Applying Appreciative Principles to Improve Systems that Serve Students

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Abstract
Appreciative Inquiry is an organizational change model that seeks to identify and build upon existing strengths to create the best of what might be (Cooperrider & Whitney, 2000). Bloom et al. (2008) applied and expanded Appreciative Inquiry principles to create the Appreciative Advising framework which includes 6 Phases designed to support students to leverage their experiences and strengths to achieve their goals. This paper presents the addition of Design Thinking as a human-centered process that adds to the appreciative frameworks currently in use for enhancing educational practices. Specifically, Design Thinking can be used to address challenging organizational systems and structures that may hinder students' ability to fully achieve their goals. An example of utilizing Design Thinking to build a better system of communication with students is presented.

Keywords

Appreciative Advising, Appreciative Inquiry, design thinking, colleges and universities, student-centered

Appreciative Advising, which is the application of the organizational improvement process Appreciative Inquiry (AI) to student success, has been an important development in higher education. Using appreciative techniques to focus on helping students successfully address the large and small challenges that exist as part of the college experience—from choosing a major to studying for an exam--has been shown to be effective and worthwhile (Hutson, 2010; Kampoff, et al., 2007; Lewis, 2021; McPhee, 2021; Truschel, 2008). As higher education continues to enroll a more diverse student body, it is critical that campuses are prepared to meet individual students where they are rather than using the traditional model in which students are expected to conform to the campus norms (McNair et al., 2016). Appreciative Advising provides a framework for working with each student as an individual in order to maximize their potential.

Appreciative Advising's focus on the individual student, however, is limited by the systems in which both the student and advisor operate. Systemic challenges such as policies and processes can significantly inhibit a student's ability to achieve their collegiate goals. Models of student retention acknowledge the campus environment as a key part of the student's experience (Astin, 1985; Pascarella, 1980; Tinto, 1975; Tinto, 1987/1993; Tinto, 2012). Institutional factors influencing student success can include such things as academic policies, faculty rewards for spending time with students outside the classroom, course placement and sequencing, and the number and type of student support services provided. Each of these factors (and more) are well within the control of institutions and should be created and reviewed with an eye on their impact on student success. The college environment is as critical to student success as are individual student interactions between campus faculty/staff and students.

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The AI model upon which Appreciative Advising was built is well-suited for the needed review of campus policies and procedures. This paper presents Design Thinking or human-centered design as an additional organizational change tool that can be used to ensure campus structures support success. An overview of AI, Appreciative Advising, and Design Thinking as well as a comparison of the models is presented. A case study illustrates the power of using design thinking to address the challenge of students feeling overwhelmed and stressed.

Appreciative Inquiry, Appreciative Advising, and Design Thinking

Appreciative Inquiry

Appreciative Inquiry

AI is a model of organizational change that focuses on what is best in people and organizations and uses this focus to provide a solid foundation for change followed by a positive, co-constructivist approach to innovation (Cooperrider & Whitney, 2000). First introduced in 1987 (Cooperrider & Srivasta, 1987), AI called for a paradigm shift from problem-solving to an approach that was built on the positive assumption that organizations and the people within them have unlimited capacity for imagination and action. Instead of focusing on what's wrong, AI asks the question, "What could be?" thereby refocusing thinking and effort on possibilities instead of limitations. In addition, there is a fundamental belief that an organization's collective strengths (referred to as the "positive core") have the power to transform the way a group conducts business (Cooperrider & Whitney, 2005). This approach has led companies and organizations of all sizes and from across the globe to rethink their work and operate in ways that are forward-looking and innovative.

