A Theory of Change-Making:
An Ecosystem Approach
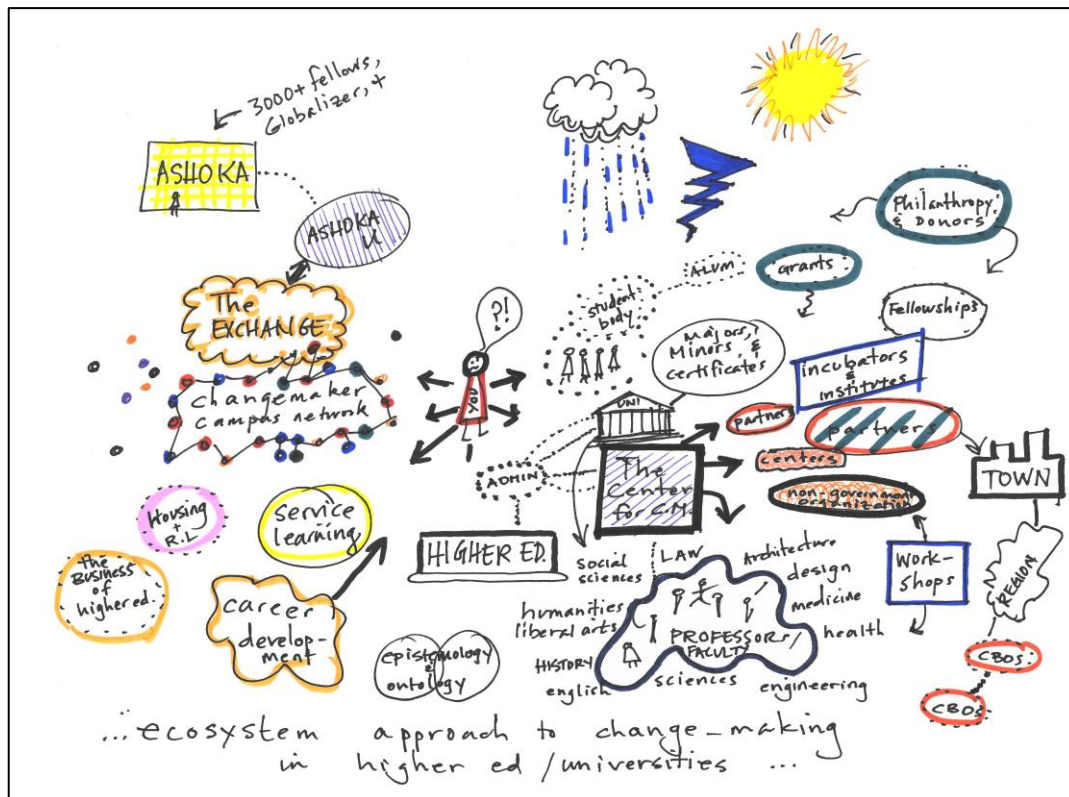
Taylor Provocations Series #2

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January 2020

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Purpose

This monograph is part of our Taylor Provocations series. It is intended to generate conversation and to help readers clarify thinking behind the practices of changemaking education and related knowledge production. The audiences are Ashoka U colleagues, community partners, Taylor Center team, Tulane affiliates, sponsors, and funding agencies, other stakeholders-- anyone interested in promoting changemaking in higher education in the 21st century.

This Taylor Provocation introduces a *Theory of Change-Making*; that is, it explores a theory of change approach for promoting and understanding "changemaking" within the setting of higher education. We use the Taylor Center as an exemplar to illustrate and contextualize the application of an ecosystem framing to articulating how an organization does its work and makes sense of its impact. Therefore, this provocation paper interprets the work of the Taylor Center but is not intended to be an official representation of the Taylor Center's theory of change.

Our approach models an application of the popular theory of change (TOC) approach used for planning and evaluation in social mission organizations. It thus outlines the key elements of the Center's work: the context, values, vision, and mission; the resources, inputs (forms of capital), activities, expected outputs and greater envisioned impact; as well as key assumptions and external factors. We also pay attention to feedback and dynamics among the interconnected elements and what we hope will emerge from these interactions. Some questions arise that can guide learning and evaluation.

We hope this monograph can help promote an informed application of an ecosystem worldview in developing a TOC for a higher education changemaking center. We illustrate how to use an ecosystem approach to interpret an organization's logic model for the purposes of informing the monitoring, evaluation, and learning systems we need to guide coherent and compelling changemaking efforts. We hope readers find the discussion and examples useful and thought-provoking. Please read with these considerations and context in mind and send us feedback!

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Acknowledgements

Part I: Values, Vision, and Mission of Changemaking

1. Changemaking in Higher Education: the Taylor Center

This monograph draws from a real-life example to demonstrate and explore a "theory of change-making". This section introduces the organizational case: the Phyllis M. Taylor Center for Social Innovation and Design Thinking at Tulane University, New Orleans.

Social innovation programs began at Tulane in 2009. These initiatives arose over several years of efforts by many people, from pioneering undergraduates to the former Tulane leadership and administration. All helped to bring social entrepreneurial and "intrepreneurial" (internal to large organizations) ways of thinking, learning, and acting to Tulane. Recognizing these efforts, the Taylor Center was founded in 2014 as a university-based center within Tulane to promote social innovation and changemaking, with design thinking as a central element. The center was made possible with a generous donation by Louisiana native and Tulane alum, Phyllis M. Taylor.

The Taylor Center offers a range of initiatives for the university and local community that serve aims of education, training, research and service. One core activity is curricular: a social innovation and social entrepreneurship (SISE) undergraduate minor. Other co-curricular programs for students include fellowships, financial awards, a social enterprise incubator, life design courses, design thinking workshops, and a residential learning community. Support for faculty and scholar engagement currently include Social Entrepreneurship (SE) Professorships, and faculty fellows and visiting scholars in the past. Formerly under the umbrella was a major "X-prize" type of competition, the Nitrogen/Hypoxia reduction prize, which invited teams from around the world to address the problem of excess nitrogen and hypoxia in the Gulf of Mexico and other delta regions (a team was awarded the million-dollar prize in 2017). Newer initiatives include supporting research & scholarship among graduate students and faculty as pathways to changemaking and knowledge generation for effective changemaking education. A cross-cutting initiative is the integration of the VISIONS model of multicultural competence into center administration, teaching and other programs.

The Center has a wide audience of "learners". It primarily serves enrolled undergraduate students, but it also engages a larger community of faculty, staff, administrators, graduate students, community-based organizations and peer organizations. These groups participate in our programs as well as help execute them: they teach courses, produce knowledge, advise students, shape and execute university policies and systems, and more.

Results of Strategic Planning for 2018-2020

During 2016 to 2017, the Center undertook a planning process for a 3-year strategic plan for 2018-2020, known as *Taylor Forward* (see Taylor Center, 2017). This process clarified the vision for "the change we want to bring into the world", and the mission in contributing to making this vision a reality.

> Taylor's stated **Mission** is to: "cultivate a diverse network of Changemakers who are working and learning together to create a more just and equitable society."

The **Vision** is an extension of this purpose: "a powerfully connected network of <u>changemakers</u> who support and learn from each other as they work to create lasting positive social change in their communities."

Values that surfaced through stakeholder discussion were:
- **Respect**: "We are committed to equity and recognize humility and empathy as cornerstones of effective and ethical engagement with others."
- **Connection**: "We see innovation as a social act that is grounded in the relationships between people across differences."
- **Learning**: "We practice persistent curiosity and recognize that everyone has knowledge to gain and share."
- **Creativity**: "We are committed to being open and at times uncomfortable as we seek out the unexpected in imagining a better world."

(It may be worth noting that the center's planning strategy process also revealed four strategic directions as priorities for investing resources and structuring activities over several years: *Equity*, *Community*, *Research & Scholarship* on/in social innovation and *Organizational Capacity*.)

Changemakers and the "The Change We Want to See"

The strategic planning process reflects the center's ongoing alignment with the philosophy of "changemaking" in higher education, advanced by Ashoka U. It was founded in 2008 as a spin-off from Ashoka, a global organization supporting social entrepreneurs since the early 1980s. Ashoka currently seeks an "everyone a changemaker" world (Drayton, 2006).

Thus, the strategic plan lays out how the Taylor Center (2017) interprets **changemakers** as**:**

> "People who use their skills, humility, expertise, gifts, empathy, and power in a way that creates *positive social change* and affirms the *humanity* of all people. Taylor cultivates a dynamic community of Changemakers who demonstrate a commitment to social change, constant learning, and working in partnership with the people most affected by a given social or environmental issue." (p. 3)

Note here that the center's conception of changemakers is intentionally diverse, due to the belief that a changemaking education should ideally be accessible to anyone, regardless of their ability to pay or societal position.

Borrowing from Phills, Deiglmeier, and Miller's (2008) seminal work on defining social innovation, the plan also defines **positive social change** as:

> "The change that leads to a more *just, equitable*, and *ecologically sound* society. One measure of whether a change is positive is whether it leads to sustained improvements for those who are most affected by a given societal or environmental issue." (p. 3)

The center's values and programs indicate the range of 21st century methods and attitudes that are increasingly recognized by society as needed in order to step up and address systemic and structural inequalities, such as capabilities for empathy, creative confidence, teamwork, adaptive leadership, system thinking, and problem solving.

