

SUSTAINABILITY LEARNING WITHIN THE NEW SCHOOL

A BASELINE STUDY

Report for
The New School
Tishman Environment and Design Center



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This report was created by Tainá Guarda for the Tishman Environment and Design Center at The New School as part of a capstone research project on sustainability learning at The New School. Tainá is a candidate for the Masters of Science in Environmental Policy and Sustainability Management at the Milano School of International Affairs, Management, and Urban Policy. TEDC is a research and advocacy center focused on climate and environmental justice, environmental policy and innovative, sustainable and socially engaged design.

It should be noted that this report does not attempt to analyze the sustainable practices of The New School at an operational level, but rather focuses on where sustainability is occurring at a curricular and extra curricular level as performed by New School students, faculty and community partners.

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- New School for Social Research Executive Dean Will Millberg
- Associate Professor of Music and Arts Entrepreneurship Tanya Kalmanovitch

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Executive Summary

The New School (TNS) originated as, and continues to be, a socially progressive institution. Concern over climate change, environmental degradation, and the impact of environmental and economic inequalities on local and global communities are currently taking priority at the university. The Tishman Environment and Design Center (TEDC) is supporting efforts to explore how to further integrate concepts and practices that tackle these issues across TNS' five divisions, uniting them under the umbrella of "sustainability" - a term meant to be flexible and inclusive.

The purpose of this report is to uncover the various expressions of sustainability learning that are already present within The New School. This baseline report will

- Illuminate the various ways in which sustainability is already being engaged with throughout the New School educational experience.
- Inform the development of a framework that aims to unite these expressions of sustainability learning.
- Suggest pathways for building on sustainability work already present and developing new methods by which students and faculty can engage with sustainability learning.

Uncovering these sustainability expressions means finding curricular and extra curricular spaces where sustainability is being taught, explored or tackled as a theoretical concept, a production or strategic practice, a social or environmental issue, as an inspiration for artistic and performative work, or in some other kind of form. This also means finding expressions of sustainability that do not explicitly link themselves with sustainability.

Uniting these disciplines under the umbrella of sustainability in a formalized way will provide a concrete demonstration of the sustainability work being done at TNS. It is also hoped that this will spark innovative and creative interdisciplinary collaborations between disciplines that had not previously realized they had a connection. Lastly, the hope is that this can lead to a more formal accounting of sustainability learning through some form of credit giving framework.

The roles TEDC can continue to play as sustainability expressions are linked include:

- Acting as a repository or way station for curricular and extra curricular work on sustainability
- Providing guidelines for incorporating extra curricular activities as an option for learning or engaging with sustainability
- Supporting cross-disciplinary collaborations and course offerings
- Developing MOOC offerings that capitalize on the extra curricular sustainability related work

This report is but a starting point and disagreements are welcome as part of the process of establishing what sustainability means to The New School now, what it means to each division and school within, and how these various expression can be supported and further developed.

INTRODUCTION: TEDC

The Tishman Environment and Design Center (TEDC) is a multidisciplinary research center founded in 2005 with a \$5 million donation from John Tishman, a board member of The New School (TNS). Its early accomplishments, when headed by Director Joel Towers, include establishing the Environmental Studies program at the Eugene Lang College and bringing together faculty devoted to sustainability issues. TEDC operated on auto-pilot for several years before it was re-energized by a renewed commitment to sustainability by TNS. This commitment came on the heels of a board decision to divest the university from fossil fuels. At that time, board members became interested in pressuring the school to act on more than divestment. This concern was paired with the hiring of Michelle DePass, an environmental justice leader who had worked at the EPA and the Ford Foundation, as the Dean of the Milano School of International Affairs, Management and Urban Policy. DePass was made the Director of TEDC and given funding to hire full time staff to develop TEDC's programming and social engagement strategy.

Over the summer of 2016, TEDC created a new strategic plan to guide its efforts around its four pillars: Design, Policy, Social Justice and Interdisciplinary approaches. The three overarching goals established were:

1. To mobilize the 14,000 members of the TNS community as climate citizens.
2. To become a resource center for environmental justice.
3. To increase awareness of the design, policy and social justice work being done on sustainability and climate justice issues.

(TEDC Strategic Plan, 2016)

Its key issues currently are food, climate and waste and it approaches these issues with a marked emphasis on their implications for social justice. TEDC leadership have professional backgrounds in social justice advocacy and focus on creating programming that explores sustainability issues through a social justice lens that emphasizes the impacts of these systems on low income and racially segregated communities.

TEDC's capabilities are being extended to promote sustainability learning across the school. In January, 2017 TEDC recommended that the Office of the Provost:

...adopt a framework to incorporate mandated sustainability learning outcomes and/or sustainability required courses across all schools at The New School.
(DePass et al., 2017)

As part of this recommendation, a baseline study situating the various nodes of sustainability learning was requested and performed as part of the capstone project of Tainá Guarda, a graduate student in the Environmental Policy and Sustainability Management MS Program. This work is meant to inform the development of a framework that situates and gives credit for sustainability learning.