Key to the use of an AI approach to organizational change is the engagement of all members of the organization. In this way, the future is not something that is created by top leaders through a strategic planning process. Instead, the future is co-created by bringing the perspectives, ideas, and dreams of a broad sector of members to the table to design an organization's path forward. An organization starts by identifying an "affirmative topic" (Cooperrider & Whitney, 2005, p. 17) on which it will focus. The affirmative topic can be wide-ranging or focused on a single opportunity. The 4-D Cycle then guides the AI process. Through appreciative interviews and questions, the *Discovery* phase invites all stakeholders to uncover the strengths, core values, and current best practices related to the appreciative topic and ensures that an organization brings into the future the best of what currently exists. The *Dream* phase involves envisioning the future as not a problem to solved, but rather as a deep reflection on how organizational potential relates to mission and contributions to the world it inhabits. It seeks to align the organization's daily operations with foundational values. In the *Design* phase, participants create concrete possibilities that arise from the uncovering of organizational potential during the Dream phase. Each of these possibilities is grounded in past successes that illustrate how collective strengths of the organization can be operationalized to move forward. Finally, the *Destiny* phase not only sets plans for moving possibilities forward but it creates ways in which people can empower individuals, teams, and the entire organization to act on positive attributes to sustain momentum toward change (Cooperrider and Whitney, 2005).

AI not only provides a framework for positive change, but also offers a wide array of actionable strategies and techniques for moving through the 4-D Cycle (Ludema et al., 2003). At the heart of the process is a commitment to raising individual experiences and voices in order to help an organization become its best.

Appreciative Advising and Appreciative Education

Based on the AI framework and principles, Appreciative Advising was formally introduced to higher education in 2008 by Bloom et al. in their seminal book on the topic. This work presents Appreciative Advising as a "social-constructivist advising philosophy that provides a framework for optimizing interactions with students in both individual and group settings (p. 11)." Appreciative Advising focuses on the interactions between a student and advisor in order to help students in maximizing their potential in the collegiate environment – essentially moving students toward becoming their best. As in AI, Appreciative Advising is based on a positive, strengths-based approach to planning, experiencing, and making meaning of the college experience. The central practice of asking "unconditional positive questions" (Cooperrider & Whitney, 2000, p. 10) guides Appreciative Advising in helping students build upon their strengths to design and implement their future through six phases: (a) *Disarm*: actions to help the student feel comfortable through positive first impressions, (b) *Discover*: effective open-ended questions to elicit student narratives through which strengths, skills, and passions are identified, (c) *Dream*: creation of powerful images of the future, (d) *Design*: a plan to achieve future dreams that is co-created with the student and guided by the advisor, (e) *Deliver*: implementation of the plan with support of the advisor, and (f) *Don't Settle*: challenge and support students in furthering their actions and dreams. Appreciative Advising combines careful understanding of human behavior with specific strategies for guiding students toward maximizing their potential.

Bloom et al. (2013) have expanded the principles of Appreciative Advising in their model of Appreciative Education as a framework for individual student interactions across institutions as well as organizational culture. Critical to this model are the foundations of appreciative mindset and social-constructivism. The authors argued that in order to maximize the outcomes of appreciative approaches to education there must be congruency in the application of an appreciative mindset at all levels of the organization. Organizational planning, change, and leadership must be approached with both an appreciative mindset as well as a commitment to co-construction of goals, plans and outcomes. For example, in strategic planning (or the design stage) a wide-range of constituents should be involved in both local and macro discussions in order to maximize idea generation and support the development of appreciative approaches to organizational work at all levels. Furthermore, organizational change is most effective when stakeholders have participated in both dreaming and designing the future of the organization.

Design Thinking

Design Thinking, also referred to as human-centered or user-centered design, is an approach that brings together traditional analytical approaches to problem-solving with creative processes that bolster innovation. Design Thinking is always conducted in teams as groups of people generate energy and creativity. A central tenet of Design Thinking is that people who face the problem(s) are the ones who should be involved in developing solutions (IDEO, 2015). The process is both iterative and interactive as designers move through what they know about the issue, draw connections between what is known and potential solutions, and use initial ideas to inform future efforts (Razzouk & Shute, 2012). The basic design thinking process has three stages: (a) inspiration, (b) ideation, and (c) implementation (IDEO, 2015).