Given this context and framing, the Taylor Center's statement of the "change we want to see" is represented in the Vision and Mission statements. The center's **Vision** is: "Taylor envisions a powerfully connected network of Changemakers who support and learn from each other as they work to create lasting positive social and environmental change in their communities." (p. 3). For its **Mission**: "The center cultivates a diverse community of Changemakers who are working and learning together to create a more just and equitable society." (p.3).

Taken together these definitions and vision and mission statements point towards a center-wide "theory of change": The greater impact in the world (the "positive social change") is envisioned to result from the center's work in cultivating a thriving community of engaged, ethical, and capable changemakers. Changemakers are people able to collaboratively and effectively address the substantive social and environmental problems they encounter where-ever they go in the world. Effective changemaking will thus create a more visible "Community of Changemakers" around the world, working at scales that range from local to global.

2. Situational Scan: A Context for a Changemaking TOC

A situational scan explores the context in which our case, a higher education changemaker organization, exists and operates. This can help clarify threats and opportunities for its various plans, programs and operations. Looking at the context also helps clarify the reasoning for such organizations and how programs evolved.

The relevant contexts for the Taylor Center's work span several domains, but the primary is that of higher education. This industry encompasses the production of undergraduate and professional graduate education, and academic knowledge and disciplines. Higher education also entails the university itself as an institution, produced by flows of money, resources and policies. These institutions face many challenges, such as competition, rising costs of tuition, and infrastructure issues. They are local and global structures, (usually) embedded in a place but connected to communities and phenomenon worldwide. They must satisfy multiple demands in our multicultural and globalizing world.

The Geographical and Socio-Political Setting of the University

The university's embeddedness in a local milieu, and links to extra-local settings, helped create the enabling conditions to grow academic and co-curricular efforts in social innovation. There has been a growing recognition within the university of the pressing wicked problems we face in an increasingly interconnected world, and an evolution in thought about the university's role in solving them.

Tulane University has been based in New Orleans for over 150 years. Tulane (and therefore Taylor) is grounded in the geography, cultures and history of New Orleans and the Gulf region and is thus strongly oriented to the specific opportunities and challenges of this setting. New Orleans is a 300-year-old city that is multicultural, complex, and yet relatively small (its population is about ~400,000 in a greater metropolitan area). Distinguished by many wonderful, delightful aspects of a rich cultural and historical legacy, in 2018 it landed #1 on the NY Times list of destinations 'places to visit'. It is also a microcosm of the United States, characterized by structural racism and white privilege, growing economic inequality, widespread income poverty, housing discrimination, environmental injustices such as chemical plant pollution, and more. The "school to prison pipeline" is a factor in mass incarceration rates, especially among young African American men. Increasingly, the city and Gulf region face more existential

challenges as irreversible climate change proceeds. Owing to the ecological setting of the Mississippi river delta region, New Orleans is highly vulnerable, and the campus faces regular flooding events among other problems. Rising sea levels, warmer temperatures, and more extreme weather events will aggravate existing inequities.

Tulane also aims to be globally relevant. Many students, faculty, partners, and staff work around the world in health, engineering, humanities and social sciences. New Orleans is also a cosmopolitan city where many international students seek degrees. Stepping back, a global perspective sees many people face persistent inequalities and deprivations, owing to their geographic location and numerous societal structures that institutionalized inequity, or "structural violence" (Farmer, 2004). Poor health, for example, results from the oppression and exclusion built into institutions of education, governance and exchange. Climate change is a life-threatening issue for coastal peoples and poor farmers all over the world.

Interconnected deprivations systematically exclude many people from opportunities to make a better life for themselves, and present challenges that many changemakers are keen to address. Recognizing this energy, and interrelated systems of oppression, Tulane has made an institutional commitment to community engagement and service learning in the aftermath of Hurricane Katrina (Cowen, 2014). This built on the work that university stakeholders were already doing: the wide range of persistent, compelling and complex local, regional and global challenges--across social, environmental, and political spectrum -- are no surprise to anyone. Now, more faculty, staff and students than ever are working in schools, non-profit organizations, health centers, economic development, and other community organizations. Faculty and students engage with these issues in the classrooms, as well as in research and learning experiences. They are recognized in Taylor programs and the strategic planning document (Taylor Center, 2017).

Thus, along with this growing investment in generating tangible social value, social innovation programs were born. The Taylor Center now exists because of the response of university-based individuals and a philanthropic donor to these pressing societal challenges. Enrolled students, faculty, staff and administrators teamed up with Phyllis M. Taylor, a Tulane alum and humanitarian, to found Taylor and relevant Tulane-based programs and initiatives.

Higher Education as a Specific Domain of Changemaking Action

The positioning of higher education as a unique and specific domain of changemaking is another major factor driving the Taylor Center's work. The Taylor Center has joined collaborative efforts to promote social innovation and social entrepreneurship, and to carve out a unique role for an academic institution in doing so.

Universities must be responsive to changing education trends in order to remain relevant. One such trend is the growth of social entrepreneurship and social innovation as key strategies for addressing persistent social challenges around the world (that are related to but distinct from approaches like advocacy or public policy). Ashoka is a pioneering organization in creating this global movement and lexicon for "changemaking". It sought to identify social entrepreneurs who were generating fresh and insightful solutions to pressing social problems, addressing them in ways that transform (via social innovations) the underlying systems that perpetuate them. A range of non-profits, social ventures, accelerators, incubators, prize competitions, venture funding, and other mechanisms exist to support those efforts. As Drayton expanded the work of Ashoka in 2005 to be about changemaking everywhere

and by everyone, changemaking, and the need for it, has gotten more attention as a valued mindset for US society and for our youth (Brooks, 2018).

As shown in the previous section, Ashoka U, is a key ecosystem actor that has worked to establish "the university" as a space for promoting changemaking. It is a primary driving force factor in the creation of social innovation and social entrepreneurship curricular and co-curricular efforts at Tulane University. Ashoka U has catalyzed a "changemaker campus" network among universities that works at a national and global level to support and sustain efforts to transform higher education and develop changemakers. Tulane, and subsequently the Taylor Center (because it was founded later) have been part of this network since 2009. Building relationships and learning from each other by means of conferences, campus relationships, and mentoring are but a few examples of this reciprocal support across universities. At the same time, this could be potentially a threat, as Tulane and Taylor are not unique among campuses in offering rich and innovative community-engagement, service learning, design thinking, and social innovation as part of the experience for undergraduates.

At the same time and on par with other US and global cities, a local social entrepreneurship movement has arisen in New Orleans, led by organizations such as Propeller, a force for social innovation which started as Social Entrepreneurs of New Orleans by Andrea Chen. This rise occurred within the Katrina-related devastation and recovery period. Since Taylor intentionally builds on the New Orleans setting and Tulane's civic engagement priorities, it made sense for it to connect and support this movement.

3.   An Ecosystem Approach, or, the Science of Cultivating Change

A dynamic, non-linear and "ecosystem-based" worldview is grounded in a scientific paradigm of complexity and complex adaptive systems. This paradigm was advanced by scientific authors such as John Holland (1999) and Fritjof Capra (1996), and the work of Ben Ramalingam (2013) in the field of international development.

For the purposes of this review, several key concepts inform how we define an "ecosystem approach":
- An ecosystem approach reflects that we are in a living community of different agents: people, organizations, environmental factors, etc. These are the key **elements** of an ecosystem.
- The ecosystem is characterized by **interrelatedness***:* these elements are interconnected through their dynamic interactions and the flows of resources, such as money, energy, and ideas.
- As with ecological systems, living elements evolve and feedback mechanisms adapt. **Feedback** means the assumption that actions, events, and results in one area can lead to positive, or amplifying and reinforcing, effects and/or negative, or dampening, effects on other elements and processes.
- **Dynamics** refer to the reality of constant change. They help shape *emergent* properties and behavior of the system: new ideas, connections, growth areas, and programs.

Ecosystem thinking is especially needed for the 21st century, which presents many wicked problems – ambiguous, ill-defined, and difficult challenges – that our world has not seen before. A contrasting but common worldview, for example, would be a mechanistic and linear model of change that does not capture living qualities and feedback. A linear model of change might posit that the cause of famine is a lack of food supply, while a non-linear perspective might look at how a change in exchange values, such as rising food prices, might diminish people's ability to acquire food (Sen, 1981). Thus, the solution to a famine may not be to import food, but to bolster people's command over resources.

The interrelatedness that characterizes complex systems brings unpredictability and surprise through emergence. In other words, we do not know what one action or event will lead to. On the one hand, the increasing wickedness of problems relates to interconnectedness through new digital technologies, the pressures of 7.5 billion people (and growing), rising consumption levels, and our combined impacts. Such interdependence poses challenges for fragile systems and possibly a negative and dampening feedback loop, such as in global financial systems and financial crisis. Many forms of incertitude abound. Risk, or calculable forms of uncertainty, is possible. Ambiguity about problems and consequences, as well as uncertainty about facts and what will happen, are also possible (Leach et al. 2007). On the other hand, solutions might be found there as well. Interconnectedness also means technology-mediated proximity and influence, for better or worse. These are opportunities for an individual, no matter where they reside, to have larger impacts on events around the world.