INTRODUCTION: The New School's 5 Divisions

Embedding sustainability in a higher education setting involves institutional change and adaptation as much as teaching students and enriching faculty capacity (Selby & Sterling, 2010). As is to be expected, this process is not standardized. It is context specific and as such comes closer to succeeding when all community members can be involved in the embedding process (Brooks & Ryan, 2008).

The New School (TNS) is a higher education institution with a unique mixture of schools and disciplines. It is essential to understand the makeup of TNS to understand the various approaches to, and contexts in which, sustainability learning already takes place (Parsons having pursued an overhaul in this direction already) and the various potential approaches that have yet to be explored.

The New School is made up of 5 divisions:



The **New School for Social Research** (NSSR) and **Eugene Lang College of Liberal Arts** (Lang) are organized by department and majors, respectively. NSSR is a graduate level institution, while Lang offers a combination of both undergraduate and graduate degrees. Their focus is on liberal arts education and they foster deep, critical thinking in their students.

The **Parsons School of Design** (Parsons), the **School for Public Engagement** (SPE) and the **College of Performing Arts** (COPA) have different Schools within, which offer a mixture of undergraduate, graduate, certificate and associate degree options.



Parsons is well known for design and fashion programs. Parsons takes a hands on and strategy based approach to learning. Learning is studio and project based. SPE focuses on education that tackles real world problems and provides opportunities for learning with real and mock client projects. COPA is a performance arts school for which students arrive with an already honed practice in musicianship and dramaturgical work. COPA imparts further performance training in students while also teaching entrepreneurial strategies.

INTRODUCTION: Divisional Approaches to Sustainability

Each school has a different relationship to the term sustainability. Due to temporal and logistical constraints, these approaches were discussed with Executive Deans from all divisions except for COPA where availability prevented a conversation with the Dean to take place. Instead, Associate Professor Tanya Kalmanovitch provided interesting insight on COPA's approach.

Parsons

In 2009, the Parsons School of Design went through a curriculum overhaul under the leadership of Executive Dean Joel Towers (who had been hired as the Director of Sustainable Design and Urban Ecology at the New School in 2003 as part of a concerted effort on the part of TNS and the board to hire faculty with expertise in professional and cross-disciplinary sustainability work) as well as the Deans of each individual school within Parsons. The committee working on this overhaul identified "ecological literacy" as one of the core literacies to be imparted on all Parsons students. This built on a growing emphasis on sustainability in this division.

At the undergraduate level, this literacy was disseminated with both a class and by embedding it into courses through concepts, practice and material choices. All first year Parsons students are now required to take the course "Sustainable Systems" in which students are taught sustainable design thinking alongside the basics of energy systems, ecological systems, climate change science, the affect of climate change on urban and rural environments and the social inequities of those impacts. At the graduate level, sustainability thinking is embedded throughout all the making practices and strategies taught.

There are resources in the Fashion and Constructed Environments departments for more sustainable materials, and the school has a membership to Material Connexion, which allows students to research materials by material type (polymer/natural/wood etc.) and by a variety of sustainability criteria, such as biodegradability and non-toxicity.

School of Public Engagement

In the School of Public Engagement, there is an emphasis on social justice issues that include economic inequality and public health. Sustainability in this division incorporates these social justice issues. As such, sustainability is explored in class work that incorporates conceptual learning as well as project based learning. SPE focuses on giving students experience with real world clients and it is through these projects that learning related to

sustainability often occurs. SPE is currently exploring ways to bring social innovation work into the curriculum versus supporting social innovation projects outside of the curriculum. This will affect how sustainability learning is introduced into course curricula and program requirements as well.

Eugene Lang College of Liberal Arts

Sustainability can be found in Lang course in unexpected ways. In a conversation with Dean Brewer, she mentioned that a class on contemporary literature may not, on the surface, seem to tackle sustainability. However, a syllabus may reveal that several of the assigned books are about a dystopian future that would cause students to reflect on the state of affairs in our current society. Sustainability learning is considered to be the ability to think critically about data, scientific information and notions of justice, equity and fairness, while incorporating a sensitivity to racial, class, gender and sexual diversity.

There are discussions at Lang to map sustainability learning instances across the various curricula. Lang recently underwent a curriculum review, at the behest of students, to incorporate a more culturally and racially diverse set of literature throughout the departments. An independent analyst randomly selected a diverse group of syllabi and analyzed how they dealt with issues of gender, race, sexuality and class. Sustainability may be tackled in a similar way. What is important for Lang is that sustainability be embedded in a deep way across curricula versus being silo-ed into one class. Lang is also open to giving credit to projects done outside the classroom.