Design Thinking begins with a general idea of the problem or challenge to be solved followed by the "empathy" stage, which seeks to deeply understand users' current experiences; this understanding can be garnered through in-depth interviews, story-telling, observations, and a host of other techniques. From this deeper understanding, the problem is

reframed to a "How Might We…" statement which moves solutions from simple problem solving to envisioning a better future. Through a process referred to as diverging and converging, the design thinking team moves between brainstorming solutions and refining or operationalizing potential solutions; operationalization of solutions often leads teams back to broad ideation and the cycle continues until solutions are narrowed down. Once a potential solution is identified, quick, low-cost prototypes are developed and presented to users for feedback. The feedback is then fed back into the cycle of ideation until a prototype is developed that can be launched into the wider organization and its constituents (Lietdka & Ogilive, 2011).

Comparison of the Models

All three models – AI, Appreciative Advising and Education, and Design Thinking have much in common. All three models are positive and action-oriented and designed as enhanced problem-solving models that seek to find the best of what can be (Truschell, 2008). All are based on social constructivism and require depth and breadth in the involvement of stakeholders (acknowledging that in Appreciative Advising, the process involves just the advisor and one or a few students). Across the three models, reframing of problems as potential opportunities for positive momentum and outcomes is critical. A key similarity across models is the significant time and effort that is spent on understanding the situation and developing potential solutions before action, which is often antithetical to American culture which has a bias toward quick action and implementation.

The centrality of asking questions as a method of uncovering assumptions and unstated perspectives on the current situation is an essential component of all three models. In each model, seeking understanding is the foundation for any further considerations and asking. As stated by Truschel (2008):

> …the subject of question asking is primary and universal; it is fundamental to any consideration about the ways we as human beings perceive, think, feel, and make meaning. Questions are also at the core of how we listen, behave, and relate and individuals. Virtually every thing we think and do is generated by questions. (p. 9)

Each model points to questions as an intervention in which not only are questions used to gather information, but also help make meaning and, often, the nature of the questions can change lines of thinking and future action as well.

Some of the similarities across the models are less visible. For example, Design Thinking clearly articulates and expounds upon prototyping as a key step before reaching a final solution (perhaps because Design Thinking is often used in addressing organizational problems that have high cost). Although prototyping is not specifically stated in Appreciative Advising, the "Don't Settle" phase implies evaluating the efficacy of implementation to either chose alternative actions and pathways or to use what has been learned as a way to continue forward progress. Additionally, although not named as a specific step, visual models of AI include this feedback loop.

What initially appears as a difference, but is more of a fundamental a similarity, is the approach to problem-solving. On the surface, Design Thinking is described as an approach to problem-solving while both AI and Appreciative Advising, see the term "problem-solving" as limiting and therefore speak more to the importance of broadening options and opportunities. This difference can be seen as a type of small divergence in process. Design Thinking begins with the identification of a "problem," but then through the empathy phase begins to align with the foundations of Appreciative Inquiry and Appreciative Advising as the approach moves to focusing on "How Might We?" questions in order to open and explore

what can be. Overall, Design Thinking seeks the same widened and more creative approach to addressing challenges through similar techniques to both AI and Appreciative Advising – being user-centered, using interviewing as a key technique, and focusing on creative solutions to name a few.

Finally, there are visible differences in the number and naming involved in the process steps within each model (see Table 1). However, again, this differences seems to be one of language rather than substance. The most significant differences are with Appreciative Advising and the other two models, primarily because Appreciative Advising is focused on individuals rather than organizations. Disarming is a critical first phase in Appreciative Advising and needs to be stated because of the importance of the relationships between the advisor and advisee. However, both AI and Design Thinking include making participants feel welcome and building a safe environment as part of the first step of exploring the current situation. Similarly, the last steps in each model appear different, but all include final development of the design, implementation, and evaluation of the solution.