Figure 1 below illustrates the dynamic qualities and complexity of an organization, and its environment, as a living system. It shows an initial sketch, created in 2017, of the Taylor Center's "ecosystem": a messy landscape of partners, people, flows, and relationships. The details reflect Tulane, New Orleans, and specifics of Taylor programs and partnerships.
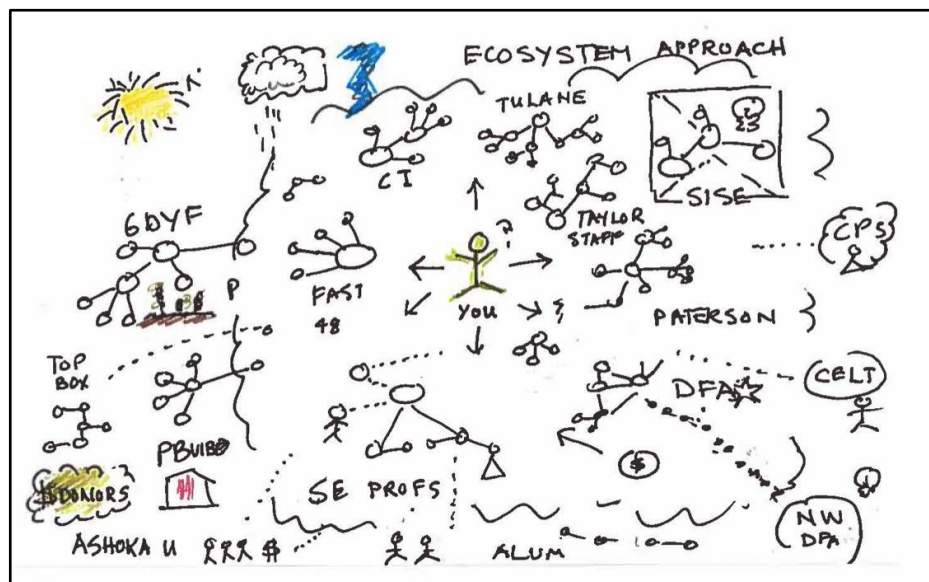
Figure 1. An Ecosystems Approach to Understanding the Work of the Taylor Center, 2017.

Figure 2 is a "generic" ecosystem map of changemaking in higher education institutions. As one can see from these graphic diagrams, conventional models of change would not capture reality and can lead to false expectations and misguided programs. Relationships are multi-directional and feedback from one action influences others, such as university alum hiring others and supporting research in the field of changemaking.
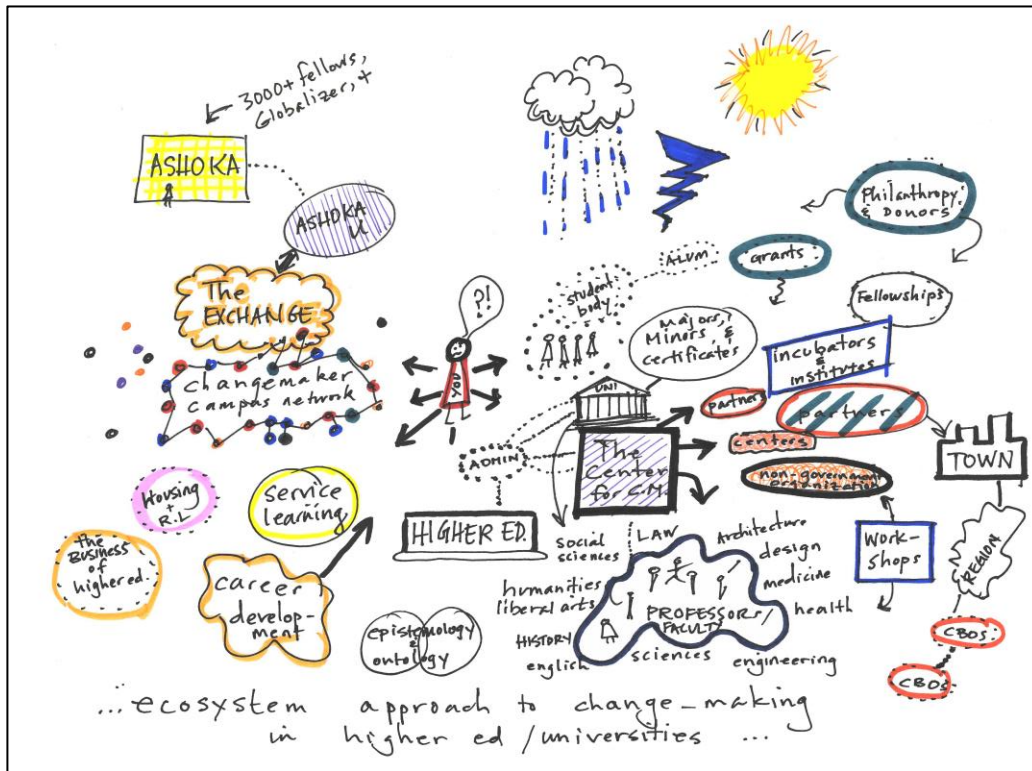
Figure 2. An Ecosystems Approach to Understanding Changemaking in the Work of Institutions of Higher Education.

Seeds, Soil, and Plant Metaphors

An ecosystem approach means acknowledging that we, as individuals and organizations, are part of a complex, living system. As a metaphor, ecosystem thinking lends itself to a certain vocabulary of changemaking.

We can view the work of the Taylor Center as "planting changemaking seeds of curiosity" about the people, institutions, and phenomena circulating around social problems. Planting changemaking seeds also entails cultivating skills of "budding" changemakers and nourishing them among individuals within a "living community". For example, problems, at first glance, might seem to be societal, political, technological, and/or environmental problems. In reality, these dimensions are inter-related and require many disciplines to understand holistically. A wide range of scholars, support staff, partners, and institutional systems are valued members of this living community. This community is created and sustained through cultivating relationships, using resources/inputs to support the community, and aiming for reinforcing connections with alum. An ecosystem approach means that the impetus, skills, and positive actions of changemakers grow in relation to each other and the multiple experiences and touchpoints they have in their lives. This approach means promoting positive feedback via practice, accountability, and virtuous spirals, such as by funneling "outputs" (i.e., changemakers) back into the system as "inputs" (i.e., leaders, collaborators, advisors, scholars, etc.). It also means paying attention to dampening feedback loops. These offer valuable information about what's working, or not.

A "seed dispersal" metaphor reminds us that efforts to cultivate changemaking can take root elsewhere. Therefore, a center hoping to encourage a changemaking network should endeavor to spread an

appreciation and awareness of changemaking. Like the seeds of a dandelion flower taken up by the wind, this appreciation and awareness can spread via knowledge sharing, organizational partnerships, and diffuse skills-building for a larger community. A center's efforts can reach beyond conventional courses towards guiding outreach, scholarship, and knowledge production in general. Furthermore, all activities intended to inspire changemakers may lead to applications in places and conditions that we cannot predict. In keeping with an ecosystem way of thinking, an appreciation for and an awareness of changemaking means paying attention to the wider communities in which individuals, groups, organizations, and networks try to make change. The skills, mindsets, and behaviors that changemakers develop in a particular setting may serve new programs, societal networks, and cultural spaces. Changemaker skills are relevant for addressing home, workplace, community, and global problems and their linkages.

Since the community is ever-changing and the world is unpredictable, we need to be able to adapt to reality, new threats, and changing circumstances. Recognizing this worldview, sometime during Taylor's strategic planning process, the image of the willow tree was chosen as a metaphor. It represents regeneration and learning from the past. It is a biofilter removing toxins from ecosystems. It is part of a resilient, healthy ecosystem – an interconnected community of individual people, plants, animals, and other agents that form a resilient system, able to not just bounce back but grow stronger from stressors. The community can adapt or evolve to better handle these stresses.

Part II: A Changemaking "Logic Model"

4. The Logic Model

A theory of change is a process and narrative that clarifies the desired outcomes and larger impact an organization wants to see in the world, i.e. "changemakers", and identifies how it aims to get there. A logic model helps translate that bigger change into action steps, clarifying the strategy, tactics, and indicators. In other words, how the "getting there" will happen. A standard logical framework captures resources, activities, and outputs into a chart or diagram.

Here, we use the Taylor Center as an example of how a theory of change is translated as a logic model. Given its vision and various activities, an initial version of a logic model for the Taylor Center was developed during strategic planning to capture a range of work (Table 1).

The visual presentation of the logic model in Table 1 is clearly less dynamic than the ecosystem drawing presented in Figure 1. Like all logic models, this one simplifies reality. This simplification suggests a social ontology based on clear causality and a linear progression from inputs to proportionate outputs and outcomes. Yet complex adaptive systems rarely work that way. Nevertheless, logic models are widely recognized tools that have usefulness alongside their (many) limitations. It can be a simple template that helps teams articulate what it is they think their programs involve and achieve and set them up to test some of their assumptions and hypotheses.

The next few sections apply an ecosystem framing to *explain* and *interpret* the logic model for our case of campus changemaking programs. We have already explained the problem and context in Section 2. The narrative thus begins by proceeding from left to right of the table to describe the logic model entries (i.e., from resources/inputs to specific activities, outputs, and outcomes). We then identify the

assumptions being made, the significant external factors at work that present opportunities, and trends and threats. Finally, we conclude with a discussion of the interrelatedness of these elements and the properties that emerge from system dynamics and feedback. The lens of an "ecosystem approach" led to some provocative *evaluation questions* that are noted in italics at the end of each section. These might be compelling questions for any changemaking entity working in higher education to kick-start planning for effective learning systems. Exploring these questions could inform an organization of how it is doing in achieving its mission, as well as highlight key connections among parts of its model that require further examination and adaptation.