New School for Social Research

At NSSR there is engagement with sustainability via critical thinking and research in a variety of departments. Currently, the Economics and Politics departments engage with sustainability most explicitly through course offerings. Dean Millberg also mentioned that the Philosophy, Historical Studies and Anthropology departments are also increasingly interested in bringing in topics related to sustainability. The research centers within this division are also increasingly looking at topics dealing with environmental sustainability. The Zolberg Institute on Migration and Mobility may focus on climate refugee issues in the future. Student organized conferences have also focused on sustainability issues lately.

College of Performing Arts

At COPA, there is an effort to activate students as citizens and transmit the discipline of practice and the artistic process as skills to bring to community engagement. There are several classes where students engage with local community organizations to produce theater or musical pieces. There are also classes on entrepreneurship that include elements of social engagement and understanding as part of the learning outcomes.

LITERATURE REVIEW

In 1987, the United Nations World Commission on Environment Development published the Brundtland Report, which created the widely acknowledged and utilized definition of sustainability. Sustainability, as sustainable development, is summarized as development that

...meets the needs of the present without compromising the ability of future generations to meet their own needs.
(pp. 43, WECD)

This definition focused on the need to eliminate poverty and protect the environment for the use of future generations. Sustainability in this context is often termed as “sustainable development” and carries on currently with the United Nations’ Sustainable Development Goals. The physical environment’s ability to provide the resources and living conditions necessary for human survival has become an increased focus of what “sustainable development” means since the Brundtland Report.

The connection of sustainability to education and educational institutions was made in 1992 with the program of action *Agenda 21* that emerged from the UN Conference on Environment and Development Rio De Janeiro (Jones et al., 2010), which identified the need for education to impart capacities to students to tackle environmental and developmental issues. In 1994, there was an attempt to unite universities on this issue with the Talloires Declaration, created by the US based University Leaders for a Sustainable Future. The leadership of major universities both in the United States and abroad signed the declaration to signal their commitment to advocate sustainable practices and policies as institutions, and to provide resources for the study and research of sustainable environmental and social systems. Universities continue to sign their commitment under the Talloires Declaration even as more contemporary declarations emerge.

A little over a decade later, the UN Decade of Education for Sustainable Development cemented the notion that universities foster research and learning that propel sustainable development. A report by the UN Educational, Scientific and Cultural Organization (UNESCO) emphasized the need for critical thinking, interdisciplinary approaches and hands on training (2004). In addition, a link was made between sustainable development and social justice values of human rights, cultural and biological diversity and intergenerational responsibility.

Science was the arena in which sustainability, as an ecological quality with implications for societal development, developed first, and where it was kept silo-ed from political and economic discussions (Kates et al, 2001). This issue of academic silo-ing is passively challenged by the emphasis on cross-disciplinary collaboration in international declarations on the topic of sustainability in higher education. Kates et al. (2001) also wrote a seminal commentary piece called *Sustainability Science*, which argued emphatically for the need for sustainability science to engage with qualitative research that incorporates global and local scales and processes, and the multiple stressors that emerge from complicated systems. Since then there have been multiple attempts to conceptualize sustainability learning across a variety of disciplines from Public Policy programs to Design Strategies.

Currently, universities across the United States are developing strategies for embedding sustainability within their community. The Association for the Advancement of Sustainability in Higher Education (AASHE), established in 2006, attempts to provide direction as well as material and networking support for this work. AASHE organizes a yearly conference to convene universities across the country to share best practices and discuss the ongoing development of sustainable operational systems and sustainability curricula. AASHE has also developed the Sustainability Tracking, Assessment & Rating System (STARS). This is a voluntary, self-assessment tool that addresses the curriculum and research, campus operations, planning and institutional capacity of universities. This system incorporates flexibility to adapt to the unique academics and capacities of different colleges and universities.

Literature on the subject of sustainability literacy has often analyzed various systems for conceptualizing sustainability and incorporating it into the curriculum. Conceptualization becomes important for providing the direction for curriculum development. The process by which the concept is developed is not as heavily analyzed in peer reviewed literature as the procedural attempts to embed sustainability in building operations, campus life and academic curriculum. Much of the literature recognizes the difficulty sustainability as a concept presents because sustainability as both a term and a praxis begins to take on a multitude of practical and theoretical expressions. As such, various authors have emphasized the need to welcome and encourage conflict and differences in opinion on the meaning of sustainability to allow for a full dissection of what sustainability means to a particular community context. These conflicts and discussions then pave the way for innovative engagement with the term (Wals & Corcoran, 2010; Wiek, A et al., 2011; 2011, Barth et al., 2007). Wals and Corcoran (2010) explain:

If indeed the exploration of sustainability in higher education involves the reconciliation of diverging norms, values, interests, and constructions of reality then the innovation process should be designed in such a way that differences are explicated rather than concealed. By explicating and deconstructing these differences it becomes possible to analyze their nature and persistence. This is an important step since it helps to improve both the dialogue between the stakeholders involved and to identify strategies for utilizing conflict in the social and individual learning process.”
(p. 223-224)

This dialectical work can be facilitated by an independent center within the University, one positioned similarly to TEDC at The New School (Jones et al., 2010; Lundqvist et al., 2012). Important qualities successful centers have been found to have are: openness, visibility and approachability, a bottom up approach, transparency, and consistent reporting of, and following up on, communal work to keep the momentum of dialectical work going. A difficulty of engaging with sustainability is that it is a work in progress. As such, flexibility in approaches and procedural systems tied to sustainability becomes important, along with an ability to communicate changes as they happen.