Table 1. *Comparison of Models*

Appreciative Inquiry	**Appreciative Advising**	**Design Thinking**
	Disarm	
Discover/Define	Discover	Empathize/Define
Dream	Dream	Ideate
Design	Design	Prototype/Test
Destiny/Delivery	Deliver	Assess
	Don't Settle	

Case Study: From Training to AI

University College at Indiana University-Purdue University Indianapolis (IUPUI) serves as the academic home for all exploratory and pre-majors as well as the coordinating unit for 13 student support programs ranging from orientation to career development to programs that serve students from underrepresented and under-resourced backgrounds. The academic advising and career development unit within University College – comprised of approximately 35% of all staff -- has utilized the principles of Appreciative Advising for many years. Advisors are trained in the model and operate from a strengths-based approach in their interactions with students. Additional training in coaching ensures advisors work with each student to identify the priority area in which they want to focus their time with an advisor, dream about the ideal, design an approach for achieving this ideal, and set in place a concrete plan for action. Further, techniques drawn from Appreciative Inquiry had been used for approximately 10 years as part of annual staff retreats in order to enhance creativity around student-focused programs and services. Therefore, most staff are very comfortable with using an appreciative approach to both their interactions with students as well as program planning and implementation.

In the 2018-2019 academic year, University College conducted a project which sought to bring large-scale change policies, procedures, and/or programs to better support the success of student. That is to say the organization was trying to move beyond program improvement to developing systemic responses to challenges students face. The direct target of the project was not the individual student but rather the organizational system(s) that

influence student's ability to maximize their learning and development. The project was based on the principles of Design Thinking and was co-lead by a faculty member with expertise in this area.

The project started in summer 2018 with staff in University College at IUPUI being given small notebooks and asked to write down any observations around student behaviors, conversations, challenges, and successes. In essence, staff were asked to move out of their usual problem-solving roles and become amateur anthropologists who were recording observations about students on our campus (interestingly, this task was difficult for many staff as they are deeply rooted in their day-to-day work of problem-solving with students). Specifically, staff were asked to put aside their assumptions about students and their behaviors, and record their observations on questions such as those below:

- Where are students gathering in small or large groups? Why that space? What are they doing together? Who is part of the group? Who is not part of the group?
- What are students talking with each other about informally? What might you this tell you about what is important to them?
- What questions are students bringing to you? What might this question say about their experience beyond just the answer you provide? How might you take the question as an opportunity to dig deeper into the student's experience?
- In what ways and to what degree do your observations about students diverge from your current thinking about the student experience? What might this mean for the way we do our work?

After three months of recording, staff submitted their notebooks and all observations were transcribed to post-it notes and organized into themes. Given the wide range of topics that emerged from the empathy component of the process, the next step was to choose a topic on which to focus, which was accomplished through an all staff retreat comprised of approximately 90 staff members from the 13 different functional units. Small groups for each of the 15 themes were led by the Design Thinking faculty member through an abbreviated process using techniques for ideation. Specifically, each group was asked to develop a "how might we" question to frame the issue that emerged from observations of students. A summary of the student issue and associated How Might We questions can be seen in Table 2.

At the end of the retreat, each group presented their question. Presentations were followed by utilization of the dot voting process in which each staff member received the same number of dots to place on the question that they felt was of the most significance for our students. Dots could be distributed among any of the questions and more than one dot could be placed on the same question to emphasize the voter's strong preference.