Table 2. **Theory of Change Logical Framework for Taylor Center as Whole**

PROBLEM and CONTEXT	INPUTS → (resources, assets	ACTIVITIES → (programs, projects, trainings)	→ OUTPUTS → (Ex. by specific activities)	→OUTCOMES → (Ex. of larger impacts)
Higher Education (universities) has evolved to be training students for professional careers that not always relevant to changing world; we need to transform higher ed and campus cultures to support social innovation. Tulane prioritizes service learning and community engagement. Individual incoming university students seek changemaking skills and meaningful careers. Individual faculty and staff seek more meaningful work within the university and to align their research, scholarship, service & teaching with the needs of society **New Orleans context:** social, political, economic, and environmental problems exist. A microcosm of the US; we should address these issues. Global challenges are immense and inter-connected.	**Human Capital** People, talent, skills, capabilities **Social Capital** Relationships, connections, bonds of trust and reciprocity **Financial Capital** Endowment funds, fees, tuition, grants, donations **Physical Capital** Spaces, equipment, facilities, campus, community **Intellectual Capital** Knowledge of the fields, disciplinary expertise, pedagogies	**Undergraduate-student oriented** Curricular: SISE minor for undergraduates SI/DT content in non SISE courses Co- & extra-curricular: Paterson RLC, Ignite, Student clubs, Student $ awards Taylor Your Life (TYL) Taylor Student Fellows **Graduate-student oriented** Fast 48 bootcamps for grad students SISE 6100 Taylor Your Life CI+ for social enterprise DT/SI in graduate courses SI/CM in other units (GCHB, BME) Social Innovation Conversations Graduate assistants **Faculty engagement** Social Entrepreneurship Professorships cohort and network Visiting scholars NewDay Speakers **Community outreach** DT workshops for community/public Speaker Events Community Innovator's Circle Other Partnerships **Global outreach/solutions** One Million $ (X prize) challenge	**Individual:** - SISE alum learn changemaking skills (~40-50 /year) - Creative life design experience leads to changemaker pathways (For X alum/year) - 5-10 Social ventures/year get support and develop social entrepreneurs and ideas - Grad students have basic SI skills and practice to work in NGOs, Gov, UN in research, teaching, practice. Feedback: Alum support internships, research, hiring - (SE Profs) Faculty from any discipline connect with social innovation programs/ideas. Growing numbers of informed and connected faculty and support student learning, develop research (feedback to UG and G learning) **Ideas & potential social innovations:** - Viable technical solutions are generated that can reduce N, P, K in water, and diffuse around the world (The Nitrogen Challenge). - PL@YMLK initiative; "Global café"; etc. **Networks, relationships & cultures:** - Stronger relationships – community partners and campus entities understand and support Taylor and design-led changemaking. Feedback: informed programs, stronger partnerships, better student placements - The Ashoka U network promotes changemaking culture across the campus **Shared knowledge:** SISE alum, CI alum, SE Professors, partner organization staff, and visitors inspire, share knowledge, host interns/support student learning, etc. (intellectual capital boost).	All outputs feed into this bigger social impact: A growing, adaptable, resilient, connected **community of changemakers** in NO, the US, and around the world who are actively addressing pressing social & environmental challenges wherever they are, and contributing to the health of the community and ecosystem. TU alum are employing CM/SI skills around the world to address problems (feedback: alum support, internships, funding, research, etc.) Tulane campus + community is rejuvenated and enriched by visitors and speakers (feedback: funding, student support) Appreciation for CM/SI is embedded throughout the university academic units, programming, and systems (feedback: learning CM/SI is the norm, recruitment, minors, internships). Key faculty champions in the university support CM/SI (feedback: collaborative research, funding, student learning) Resilient community: New Orleans and regional communities of changemakers are supported and connected by Tulane campus and systems Health and well-being are advanced. Hypoxia problem is reduced in gulf regions around the world.

ASSUMPTIONS: This approach assumes that factors that are more within our control (to a degree) function as we envision that: forms of capital continue; center staff and resources remain stable and productive; the curriculum, courses, and trainings are effective (in cultivating changemaking); Tulane admin. support is consistent; students are interested in changemaking; faculty are supportive; the Ashoka U Changemaker campus network persists; community partners remain aligned; and, the alum network is supportive.
EXTERNAL FACTORS: We are subject to dynamics of factors outside our control such as: national trends in higher education/academia (enrollments, service learning, hiring, funding, etc.); local and national policies (immigration, banking emergency relief); global geopolitics (refugees, war); extreme weather and climate change disruptions; trends in philanthropy, foundations, grant-making, sensitivities of global financial markets (affecting endowments), and other unknown factors.

5.   Logic Model Entry: "Inputs" as Forms of Capital

In a logic model approach, inputs are the resources, assets, or forms of "capital" used to do the work. Here, they are organized as five forms of capital: *human* as labor and talent; *social* as relationships, *financial* by way of access to endowments, credit, grants, donations, and in-kind; *physical* capital as infrastructure, safe environment, and machines and facilities; and, *intellectual* capital as forms of academic and other knowledge (such as theories of change, pedagogy, etc.). Some provocative questions to guide evaluations follow each section in italics.

Human capital: At the time of first drafting this document, the Taylor Center was rich in human capital in diverse forms and arrangements, with then 8 (now 10) full-time and several part-time staff and instructors, including the director and 10 student workers (undergraduate fellows, graduate assistants) who help deliver programs. Affiliated are 10 Social Entrepreneurship Professors, as well as short-term "faculty fellows", and occasional visiting scholars. There are community-based and campus-based organizational partners. There are also volunteers and part-time help on specific programs and projects with other organizations. Together these regular and affiliate team members possess abundant practical, professional, and academic skills and knowledge. They bring creativity, motivation, and energy to promote changemaking efforts. They constantly execute activities, learn, and design new programs. There are unclear boundaries, overlaps among people, a large and fluid network, and significant turnover from year to year requiring training and on-boarding.

Intellectual capital: This refers to the knowledge and insights of team members across the fields of social innovation, social entrepreneurship, social change, design thinking, and changemaking, as these intersect with academic disciplines. This form of capital is cultivated through different forms and disciplines of research, from experiments in labs to case studies, both here and around the world. It results from both professional and classroom practices, and experiences in serving as thought-leaders within the Ashoka U network. It is a hybrid of these institutional change-making experiences and training as academic scholars and researchers in various disciplines. As a university-based and university-wide center, this asset is particularly necessary and expected. The center's intellectual capital represents decades of accumulated theoretical, practical, disciplinary, and experiential knowledge. This is a rich asset compared to other changemaking arenas outside a university. At the same time, the center lacks rich connections to a wider scholarly network producing rigorous and critical knowledge about changemaking, which is reflective of the field of social innovation in the United States as a whole.

Social capital: Social capital refers to bonds of trust and reciprocity (Aldrich, 2012). These are the partnerships, exchanges, and connections supported through interactions -- within the center, with other units on campus, in the local community, and global networks. These are important to developing and sustaining programs and part of an ecosystem approach. Taylor seems to be rich in social capital of some forms, evident in connections to powerful individuals such as the university president and president emeritus and the donor who helped establish the center. Its individual members bring many connections on campus, in the city and in wider regional and international networks; for example, an established faculty member has crucial relationships with faculty in other schools and graduate students who support and inform the center's work. Other connections have come or are being built over time, such as with offices of student affairs, multiculturalism and public service.

Financial capital: The center is well-positioned with financial capital, especially relative to other university units and Ashoka U changemaker campus network members. Assets and revenue streams for the center include the Taylor endowment, as well as SISE program tuition revenues and other program fees. There are other individual professorship endowments, such as the Sachs Chair and the 10 Social Entrepreneurship Professorships. There are small individual fees from programs and occasional grants and in-kind sharing (i.e., space and people).

Physical capital: The physical capital, or infrastructure of the center includes staff offices, a classroom/studio space, dedicated and flexible furniture, screens, computers, and related equipment and supplies. It also includes the university facilities such as internet, libraries, water, electricity, the campus residence hall, and other meeting spaces. A new space, the Taylor Warehouse (in the New Orleans arts district) expands physical capital.

Evaluation Questions

From this understanding of the key **inputs** underpinning activities, a few key evaluation questions emerge about the center's strengths, weaknesses, and opportunities. These questions pertain to how the center should use the forms of capital available and seek new inputs, and what trade-offs might exist. They also pertain to how the inputs specifically connect with other elements of the logic model, such as activities and outcomes.