The evaluation of learning outcomes is perhaps the most germane topic when discussing efforts to introduce sustainability in curricula and the educational experience. However, the sheer diversity in academic disciplines and the combination of disciplines present at each

universities require the use of guidelines rather than specifics concerning the content of what is learned. There are various models for conceptualizing sustainability learning. Sustainability learning can emerge from particular learning cultures, which serve to interiorize values linked with sustainability on students (Barth et al., 2007), and from models for competencies (Wiek et al., 2011; De Haan, 2006; van Dam-Mieras et al., 2008) that seek to provide a direction for the development of learning outcomes.

Wiek et al. define competence as:

...a functionally linked complex of **knowledge, skills, and attitudes** that enable successful **task performance** and **problem solving**” (2011a, p.204).

They argue that working groups must avoid delivering competency lists and instead create competencies that are “conceptually embedded sets of interlinked competencies” and “systematic and comprehensive” (ibid., p. 204). Wiek et al. (2011a & 2011b) suggest these five competencies: **Systems-thinking, Anticipatory, Normative, Strategic** and **Interpersonal**. While interdisciplinary education and collaboration is stressed, these authors emphasize the need for students to develop an expertise in a discipline so they can approach an interdisciplinary project with a confident and knowledgeable grasp of that discipline and better produce a productive and effective collaboration of disciplines (Wiek et al., 2011; Barth et al. 2007).

Wiek et al (2011a & 2011b) argue that the competencies they suggest are conceptual and are meant to provide suggestions for an overarching framework in which, in iterative fashion, competencies and learning cultures appropriate for a particular school can develop. Iteration and an iterative process, although not mentioned explicitly in the works mentioned above, emerges as key to incorporating a diversity of views and engaging in an inclusive and sensitive manner to the conflict that will inevitably arise from this process.

Once contextualized, a framework can unify the institution, a learning culture can establish the various avenues in which learning can take place inside and outside the classroom, and competencies can reflect the various divisions of a university after which the granular work of narrowing down to schools, departments and disciplines by learning outcomes can begin.

RESEARCH DESIGN: Introduction

The purpose of this report is to take a snapshot of where and how sustainability learning is occurring at The New School. This will enable TEDC to situate the various opportunities already available for students to tackle sustainability minded topics and build on them. This study is part of a larger project to embed sustainability across the New School's five divisions, which itself is part of The New School's commitment to sustainability as a primary tenet guiding the university. TEDC, as a center focused on sustainability, has been tasked with exploring how to accomplish this.

From the outset, meetings with Molly Johnson and Yvonne Watson stressed a pluralistic view of sustainability learning – one not limited to course curriculum. This is not to say course work is not considered important, quite the opposite. Curriculum is considered an important starting point. Rather, TEDC also wants to ensure it is aware of all the other areas of learning in which sustainability learning takes place at The New School – itself a multidisciplinary institution that prioritizes the importance of hands-on learning through projects within each division, between divisions, and with community organizations at a local, domestic and international level. This meant finding expressions of sustainability learning in research projects, student groups, conferences, public events, and any other hidden crevices in which important work concerning sustainability has been occurring. Situating these will allow TEDC to take advantage of these opportunities as it formulates a strategy for encapsulating, formalizing and adding to sustainability learning across the school.

RESEARCH DESIGN: Methodology

Search for Sustainability Learning Inside Class

Research began in the most obvious and easily accessible place: the online course catalogue. This meant combing through course descriptions using a set of keywords that include root words to terms obviously related to sustainability such as: climate, sustain, environment, and ecology.¹

Keywords were then expanded to include terms that relate to environments or social practices that have the potential to teach about sustainability, climate change or environmental challenges. This included keywords such as rights, community, and natural. Keywords for materials such as wood, water and metal were used to find 'making' classes where sustainability concepts might infiltrate the creative process.

The search was then finished with a more open ended approach that included searching for classes of a certain learning style – the studio class being the prime example. The New School offers a large amount of design and project based classes in which student or professor interested could introduce sustainability. There are also opportunities for independent study. At the same time, some keyword searches were too open-ended. Using "research" for example turned up too many classes to be useful.

¹ For a full list, please see Appendix A

An important caveat to mention here is that this search is superficial in that it operated off course titles and course descriptions. Analyzing course syllabi would be the next step for deepening this type of search process.

Search for Sustainability Learning Outside Class

The search was then extended to sustainability learning outside the classroom. This was a more informal process and was accomplished via website searches, suggestions from Yvonne and Molly at TEDC, word of mouth, and by looking at fliers all around the school. This uncovered types of engagement (through students groups, research labs, events, etc.) as much as examples for these engagements.