Because conducting organizational development with over 90 staff members is both unwieldy as well as impractical, the next phase of project was moved to the directors of each of the 13 programs and services within University College. The first meeting of this group was to take the results of the dot voting process and determine an area on which to focus. The group chose to focus on the issue of student stress and couple that with the frustration students experience as a result of the difficulties they face in getting clear information on how to navigate the university system. The resulting question for the project, was "How might we create an environment in which students are empowered to successfully navigate IUPUI in a way that minimizes stress?" Notably, this question is distinctly different from the initial question around reducing student stress which focused on developing training for faculty and

Table 2. *Themes and Questions*

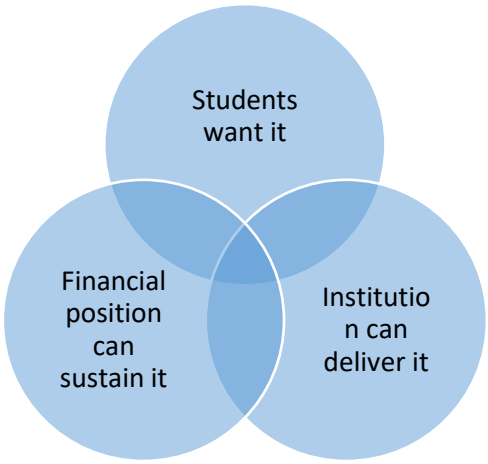
Theme	Issue	How Might We
Ownership of Learning	Degree Maps Don't Meet Needs of All Students	How might we help students connect educational and emotional aspects of degree planning to achieve goals?
	Students Don't Know How to Develop a Career Plan	How might we help students choose a major and career path based on multiple factors?
Self-Management	Balancing it All	How might we get a clearer picture of students' priorities, finances and time in order to better support them?
	Students are Stressed	How might we develop training for UCOL faculty and staff around a common language to develop for students?
Information	Lack of Clarity in Process/Info for New Students	How might we streamline, simplify and centralize essential student communication?
	Lack of Clarity on College Costs	How might we personalize the cost of college for ALL students?
Community	Letting Student Know We Care	How might we create opportunities for us to build connections and trust with students?
	Lack of Belonging for Students of Color	How might we make inclusion and diversity an integral part of media and department missions?
	Students have trouble finding their place at IUPUI	How might we create more communities in the classroom?
Transition	Disengaged at Orientation	How might we determine what information and experiences are essential at orientation?
	Barriers to Bridge	How might we engage students to understand the barriers to attending Bridge so that we can make Bridge accessible for all students?
	Confusion about FYS Options	How might we design first-year seminar options to better meet the unique needs of a variety of students?
Space	Students Lost in Taylor	How might we improve signs (content and location) so students are better directed?
	Taylor Hall doesn't meet Student Needs	How might we increase student appeal and usage of Taylor Hall by enhancing their living experience through creating flexible and colorful learning environments?

staff to be better equipped to talk with students about their stress and campus resources. The framing of the focus of the project was facilitated by well-established Design Thinking practices and was critical to the manner in which solutions were developed. It moved the

group from focusing on one-type of solution to creating a broader framework in which a multitude of solutions could be explored.

To ground the new question in the empathy stage of design thinking, the group embarked upon creating a journey map for the first-year of enrollment at IUPUI (the first year was chosen because that is the focus of the work in University College). With the question in mind, throughout the creation of the journey map, the group focused on communication needs and resources. With the completion of the journey map, the group moved into the ideate phase of Design Thinking. Several methods of prompting creativity within brainstorming were utilized in order to generate a wide array of potential solutions. Final solutions focused on systems that would allow students to receive real time answers to their questions through a single interface. The group thought about using an Uber-like assignment structure which sent questions from students to a group of well-trained upperclassmen who would then "accept" and answer the question. Another possible solution was to match every student with a peer whose primary responsibility would be to research and find the answer to student questions. Once several potential solutions were generated, a simple feasibility tool was used to evaluate options (Liedtka & Ogilvie, 2011). The tool, translated to the work of higher education, is shown in Figure 1.

Figure 1. *Feasibility Tool for Evaluating Concepts and Ideas*



In the end, the design group landed on using artificial intelligence through a chat bot to serve as a single portal through which students could receive answers to their questions at any time of the day or night. This solution met all three factors in the feasibility tool in that, (1) students want easily accessible, real-time accurate information, (2) there are several vendors in the marketplace delivering the technology solution (chat bots) that was being explored, and (3) the technology solution could be financed through an established annual budget with a low-level of human resource investment (heavy personnel investment in development but minor after that).