Broad questions include:
- *Might some forms of capital conflict and work against others?*
- *Are resources and assets (e.g., people, facilities, ideas, funding) aligned with strategic priorities, needs and goals? With the larger vision?*
- *Do feedback systems support or deplete these inputs?*

Questions specific to the forms of input include:
- *Human capital: Do staff and related team members have the appropriate capacities and resources to deliver, assess, and communicate programs?*
- *Intellectual capital: How might the center use its intellectual capital more effectively? Are there gaps— e.g., certain academic disciplines, specific skills?*
- *Social capital: What are the important relationships for changemaking efforts and how is the center working to maintain them? What are the missing relationships (i.e., with alum, local government, with other potential sponsors/supporters)?*
- *Financial capital: How do financial inputs shape strategy? Do they guide mission and strategy, or the other way around?*
- *Physical capital: Are there trade-offs, such as partitioning the space as offices for the team versus a classroom or studio space for learners? What is the business model guiding the expansion of the space, and how does that connect to its overall impact?*

6.   Logic Model Entry: "Activities" Across Audiences

The "activities" column refers to a range of initiatives intended to achieve the stated aims. These activities are supposed to lead, in a logical way with clear causality, to the stated and desired outputs: in this case, a community of changemakers. In a university, activities can span curricular and credit-bearing to extra-curricular (not for credit) offerings. In between lie many co-curricular options. These serve students from undergraduate to professional and doctoral level of instruction, as well as staff, faculty, and community organizations. Many serve multiple audiences. For the purposes of this review, we present the activities according to the intended audience around which they are primarily structured: undergraduates, graduate students, faculty, and campus and community audiences.

Activities Serving Undergraduate Students

As with many universities, undergraduates are a primary audience for academic and programmatic efforts. They can take advantage of many offerings. They Taylor Center's undergraduate-focused activities aim to serve a variety of students from different disciplines and majors: at Tulane, these could be a BS (sciences, engineering), a BA (liberal arts, social sciences), a BArch (architecture) and/or a BSPH (public health degree programs). The activities are also intended to cultivate changemakers by offering different touchpoints for undergraduates, such as those who desire and can commit to a degree

program and those who may come to changemaking through other pathways such as student funding/awards.

The **Social innovation and Social Entrepreneurship (SISE) minor** is a signature changemaking program at Tulane. It is intended for any student, and to complement any degree program/major. Students enroll in a series of 3- or 4- credit courses (introduction, business, design thinking, leadership, senior practicum/elective, and senior seminar). These offer a social innovation "toolkit". Activities to deliver this involve classroom teaching, as well as student advising, curriculum updates, assessments, team collaboration, coordinating with service-learning partners, and maintaining institutional relationships. The SISE minor is an academic program officially housed in the School of Architecture and supported from the Taylor Center as a base.

The Taylor Center has offered programs at a **Residential Learning Community (RLC)**, Paterson, that aims to create a thriving community of like-minded students within a dormitory setting. There are various aspects such as visiting speakers, film nights, field trips, multiculturalism training, etc. Its form has evolved since the original vision and inception and involves relationships with other major campus units (e.g., Tulane Housing and Residence Life).

Other Co/Extra-curricular activities include the various clubs, groups, and related speaker events and workshops that have been offered. These vary in resource-intensity. These can complement academic learning (via the SISE minor), replace the minor, or serve graduate students. The Taylor Center has officially advised and supported student clubs and groups, like Design for America (DfA) and TEDxTU.

Activities Serving Graduate Students

Students in graduate programs across a range of disciplines and degrees can access activities. Master's degrees include MPH, MSW, MBA, JD, MArch, MA, and others. Doctoral degrees include PhD, DrPH, MD, and others across the sciences, social sciences, and humanities. The extra-curricular activities below started as a way to provide similar content and experiences being offered to undergraduates and were tailored to the needs and capabilities of graduate students.

The Changemaker Institute (CI) was started by Tulane students in 2009. The CI supports individuals or teams who have social venture ideas and are interested in addressing specific societal problems. The program started out serving primarily undergraduate students but has evolved to serve graduate students. This shift is part of a wider reframing of the incubator (and the center's work) to promote broader changemaking qualities and lifelong pathways by "apprenticing with a problem" rather than encouraging the unfettered creation of social ventures as if being a "founder" is the only pathway to changemaking. Therefore, we deemed graduate students as in better positions to start and grow initiatives, and we encourage them to work in collaboration with others in their ecosystem.

The Fast 48 bootcamp is a weekend immersion in design thinking for social impact offered since 2013 aiming to serve any graduate student at low cost. Since 2018, a student can get credit for the workshop via taking a graduate level, 3-credit course, a social innovation toolkit (taught as GCHB 6700, previously "SISE 6100"). Participants can also return to expand skills and learn to facilitate. A partnership with a community organization offers specific challenges to work on. A team of skilled staff, student workers, and community-based coaches (drawn from former participants and our wider network of partners) are required to run the workshop. The preparation and coaching aim to build additional skills for this team.

Activities Serving Both Undergraduate and Graduate Students

Taylor Your Life (TYL) courses are creative life-design trainings that support changemaking and career/professional development. The program involves the Advising Center and is expanding on campus, so that the trainings are increasingly available to any student (including graduate students). The program offers training for TYL instructors to support this expansion. TYL are both tuition-bearing and extra-curricular.

Financial awards at Taylor include the Catalyst and Alvarez Spark awards. These support student changemaker development through learning opportunities and early-stage social venture experimentation. Similar to the shift evident in the Changemaker Institute, these awards now encourage an "apprenticeship with a problem" model rather than the previous "heropreneurship" awards common to the SISE field (and somewhat perpetuated at Taylor) that incentivized ineffective and harmful lone savior-type approaches (Papi-Thornton, 2017). About $30,000 a year is distributed through a competitive application process and faculty review.

Student work opportunities include paid work for both undergraduate and graduate students that offers income, employment experience, and direct experience in running changemaking programs. The Fellows Program (mostly for undergraduates) also aims to cultivate individual changemaking skills and build a network. Students can return to the fellowship another year, shift from one program area to another, learn about social innovation, and get professional development for their changemaking career. The program evolved from its roots in the campus Center for Engaged Learning & Teaching (CELT) to more Taylor-specific jobs in changemaking. The student employees help deliver all the Taylor programs and seem to form an enthusiastic cohort of young changemakers.

Activities Serving Faculty

Faculty can access several programs. This recognizes the need to cultivate faculty interest and ownership in changemaking education and its place in higher education, rather than just running discrete student-oriented projects and courses.

There are 10 endowed **Professorships in Social Entrepreneurship** (expanded from the original five in 2011). Each endowment fund is supported by an individual named donor. It offers a fund to support their research, teaching, course development, and a formal affiliation with the Taylor Center. This professorship is not salary support to buy-out teaching but is intended to complement the faculty member's existing role in their academic department. The goal is to encourage and reward involvement in changemaking education and research/scholarship.

Other **ad-hoc activities** that connect with faculty include support for research, scholarship, and teaching. Regular faculty in any discipline/department across the university can get involved by building informal relationships and attending public events.

Activities Serving Campus and Community (Local and Regional) Audiences

In keeping with an ecosystem approach of planting "seeds" of learning and generating support, many opportunities are open to university staff, community partner organizations, and the general public. Engagement with campus and community audiences reflects aims of 1) supporting community members

as potential changemakers themselves, 2) addressing inequities and structural barriers to accessing changemaker learning resources, and 3) cultivating the soil for changemaking "seeds" to flourish.

Design Thinking & Donuts offer introductory workshops in design thinking for the public (campus and city/region). The aim was to offer a welcoming space and cultivate an informed and aware community. These also trained Taylor team. These workshops were piloted in 2015-6 to reflect the spirit of diffuse design (Manzini, 2015). These are undergoing another level of adaptation/evolution.

Taylorized facilitation in design (e.g., process, skills, problem-solving, etc.) has been available since 2015, by special request for some partners and clients. This customized offering is an example of an emergent program that evolved based on demand. Custom design trainings have supported Tulane staff in their work by building their design capabilities, such as when the Advising team received design training in 2015 and 2017. Others have served community partners, such as the trainings done with Xavier University's Honors Program staff and students in 2019.

The **Community Innovators Circle (CIC)** is a specific, intensive and funded long-term commitment to partner with specific organizations in the local setting (New Orleans) who share changemaker values and support SISE and Taylor mission. Grow Dat Youth Farm, PlayBuild New Orleans, and UnCommon Construction have been partners in this circle. These organizations host students, come into classrooms and workshops, and engage in other activities to support the center's strategy and network, such as attending fundraising or planning events.

Staff and professionals from around the city can also participate in **ad-hoc learning experiences** like workshops (such as the Fast 48) and speaker events to build their changemaking skills.

Furthermore, many different collaborations with campus and community entities provide valuable **inputs** to other center activities. Community partner organizations, for example, are valued educators and hosts for internships, research, and experiential learning. Staff with an understanding of what SISE, design thinking, etc., is can better advise students, partner on projects, etc.

Evaluation Questions

The **activities** reviewed here bring up some questions about the appropriate strategies for delivering the center's various "programs". Questions pertain to the internal coherence of activities, such as around content and program viability. They also point to how the programs fit together as a set of offerings.

Questions specific to (some of the significant) activities and audiences include:
- *SISE minor: Changes in requirements (i.e., removing pre-req for Econ 1010) aimed to promote greater access, diversity, and disciplinary breath (i.e., appealing to arts & humanities students), reflected in both students and curriculum. Is that actually happening?*
- *The Changemaker Institute: How does the approach of "apprenticing with a problem" help students develop their changemaking skills?*
- *The Fast 48: Do participants learn design thinking? Do they bring this to a social impact career?*
- *Taylor Your Life: Does TYL on its own cultivate student changemakers? Or, is it best used as a vehicle for those already committed to changemaking to explore career and life pathways?*
- *Financial awards: Do these awards promote changemaking, and how? What kinds of students apply for these awards, and is the composition changing?*

- *Student employment: What are opportunity costs of investment in student workers? Do the inputs going into this (e.g., hiring, supervision, etc.) equally support students' development and feed back into supporting the work of the center?*
- *SE professors: Do SE professors themselves become changemakers? What does that look like? How do they support changemaking education and the larger community?*
- *Campus audiences: What can be learned from planting these seeds among employees: which have sprouted, which have died? Why? Is there individual demand for more staff-specific changemaker development?*
- *Community partnerships: Do community partners (present or potential) value these campus-based opportunities? Is New Orleans the appropriate boundary/zone for these partner organizations (going forward)?*
- *Taylorized: What is the value of custom consulting for the center's changemaking mission? What types of activities and partners are consistent? Do these activities lead to social impacts and solutions*?