RESEARCH DESIGN: CRITERIA

Searching for sustainability learning means knowing what sustainability is. As an Environmental Policy student, I interpret sustainability subjects to include climate change, social and environmental justice, improving urban ecology and urban resiliency, organic food systems and food insecurity, energy systems, waste systems, the environment as a biological ecosystem, production practices that focus on reducing resource use and waste output, and all manner of community building. AASHE relates sustainability to both the [Earth Charter](#) and the [UN's Sustainable Development Goals](#) (AASHE, 2008). Both of these initiatives tie in principals of economic justice and human rights to sustainability. I combined my knowledge of sustainability with the values and goals imparted in the Earth Charter and SDGs to single out the classes that were already teaching sustainability according to their title and course description, while also flagging courses that did not mention sustainability but addressed topics that were related to Earth Charter and SDG goals.

Once selected, classes were assessed using AASHE's designation of "Sustainability Focused" and "Sustainability Related". Sustainability Focused means that sustainability or a sustainability challenge is the primary focus of the class. Sustainability Related means that sustainability or a sustainability challenge is one of many topics covered in the class.

I also added the designation of "Sustainability Potential". Since the goal of TEDC is to expand on what the New School already offers, it seemed important to find classes that could incorporate sustainability topics into the curricula should a professor be interested in doing so. Providing the resources and support to do this could be the kind of work TEDC engages in moving forward. These same criteria were used when searching for sustainability learning outside of class

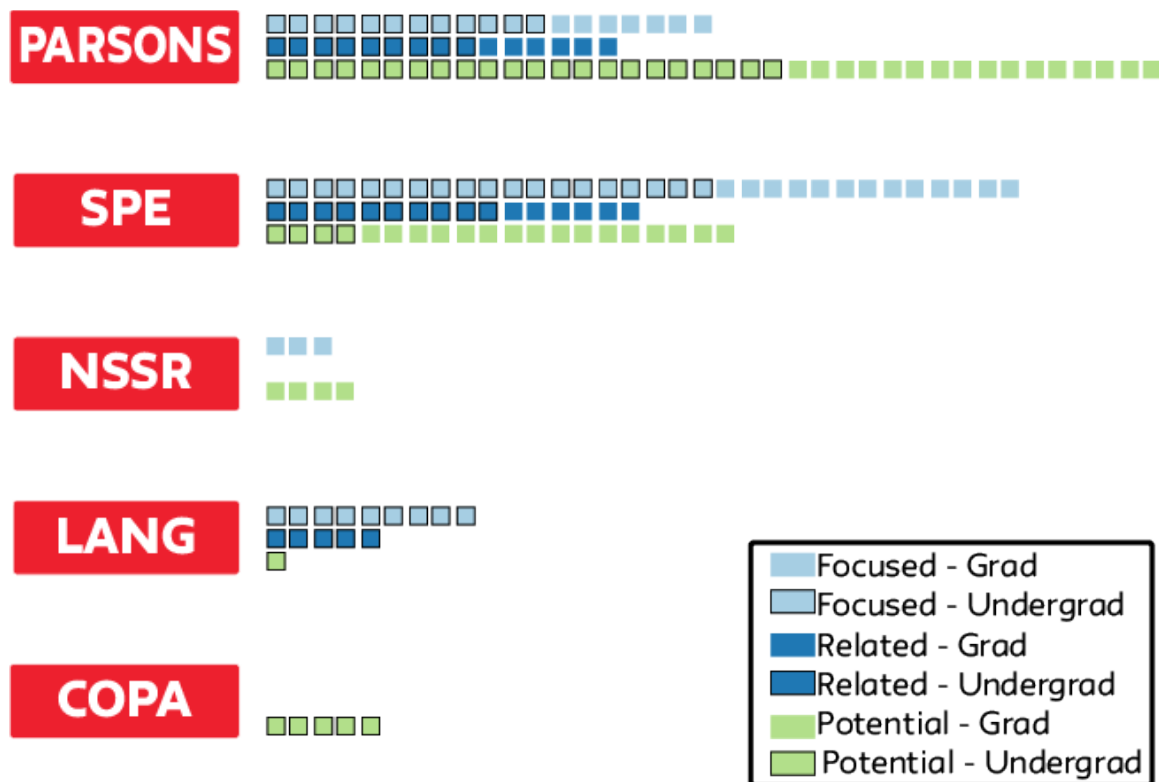
The list and designations that resulted from this search is but a starting point for finding sustainability. Following Lang's model of sampling syllabi to get a deeper sense of the kind of sustainability learning going on could be a possible next step to continue determining where and how sustainability learning is being delivered. The absences from this list created for this report will perhaps bring about the most fruitful conversation with faculty and department heads, should they be made aware of the list and protest absences. These discussions will uncover approaches to sustainability that other disciplines are taking that are

not immediately apparent to those outside said discipline and could provide innovative ideas for sustainability learning going forward.