The next step in Design Thinking is prototyping. Many institutions engage in prototyping when conducting pilots of emerging projects; unfortunately, most of the time these pilots take a tremendous amount of human and fiscal resources making them difficult to quickly implement and evaluate for potential impact. Prototyping involves quick, low-budget visual (and sometimes physical) representations of potential solutions. For this project, the group created a description of how the chat bot would work and sent staff out to talk with students and get feedback. The feedback from students showed great potential in this solution.

The proposed solution was then fully developed and presented to campus administration who approved the idea and an exploration of potential vendors was conducted. Demonstrations of vended projects where matched against project specifications; staff were given accounts to test the various chat bot systems. Within just a few months, a contract with a vendor had been signed and the chat bot put into place for University College students.

This case provides an example of how the appreciative nature of Design Thinking can help higher education organizations provide human-centered solutions to the complex and deep challenges faced by students. Central to this effort was that the problem to be solved was developed from a grounded theory approach in which observations of students led to the specific question to be addressed. Further, the Design Thinking approach led to a completely different outcome from the original question which implied that the solution was better training on student needs and campus resources for faculty and staff. By adding design thinking processes and techniques, staff were able to deeply understand the source of student stress and provide a root-cause solution rather than focusing on providing additional training to staff which would serve as more of a "band-aid" solution while the root cause of stress remained.

Discussion and Conclusion

College student success requires that both organizational systems and individual experiences support the needs of each student. Appreciative techniques including, Appreciative Advising, have been applied to individual and small group interactions to help students identify their strengths, envision positive outcomes, and develop strategies to achieve their goals. Design Thinking is an additional tool that can be used to address organizational policies and procedures that may be hindering student development and achievement. Specifically, Design Thinking ensures that the problems being addressed are based in the lived experiences of students instead of addressing what faculty, staff, and administrators perceive to be the problem. Additionally, Design Thinking provides a wide array of creative approaches to ideating that facilitate creativity by moving back and forth between pie-in-the-sky ideation to usable strategies. The prototype stage of Design Thinking ensures that potential solutions truly meet the needs of students prior to implementation. Far too often, college and university systems are not considered as a target of intervention for student success and problems and solutions are identified and addressed through the lens of university personnel. Design Thinking has emerged as a complementary approach to the appreciative foundations already being used with individual and small groups of students.

Throughout this paper, Appreciative Advising and Design Thinking have been discussed as separate processes with appreciative techniques being geared toward individuals and small groups while, as an appreciative process, Design Thinking targets institutional processes and structures. However, when combined, the two approaches can be very powerful tools for use in any situation. Specifically, Design Thinking offers a wide array of techniques to use in getting to know students or organizations (IDEO, 2015; Kumar, 2013). For example, design thinking interview and observation techniques, card sorts, and journey maps (Kumar, 2013) can be powerful tools in the discovery phases of appreciative advising. When addressing challenges faced by students, advisors can help students reframe a setback as "How might I…" in order to assist in generating a wide-array of potential solutions. Storyboarding, mash-ups, role-playing, and exploring "hunches" are great design thinking techniques that can assist students in fully exploring and trying on potential approaches to a challenge. Similarly, the iterative nature of the ideation phase of Design Thinking can help ensure that many solutions are presented and explored. In the same vein, Appreciative Advising approaches can support a Design Thinking approach to organizational change.

Specifically, the Disarm phase ensure that groups embarking upon systems change are in an environment where they feel safe and confident to share ideas and opinions. The Don't Settle phase ensures that creative problem-solving doesn't end with implementation of a successfully prototyped solution; continuous evaluation and improvement are a key component of creating organizational that support student success. When taken together, Appreciative Advising and Design Thinking can be powerful approaches to individual and organizational success.

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