Broad questions include:
- *Given the different audiences being served, do the offerings make sense for each group? How might one best cultivate changemaking mindsets for a diverse and diffuse audience? Does this breadth reinforce the mission and promote inclusivity, or does it spread resources too thin and water down the mission?*
- *How do these activities specifically cultivate changemakers? How (and when) does that happen during the course of a student's journey? Which activities plant "seeds" and which nourish growing seedlings? Do any of them support more mature changemakers or maintain the ecosystem, e.g. by "pruning"?*
- *Do these offerings work together to create multiple touchpoints and reach a wider audience of students, or do they compete? For example, how might the SISE minor and extra/co-curricular programs better reinforce each other? Are the various activities complements or alternatives? What are prospects for financial sustainability? Do different business models support goals? Is there an alignment in seeking profit and purpose, or a tension? For example, is there value in charging a small fee to support buy-in for changemaking growth, vs. offering "free" experiences to promote accessibility? How might one scale low-cost offerings, like the Fast 48?*

7.   Logic Model Entry: "Outputs" and "Outcomes"

For any logic model, the expected short-term *outputs* of specific activities should also support the larger mid-and long-term *outcomes.*

Outputs include people as changemakers (SISE alum, CI alum, SE Professors, partner organization staff, etc.), the ideas and solutions (e.g., The Nitrogen Challenge), connections and networks (relationships between staff, partners, alum, etc.), and shared knowledge (e.g., intellectual capital boost).

The aim of these outputs is the desired *outcomes*: to foster a resilient, growth-oriented, values-centric community of changemakers. The goal is a network of people with changemaking skills who are connected to one another and able to access the resources to sustain the network.

There are four main ways we can categorize these outputs and outcomes as units of analysis: individuals, innovations, networks, and knowledge.

Cultivating Changemakers (as individual people): This refers to the participants of programs/activities, and whether changemaking abilities are nurtured. This could be measured both quantitatively and qualitatively. The immediate outputs would include the number of individuals and organizations involved in activities, such as courses, the minor, the residential hall, workshops, service-learning partnerships, etc. Over time, measured outcomes might include the skills, theories, and commitments that participants acquired (i.e., their learning outcomes) and the number who are pursuing changemaking careers or vocations. Measures could be subjective, i.e., the value of changemaking to an individuals' life, perceptions of valuable educational experiences, etc.

Cultivating Changemaking (as ideas and potential social innovations): This will be visible in the actual concepts, rough prototypes, and other aspects of proposed solutions, and tracking those over time. For example, in the SISE minor: the concept of "global café" arose to increase awareness on campus of global students' needs and assets emerged from a SISE design thinking course in partnership with the Office of International Scholars and Students (OISS); the cafe is still active on campus. For the Fast 48: the "PL@Y MLK" initiative to activate the neutral ground (medians of large avenues like MLK Blvd) as a play space for children in an underserved neighborhood arose in partnership with community organization PlayBuild NOLA; the PL@YMLK initiative is still active several years later and run by a group of volunteer residents.

Cultivating Community (as networks, relationships and cultures): The Ashoka U network calls for Change Leaders to act on campuses to promote change in the institution. New changemaking structures can result from people engaging with our programs and activities---student clubs, networks, organizations, start-up social enterprises, intrapreneurial initiatives (within larger organizations such as departments at Tulane), social networks and movements, campaigns, programs within community-based organizations, and faculty research areas. This could add up to shifting the culture on a university campus from an individual career focus to societal-changemaking. Instead of service learning as a pathway to personal advancement, the community would value the broader goals of changemaking.

Cultivating Changemaking (as shared knowledge): Knowledge about changemaking is produced and shared through many processes and forms. It happens through processing relevant data, sense-making, and working out theories using academic, analytical mindsets. This means researching and assessing learning experiences and change processes to generate useful knowledge for others.

This thriving community of changemakers should contribute to long-term societal **impacts** -- a better world, shaped by changemakers. If the center is working well, then all these effects should be visible in various ways on campus and in New Orleans, as well as among alum.

When designing internal learning systems and data collection, we should keep in mind not just the specific outputs of any activity (seats in a lecture or workshop) but the larger outcomes (changemaking knowledge/abilities are spreading and accepted as a valid set of qualities), as well as greater societal impact (we see potential solutions develop and address societal disparities and degradations). We should be looking for emergent strategies and paying attention to trends in the world.

Evaluation Questions
The **outputs** and **outcomes** presented here bring up questions about the execution and nature of the activity "deliverables". There are also questions that emerge when keeping the bigger outcomes and impacts in mind, that reflect a concern for how Taylor is actually contributing to positive social change.

Questions about individuals and relationships include:

- *What "makes" a changemaker – is it cultivating a commitment to a social mission or a specific set of skills and attitudes?*
- *Does Taylor actually build the necessary commitments and competencies to work for beneficial social change?*
- *Furthermore, does it move from individual-level outcomes to systemic ones by creating a <u>community</u> of changemakers?*
- *Are alum connected with one another meaningfully? Are they using collaborative strategies to connect to other changemakers? Is a "changemaking movement" being created?*

Questions about societal challenges and solutions include:

- *What societal problems, issues, and potential ideas have emerged from activities? What is being addressed, and how?*
- *Are participants/alum addressing compelling social issues that reflect the pressing issues and systemic thinking, such as structural violence, legacies of racism and historical inequalities, and systematic environmental injustices? If not, what are they doing instead? And, why are they perhaps not aligned towards these pressing issues?*
  And knowledge about how to do this:
- *Is knowledge about changemaking being produced in a way that is credible, accessible and shareable? In other words, are different forms of knowledge being created in the form of presentations, web materials, program reviews, popular articles,* and *the typical expected outputs of academia – journal articles and books?*
- *How could other universities promote changemaking outside of conventional classrooms?*

8.   Logic Model Entry: "Assumptions" and "External Factors"

As with other theories of change, various *assumptions* underlie this theory of changemaking captured in the logic-model and narrative above. There are *external factors* to monitor. These are surfaced during a theory of change process and should be monitored over time. Both would be explored and included as part of a learning system for program evaluation and overall assessments. This section elaborates on the assumptions and factors written out in the bottom cell of the Table 1 for the Taylor Center case.

Assumptions

A major assumption being made in this theory of change is about the basic goal of "cultivating changemakers" as individuals equipped with certain qualities and capabilities. The center operates with a set of ideals about why it should do so, and how. The center (and authors) are assuming that this is what the world needs -- in contrast, for example, to new technology or political revolutions. If this goal of changemaking is accepted as valid and possible, then other assumptions relate to how this actually happens.

Several suppositions are being made about the forms of capital that are appropriate to the challenge, and these require monitoring. Consider the following issues to ensure resources remain accessible to the center's activities. Staffing is assumed to be stable, capable and qualified, and turnover is manageable. Therefore, it is important that staff resources are not spread too thin and are able to align energies to meet demand and specific programs. The physical space that houses the team is currently

crucial to delivering the center's activities. Currently, the Taylor Center operates from the Howard Tilton Memorial Library, but this is not permanent. Some type of physical space is required.

Assumptions also include the ways in which "changemaking education" is delivered. The center assumes that learning skills of changemaking does not happen in a vacuum or as a purely theoretical process detached from real problems. Different learners need engaged learning experiences and practice, such as service learning, internships, practical experience, and immersions.

Some assumptions relate to the wider environment in which the Taylor Center is embedded. For example, in New Orleans and within the local community, authentic, community-based partnerships are central to Taylor identity, values, and specific programs. The service-learning placements and other community engagement projects require strong relations with local organizations. For mutual benefit of university students, stakeholders, and community partners, these relationships also require informed and capable center staff able to adapt programs to support organizations from start-ups to established entities. There is an assumption that these capabilities and willingness exist and will continue.

At the level of university leadership and administration, several key assumptions are being made that are necessary for continued and effective operations. The first is the assumption that the Administration will continue (and increase) support for community-engagement as part of student recruitment and in university policies and programs, such as faculty hiring and assessment. Another is that policies and programs will support greater diversity and minority student representation. Finally, another assumption is that there is some coordination across/with other programs cultivating business and tech entrepreneurship and innovation (e.g., NovelTech, BioInnovation, Business plan competition, etc.).

External Factors

Many external events--in the city, region, and around the world--will bring surprises. We know that our increasingly interconnected world creates unpredictability and can support timely, unexpected synergies. Programs are dependent on other forces that affect resources and talent, the institutional home, and the funding base and other revenue streams needed for a thriving ecosystem. These forces are beyond the Taylor Center's control but can significantly shape the work and potential outcomes.

