialize with others is essential for an instructor to gain an understanding of the issues that individual students are experiencing and thus be in a better position to address their specific needs. Another valuable trait seems to be the capability of an instructor to engage in informal teaching and purposely break away from routines in order to invigorate studio environments. These unexpected circumstances surprise students and encourage them to be more alert and develop their problem-solving skills. That is not the case with the formal approach to teaching wherein the entire process is rigidly structured and little, or no deviation from the imposed configuration is allowed (Fontana, 1995).

Instructor's enthusiasm within the studio and outside seems to be one of the most prominent ways to positively influence students' intrinsic motivation levels. Positive or friendly instructors encourage students even when they are performing poorly. Besides, the relationship that an instructor has with students outside of the classroom is a positive predictor of increased student motivation in class. However, to discipline their students, instructors need to exercise some level of authority in order to control the classroom environment and ensure that irresponsible and inattentive students do not disrupt the learning process.

Humor has proved to be one of the ways through which the instructors can build rapport with their students. According to participants, having a sense of humor helps to increase instructor's teaching effectiveness. The ability of the instructor to make the learning environment fun has a direct impact on students' performance. This approach, as Berk (Berk, 1998) argues, removes the barriers in communication between the instructor and students that are created by differences in position, age, and cultural backgrounds.

Findings of the current research support Biggs' (Biggs, 2003) idea that all instructors should practice being continuously positive and encouraging when they interact with students ensuring that messages they convey are constructive and motivating. It is often not what is being said, but how, and in what context, that matters. Therefore, it is evident that more emphasis must be placed on non-verbal communication within the studio-learning environment. Schulman (Schulman, 2005) notes that instructors teaching in higher education are often very rigid, relying solely on their acquired theoretical discipline-related knowledge without evidence of adequate self-inquiry about ways to share it with students. He attributes this fact to the lack of formal teacher preparation, arguing that instructors usually teach the way they were taught themselves without further self-assessment and conscious efforts to improve their teaching (Schulman, 2005). Failure to understand the impact that studio instructors have in the classroom often leads to multiple

problems such as failed communication, missed opportunities, blaming, unmet expectations, poor quality of creative output and generally demoralized and undermined students.

CONCLUSION

Instructors successful in promoting intrinsic motivation in their students embrace the journey of self-discovery and learning themselves. They are curious and engaged in learning themselves, often interested in finding out the answers to design problems along with their students. They demonstrate and transmit enthusiasm. They strive to teach better and welcome students' feedback and constructive criticism about their teaching performance. They align with their students demonstrating wealth in their knowledge, but modesty in their attitude.

However, how does one learn to teach a studio? One of the main issues studio instructors face is lack of formal or informal training. Recent studies (Salmon, 2014) verify that one of the significant issues in applied pedagogy of any discipline today is that undergraduate-level instructors typically do not engage in any training before starting to teach; therefore, they teach conventionally relying on tested vertical methods of teaching. This approach, based mostly on content delivery, project assessment, and fulfillment of course outcomes, minimizes opportunities for meaningful engagement with students. A study by Cameron (Cameron, 2017) about teaching methods within various disciplines in Australia revealed that teachers most often rely on students' evaluations in order to determine how effective their teaching is. In this regard, teaching at the university level tends to be an entirely self-directed practice.

The results of the study demonstrate evidence of a reciprocal correlation between the levels of students' intrinsic motivation and the type of social construct within a studio classroom. The findings can be applied to any other discipline that relies on practical, experiential, or project-based learning. Although it is difficult to argue that all findings can and do apply to all studio instructors, they can be used as a framework to rethink and reconsider individual beliefs and teaching approaches. Most importantly, findings propose a way towards embracing a positive attitude that promotes self-reflection and assessment in order to learn, grow, and enhance one's teaching.

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