RESEARCH DESIGN: FINDINGS

*Courses**

Sustainability focused and related courses were most easily found at Parsons and the School for Public Engagement. This should come as no surprise given the past curriculum overhaul at Parsons and SPE's focus on current and pressing social issues. It is very possible that there are more offerings at both NSSR and Lang than were found by me, but that these offerings would be more easily uncovered with the deeper search using the syllabi analysis mentioned above.



	PARSONS	SPE	NSSR	LANG	COPA	ULEC
Focused	19	30	3	9	0	2
Related	15	16	0	5	0	0
Potential	39	20	4	1	5	0

* For a complete list please see Appendix B

All Lang, COPA, and UIEC classes are for the undergraduate level. NSSR are all graduate level courses. The educational level of the various sustainability focused/related/potential courses at Parsons and SPE break down as such:

	Parsons		SPE	
	Undergraduate	Graduate	Undergraduate	Graduate
Focused	12	7	19	11
Related	9	6	10	6
Potential	22	17	4	16

Majors, Minors, Degrees, Post-Bachelor Certificates were also identified. (TEDC is aware of these, of course, but they are added here to formally bring in all avenues for sustainability learning under one report.)

FOCUSED	RELATED	POTENTIAL
Environmental Studies Interdisciplinary Science Food Studies Social Practice Sustainable Cities EPSM Sustainability Strategies	Urban Studies Design & Urban Ecologies Theories of Urban Practice Architecture Interior Design Lighting Design Product Design Industrial Design	Nonprofit Management Organizational Change Mgmt Urban Policy International Affairs

Sustainability focused majors, degrees and certificates are available as majors for Lang, minors for Parsons undergraduates, and as an MS degree and graduate certificate at Milano.

Sustainability related studies are found at Lang, and at Parsons at both the undergraduate and graduate level and at Milano. Urban studies is the predominant topic to be found at this “Related” level. Not all urban studies will tackle sustainability directly although it’s assumed that all urban topics will touch on sustainability challenges having to do with economic

justice, urban environmental and policy design as well as energy, food and transportation resources.

The School of Constructed Environments in the Parsons division houses degrees that all have a tangible effect on the natural environment. Architecture, Interior Design and Lighting Design all have material affects through material choice and energy usage that are directly related to environmental footprint assessments. Product and industrial design provide material wants and necessities of society's daily life. Each of these degrees incorporates sustainability learning at various points throughout the learning process.

Milano houses the various degrees with a large potential for incorporating sustainability. Sustainability learning already occurs in specific classes within the degrees listed here, although it is not currently a focus of these program as a whole. Nonprofit management relates to sustainability challenges as it addresses the running of the kinds of organizations that tackle sustainability challenges directly. Organizational Change Management will become important to sustainability as more organizations develop new business approaches to adapt to limited resources and create practices that are more sustainable. Urban Policy and International Affairs each have the potential to tackle sustainability challenges through course work as well, although it is not a specific focus now and one could go through those programs with only a few touch points with sustainability topics.

Extracurricular Activities

The New School has a variety of research labs that are sometimes a class unto themselves (Community Development Finance Lab) or function as incubators for social innovation ideas/organizations and businesses. Some are focused on sustainability directly, others have some projects that focus on sustainability and thus have been labeled sustainability related.

L A B S	F O C U S E D	Healthy Materials Lab Urban Ecology Lab E-Lab: Walkntalk, Thread Cycle, Zer DESIS Lab (Design for Social Innovation & Sustainability) LEAP EntrepreneurshipLClub (Leading Endeavours w Action and Purpose)
	R E L A T E D	Venture Lab TNS Collaboratory Engage Media Lab (Media Activism) Community Development Finance Lab GIDEST (Graduate Institute for Design, Ethnography & Social Thought)

There are also a number of student led groups focused on sustainability and others related to sustainability because their work involves community and identity building, which are valued under the Earth Charter and SDG models, and which are important if one considers the importance of a strong community to promoting resilience and dissecting inequitable and unjust political, social and economic practices.