The Taylor Center's work relates to the domain of higher education. The social innovation work is embedded in this industry and touched by the sector and trends. Ashoka U's continued operation to support changemaking via higher education institutions will affect whether or not a supportive network exists to build connections across multiple campuses. In order for Ashoka U, Tulane, and the Taylor Center to continue operating, higher education as an industry must remain stable, attracting students and revenues. For the university as an academic institution, external factors related to funding, accreditation, cost of education, tenure and promotion policies are among the trends that affect the nature, culture, and viability of the institution. The high cost of tuition and challenges of student lending and debt are threats that must be resolved, so as not to prevent students from enrolling with the center (at the graduate student level in particular).

Other external factors to watch for include global trends, threats and surprises in the nation and around the world. Some forces relate to stability; for example, the stability of the financial markets could affect whether or not the university's endowment remains healthy, with reliable payouts. Other factors relate to change; for example, we expect that US political trends will continue to change, but we cannot be

certain if and when the 'xenophobic stances' of political leaders will subside. This currently affects international relations, official policies, immigration, and visas.

Some external factors are related to the natural environment and weather trends, and the impacts of changing global climate. These include rising sea level, vulnerability to storm surges, hotter average temperatures, longer hot seasons, more extreme weather events, and changing biological diversity (among others). Someday, these might overload Tulane's and New Orleans' ability to respond. Already everyday weather events can affect the university, the residents in day-to-day operations, alter travel, cause speakers to cancel travel, etc.

Evaluation Questions

Examining **assumptions** leads to questions that dig deeper into the connections among the inputs, activities, outputs, and outcomes. These questions include:
- *Is the assumption that the world "needs more changemakers" appropriate and valid? Is a changemaking strategy appropriate? Is it enough to help fix world's problems?*
- *Are assumptions about what changemaker education should entail justified? If not, might program participants need more theory and reflection alongside practice, and more repetition?*
- *Since community partners involved in programs tend to be hyper local (within New Orleans), is this the most effective type of service learning and community engagement partnerships? Should they/could they involve other parts of the world, and if so, where and why?*
- *Given the high level of campus support for the program thus far, is the assumption that this will continue justified? Are there any gaps in synergistic collaborations? What might endanger this support and why?*

External factors, while outside of the center's immediate control, bring up questions about how the center can prepare to absorb any shocks in the system. For example:
- *Is the team and programs equipped to respond to a range of uncertainties?*
- *What assumptions are being made about readiness for impacts of the changing global climate?*
- *Do systems and plans accommodate to unpredictable weather, storm days, etc.? Can the center handle these challenges to operations?*

9.   Dynamics, Feedback, and Emergence

The logic model represents a simplified version of the dynamic reality as captured in sketches-- an ecosystem of interconnected elements, feedback loops, non-linear change, co-evolution, self-organization, and emergence. This section elaborates on interconnections between the elements of the logic model—the links between columns, the arrows, and the role of context. It offers some examples of the feedback loops that are possibly at work, both positive (amplifying) and negative (dampening).

Positive Feedback: Amplifying Responses

By way of illustration, several positive feedback loops are visible in the growth of the Taylor Center's activities. These connect individuals over time with programs, leading to unpredicted activities.

An example of a positive feedback loop can be found at the level of student action on campus that creates a complementary learning pipeline. The founding of a club by affiliated students created another

touchpoint for students to get involved with changemaking. The Design for America (DfA) chapter was founded in 2015 by Tano Trachtenburg, the Taylor Center's first Design Thinking Student Fellow, along with other Tulane students. DfA continues to support student fellows (and other Tulane students) in learning and spreading design thinking. This reinforces Taylor Center programs. It offers the students useful support structures, like the DfA annual summit. It gives the students free space to work since they choose their own partners and problems.

Another example shows how some programs create amplifying feedback loops that lead to increased scale. The Taylor Your Life courses (for which the curriculum evolved from the Student Fellows' program) help Tulane students envision creative careers and life pathways for changemaking. Its success is now leading to a bigger program that reaches more students and staff. This growing program then builds the leadership and teaching capacity on campus, which in turn expands opportunities for others. Taylor Your Life has become a stand-alone initiative, where TYL participants and instructors are motivated to access other Taylor programs for continued learning. For example, TYL instructors can learn design thinking via the Fast 48. This shows a virtuous cycle on campus.

Still other examples show how alum also get involved in supporting and diffusing changemaking efforts in our local community, while staying connected to the center. Sam Heyman, an alum of the SISE minor program, co-founded TopBoxFoods, a social enterprise serving low-income communities with an affordable food box. He reached out with a request for design training for youth in the Liberty's Kitchen program, another local social venture with whom TopBox was partnering. This developed into a piece of "Taylorized" work supporting student and staff learning as well as the youth. This single individual helped catalyze and support a virtuous cycle of continued learning and deepening partnerships with roots in the local community.

Other examples of amplifying interconnections relate to many partners, including Grow Dat Youth Farm (GDYF), A's & Aces, PlayBuild New Orleans, and Propeller (i.e., noted in the sketch of Taylor Center as ecosystem). These are among many partners with whom the center (individuals within the center) has built substantial relationships over many years. These relationships lead to unexpected synergies and outputs such as practicum/interns, faculty research projects, growth of the community partner, and other unexpected long-term outcomes. PhD student (Joshua Schoop) taught and worked with GDYF, and conducted dissertation research that ultimately aided the organization in other ways. A faculty member, who co-founded A's & Aces, has produced a scholarly article coming out of this long-term relationship with the organization.

Negative Feedback: Dampening Effects

Negative feedback loops often relate to hidden assumptions or bureaucratic reactions. They are something to watch for and call for reflection and adaptation.

Some of these feedback loops occur because of external factors outside of the center's control. For example, the closure of a large graduate program at Tulane ended a pipeline of masters (MS) and doctoral (PhD) students with an affinity for social innovation. This in turn affected demand for graduate programs and research training, as well as limited the supply of teaching and other project assistants and graduate student leaders involved in the center.

Other dampening feedback loops result from the center's reaction to wider phenomena. The rising numbers of events on campus has generated competition among them and led to low attendance at

certain public events. The Taylor Center has contributed to this problem with initiatives like hosting a major visiting speaker event several times a year, starting in 2009. The center noticed that although these events were well-funded, their low attendance did not produce a sufficient benefit to justify the large effort and cost of putting on the events. This led to re-assessment and eventual "sunsetting" of a major program fueled by restricted funds.

Emergence: New Directions

Campus and external factors affect the center's people, programs, and activities and these in turn catalyze innovation and shape emergent programs. The actions of many individuals collaborating on projects may lead to the alignment of focal areas in the center, or to the spread of changemaking within overlapping networks.

The first two examples of such emergence show responses to urgent concerns that built on prior relationships. Both of these responses contributed to two substantive themes guiding the Taylor Center's Design Thinking programming for 2017-18: campus health and wellness, and designing for climate change action.

The first example related to the Me Too movement and the growing awareness of sexual violence, both campus-wide and across the nation. Title IX programs and Tulane administrators support a range of activities. A collaborative and inclusive process of discovering, understanding, and finding solutions with students and student fellows was led by a faculty member Allison Schiller in 2018, working with senior administration at Tulane. This project emerged from previous connections and relationships and university priorities.

In that same time period, growing awareness of the challenges of climate change led to plans for Climate Action Day on campus in January 2018. The Tulane Office of Sustainability was a leader, having been working on related themes for years. Academic programs like Environmental Studies, collaborative research centers like the ByWater Institute, Taylor Center, plus Student Government, and others joined in. The center contributed guidance and human resources for design-led interactive activities and panel discussions on areas of expertise, such as water management.

Outside the Taylor Center itself, an SE Professor, Lars Gilbertson of biomedical engineering department (BME), has been learning and supporting changemaking education in his discipline focusing on human-centered design as a skillset. Professor Gilbertson embedded human-centered design workshops and training into the BME team-design education and summer internships. This in turn supported an NIH-training grant that has catalyzed interest among BME students and will help shape future changemakers in their fields of action. This effort lives outside Taylor but is an example of integration into other non-SISE courses and programs in other departments; yet, it is a result of the Fast 48, SISE and SE Professorships as center programs.

The above examples illuminate the dynamics of feedback loops and emergence. These are natural and adaptive processes of growth and innovation in response to interest, opportunities, institutional changes, and real-world problems. Embracing the contemporary complexity worldview and ecosystem approach to making social change calls for an adaptive approach to all the work, in which people, resources, and activities shift with dynamic realities and not just operating with fixed programs. This in turn can make for program designing and resource allocation a challenge. It can create tensions between the need to establish a clear program and the need for flexibility and adaptability. This could

be seen in all aspects of Taylor Center programs, staff time, planning, etc. One approach might be to balance offering regular, predictable programs, and also to allow time, space and freedom – i.e., people, budget, and physical spaces – to be able respond to emergent issues. Another approach might be to focus on supporting the larger community as a seedbed for change and strengthening the flows and relationships among them that nurture individual changemakers and innovations as they grow, and not just focusing on the individual elements (e.g., programs).

Evaluation Questions
Looking at these dynamics raises questions about ongoing and internal decision-making processes. Some questions may pertain to how to make decisions about new projects and opportunities, and whether to take something on. Others may lead to decisions about what NOT to do anymore. Given dynamics, new information, or new demands, sometimes it makes sense to stop doing something. When reviewing activities looking for feedback and emergence, some fruitful questions might include:

- *What can be learned from these feedback processes? What might be happening that the center is not yet aware of? What other emergent initiatives and impacts are happening inside and outside of Taylor?*
- *Where does an activity fit? Does it build community (say, reinforcing alumni connections)? Might it deplete or undermine community? Is it justifiable on its merits? Does it seem worth the cost? Are potential revenues balanced with changemaking goals?*
- *Do any of the center's activities compete with other activities on campus? For example, do extra-curricular programs compete with conventional academic, curricular programs?*
- *What activities have been inherited and/or operated for years while facing changing circumstances, resources, and demands—and need to be sunsetted?*
- *How does the center respond to changing conditions and dynamics? How does one build programs that are resilient to institutional changes?*
- *Is there the right balance between adaptability and structure? Is a minor too rigid to support all student's learning need? Are some areas too flexible?*

Part III: Looking Back to Move Forward

10.   Some Final Provocations

This provocations paper explores a *Theory of Change-making* using the exemplar of an organization promoting changemaking within higher education: the Phyllis M. Taylor Center for Social Innovation and Design Thinking.

The paper aims to share insights from the experiences of the authors at Tulane who participated in the processes of developing the Taylor Center's logic model in the spirit of a "developmental evaluation" approach, i.e. of Michael-Quinn Patton (2010). This approach is necessarily iterative and generative; therefore, the theory of change narrative and associated logic model presented in this paper (and the programs and strategies they represent) are in processes of development and cannot be said to be the definitive model of the center. We have pulled out some reflections and questions about how the Taylor Center is achieving its desired impact of "cultivating a community of changemakers".

We have done so not to evaluate the work of the Taylor Center *per se,* but rather to show how an ecosystem approach can be useful to understanding the work of a center for changemaking in higher education. It is our view that an ecosystem approach is necessary to find and pursue meaningful opportunities for social change. Organizational programs should be not only consistent with the visions and values of the people involved, but also be guided by a contemporary scientific understanding of how the world actually works. Therefore, looking at this *Theory of Changemaking* can help the Taylor Center make decisions about how to move forward to adjust to what is learned. These insights could also serve similar institutions and actors.

We hope that this monograph provokes conversations about the field of social innovation and changemaking efforts in higher education institutions, at the Taylor Center, and other education or social mission organizations. Given these hopes, this section offers some final considerations and provocations on evaluation processes, fostering ecosystems, and wider learning communities.

11.   Evaluation Processes: An Ecosystem Approach to Learning

An ecosystem approach recognizes that "planting the seeds" of changemaking may spur unpredictable outcomes that require agile learning systems.

Developmental evaluation offers a viable approach to building such learning systems. This is a scientifically-informed exploration of how to approach evaluation as a learning process in order to design more adaptable and meaningful changemaker programs in contexts of complexity and uncertainty. In these conditions, a conventional, linear, "summative" approach to evaluation that aims for definitive assessment of value of a single "intervention" is not a useful approach (Quinn-Patton, 2010). Instead, a developmental evaluation approach calls for sensitivity to context and drawing on a range of approaches and data to support organizational learning and adaptation.

Therefore, a **timeline for evaluation** must recognize that various time frames are at work when aiming to understand and assess the theory of changemaking for the Taylor Center as a whole. Its activities span a few hours to a full semester, or even to several years. Seminars and discussions can take a few hours, which might ignite interest. A regular course will last 14-15 weeks and aims to cultivate specific capacities in a student, which may or may not "stick" in the long term. It can take time, as well as complex and unforesexen pathways, for those initial seeds of change planted in an introductory workshop, lecture or course to grow in an individual so that he/she becomes a change-agent. Assessing changemaking education means that we should be looking at tipping points and reaching out more to alum at various time points.

We also need to be thoughtful about the **data** and **indicators** we use to assess progress, especially if we choose to move towards more summative evaluations of stable programs. Conventional indicators refer to the measures, counts, signs, symbols, and other ways to note change in a phenomenon at the level of interest. In national economic and social development, these might be population-level measures of school enrollment, highest level of education achieved, levels of income poverty, health status, etc. The indicators needed for understanding changemaking are not always explicit; some are easier to identify than others. Some basic vocabulary and knowledge of changemaking can be objectively tested among participants in an education program. At the same time, an individual's subjective awareness of him/herself/themselves as an effective agent of change is perhaps the most important quality (perhaps indicating a sustained commitment and self-efficacy), and what we ought to measure. There are many activities (e.g., programs, classes, courses, workshops, events) involved in changemaking education. We

see a range of learners, from teens to seniors, of varied levels of education and experiences. Thus, subjective growth in 'changemaking' might be difficult to capture for the range of audiences. We can surface some of these insights through in-depth, observational research more effectively than through large-scale survey research alone.

12.   Creating and Sustaining a Changemaking Ecosystem

An ecosystem approach brings attention to the system of changemaking that is being created and sustained, and its inner workings such as the elements and their interactions through feedback loops and adaptive behaviors. It requires monitoring connections, forms of uncertainty, and overall system health and maintenance.

This approach means cultivating a diverse and capable community by reaching a range of people in different roles. In considering the domain of higher education in changemaking, the Taylor Center's stance is that all members of this ecosystem – not just enrolled students, but also staff, faculty, and community partners – should be able to see themselves as potential changemakers. A focus on equity calls for opening up activities to wider audiences and for making changemaking learning more accessible, beyond enrolled students and the campus.

To that end, the center serves a wide range of people as learners, potential changemakers, and collaborators, such as:
- Tulane staff and employees running related programs, student services, etc., interested in changemaking in their roles
- Faculty, both regular and part-time, serve as scholars, classroom instructors, curriculum designers supporting changemaking learning and research
- Tulane administrators with specific roles in leadership, academics, development, etc., supporting the work
- The community at large, as our formal partner organizations, prospective organizational partners, and as individuals, government officials, business sector, and the general public who are interested in changemaking and can benefit from skills, knowledge, and inspiration

Furthermore, an ecosystem approach means not just promoting diversity, but also creating strongly linked networks and reinforcing connections among diverse elements. Working with multiple audiences recognizes that inspiring changemaking among these different groups represents a valued outcome, as well as a potential feedback loop. In order to continue this flow, the Taylor Center should pay attention to the relationships of its internal team and extended network of staff, affiliates, and partners. It is essential to consider how to maintain fruitful connections and good communications, and monitor feedback among people (different actors) to capture what is really going on. This is a type of "gardening" or maintenance. It is possibly less exciting and might be much less visible than new programs, but it needs attention.

A worldview of complexity recognizes that there can be tension between stability and adaptation within an ecosystem. Stability can come through formal rules, incentives, and procedures that sustain activities. At the same time, these interconnections can stifle effective and innovative responses and generate unintended consequences. For example, academic programs tend to serve specific audiences of students. This type of offering can generate revenue that sustains operations. It can also validate work

in an academic context. However, they can also fossilize programs. Institutionalizing offerings can make it easier to find changemaking learning and reduce the 'self-selectivity' that used to accompany these in frontier, early days. This move can make opportunities to get involved in changemaking more fair. It can also water down the effectiveness of the offerings if people get involved for the wrong reasons. Extra-curricular programs can serve a wide range of people, and are more flexible, but lack support and income.

The center needs to be asking if these things are really happening, and what the side effects are, on a regular basis. It needs to be able to identify, prioritize, and invest resources in cultivating connections, sustaining relationships, and infusing new energy as well as handling the "waste" products of the ecosystem.

13.   Towards a Learning Community

This paper is a small step towards communicating with a broader network of individuals and institutions who dream of higher education as a strategy and space for pursuing meaningful social change (whether through this specific form of changemaking or other ways). We share our experiences in the spirit of a "learning community" to provoke a conversation about social innovation in higher education. We expect and hope to hear questions such as: *Why develop changemaking programs in higher education? How? What do they look like? For whom? What talent and other resources are needed? What might be the expected results or impact?*

Our case example, and these questions, will hopefully support other scholars, program directors, and administrators as they proceed through research and knowledge generation, strategy and operational planning, implementation and sunsetting programs and evaluation processes. For other centers, units, departments, and campuses interested in building or tweaking their own changemaking programs, we hope this reflection is helpful as an inspirational and cautionary tale: inspirational, in that there is demand, support, and potential; and cautionary, in that these efforts are resource-intensive and unpredictable. Many other campuses will not have access to the resources and support that have been enjoyed by the Taylor Center, so they would want to be even more thoughtful about what activities to develop and why.

This monograph is also a starting point for a research agenda. Going forward, we hope to contribute to deeper and diverse forms of scholarship and knowledge production related to the topics of this Taylor Provocation Paper, in order to stimulate a robust learning community that is helping us answer these questions for ourselves and with each other. These explorations might include themes of:
- Changemaker education and development within higher education: What works? How will we know? This calls for diverse individual stories of different pathways to changemaking taken by different learners within the university (e.g., students, faculty, staff, partners).
- Community-building to support these changemakers: Recognizing the large ecosystem and aims of building communities of changemakers, we hope to support continued research, learning, and sharing in Ashoka U and other campuses and networks.
- The learning community itself: How can we better share experiences, successes, lessons, indicators, etc.? So far, the Ashoka U network offers the best framing for this and we look forward to building on this work.

Thank you for reading. We welcome your reactions.

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