STUDENT GROUPS

FOCUSED

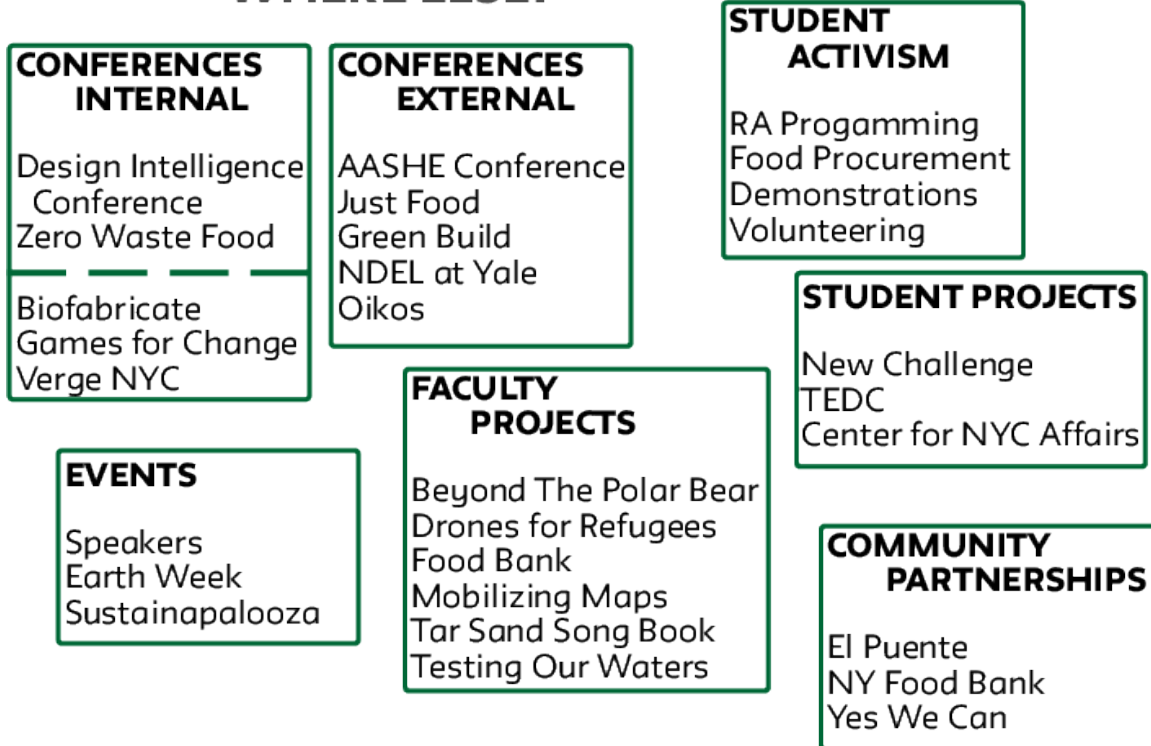
Change Forum
LEAP Entrepreneurship Club
(Leading Endeavours w Action and Purpose)
Oikos
Sustainable Cities Club
Sustainapalooza Organizing Committee

RELATED

New Black School
New School DREAM Team
Non-Violence Project
Somos OLA
STEAM New School

There are various other events and research projects that exist in various locations around campus that engage with sustainability, as shown below:

WHERE ELSE?



DISCUSSION: How is sustainability being learned?

In order to capitalize on the sustainability learning at The New School in a formalized way, it is important to situate the kinds of learning going on. What exactly is being offered? One way to conceptualize this is to think of different kinds of learning and situate the various kinds of sustainability learning expressions across these concepts. One model for learning type could include these 4 categories:

- **Curricular Development**
 - The learning in class
- **Personal and Professional Development**
 - The learning that happens at a personal level in terms of values and attitudes
 - The learning that happens at a professional level
- **Skills Development**
 - The putting into practice what one has often learned in class
- **External Engagement**
 - Engaging with community organizations and outside and contextualizing skills to particular social, political, economic and ecological environments

Curricular development is the most obvious place to find sustainability learning at a university and is one of the 4 major expressions sustainability learning takes places at The New School.

Sustainability learning also happens through various activities that constitute **personal and professional development**. Personal development happens through moments of student activism wherein students activate skills associated with being an actively engaged person in the world and acting as an engaged citizen. Student groups offer personal development by allowing students to engage with social topics important to them as they organize and lead themselves. Events and conferences offer networking opportunities as well as professional development. It also allows students to simply pursue topics they may not engage in directly with in class.

Project based learning already happens inside many of the classrooms at The New School, yet there are more opportunities to be had outside the classroom. These opportunities represent a way for schools to transfer their skills from inside the classroom into real world settings and active research projects. In student created projects, faculty projects and research labs, sustainability is expressed through **skills development**.

External engagement often occurs through all of the processes already mentioned, but is prevalent in some faculty and student projects more than others, in conferences organized by students within the school, and in projects specifically centered around community partnerships. Some types of external engagement provide an important opportunity for skills development within an organizational or community based setting, imparting the importance of context and the ability to translate and adapt skills in specific social settings.

DISCUSSION: What is being learned?

What exactly is being learned through these expressions? What are the competencies being acquired that more directly address sustainability? One model for tackling this question is to consider Wiek et al's 5 key competencies in sustainability (2011a & 2011b):

- **Systems thinking**
 - This involves considering the factors that drive the inertia behind systems, local and global scales, understanding the interplay between social, environmental and economic systems, taking into account cultural contexts and understanding the qualities of resilient economic, ecological and social systems.
- **Anticipatory**
 - This involves understanding temporal scales and understanding how interventions will affect the future along these scales, understanding how to plan for uncertain futures, understanding the risk future generations face and prioritizing intergenerational equity of risk.
- **Normative**
 - This involves having training and the attitude disposed to think about notions of justice and equity and understanding the implications of environmental solutions for different communities.
- **Strategic**
 - This competence builds on the knowledge of the above three to design effective and equitable interventions, adapt to changing environments, understand the viability of interventions and design implementation strategies that find and take into account all relevant stakeholders.
- **Interpersonal**
 - This involves the need to be able to collaborate across disciplines, lead teams and understand team dynamics, design effective communication strategies and create inclusive participatory strategies for interventions that affect communities.

The work of bringing these competences into the New School involves contextualizing these competences across the 5 divisions. Each division may at some point address all 5 competencies, but have strengths only in some, as is proposed below:

STRENGTHS	PARSONS	SPE	NSSR	LANG	COPA
SYSTEMS THINKING	●	●	●	●	●
ANTICIPATORY		●			
NORMATIVE		●	●	●	
STRATEGIC	●				●
INTERPERSONAL	●	●			●

Parsons focuses on systems thinking and strategic competencies across its design programs. The interpersonal is taught as part of this process as well since design is linked to cultural communication and cultural systems.

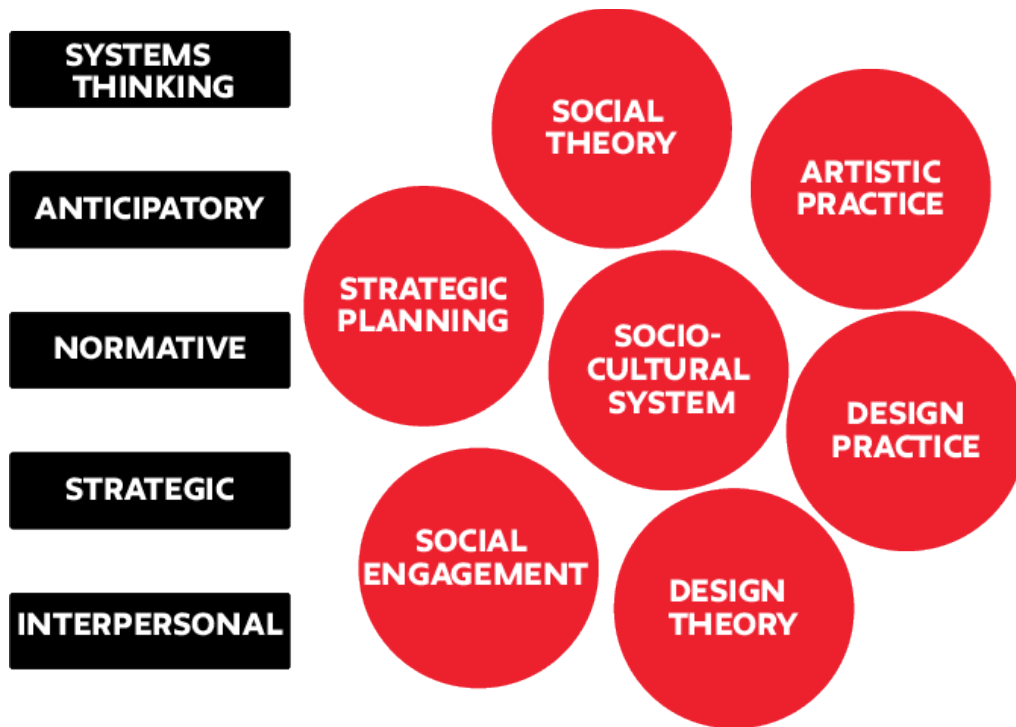
SPE imparts systems thinking with particular attention to a combined notion of anticipatory and normative competencies. Many courses in this division approach topics with a politically progressive social lens that looks at historical precedence and implications for the future, while analyzing patterns of oppression and injustice. Interpersonal competence is imparted through the focus on client based work embedded in coursework.

NSSR and Lang, as liberal arts educators, hone critical thinking skills that dissect systems and dialectically dive into normative concepts.

COPA's creative work can be both individual and community informed while also communal in performance. Entrepreneurial classes are designed to impart strategic and systems thinking competencies that are contextualized to the arts community.

These are imperfect translations of these competencies to The New School pedagogical approach which is why these competencies should be translated into the competencies already at play at TNS.

How can these competencies be redefined for The New School? These competencies are actually already in existence, yet by reconceptualizing them as sustainability competencies, one can build on what The New School is already offering, even when not dealing with sustainability directly.



The New School teaches strategic planning, artistic practice, design theory and design practice, and social engagement at Parsons; social theory at NSSR and Lang; analyzes and engages with socio-cultural systems, strategic planning and social engagement at SPE, NSSR and Lang; and, addresses strategic planning, socio-cultural systems and artistic practice at COPA. These are the competencies across which sustainability expressions are performed.

DISCUSSION: Creating a framework for Sustainability

The purpose of finding where and how sustainability learning is going on at The New School is to unite the efforts and make them visible for the entire New School community, and to formalize these types of learning as enhancing sustainability literacy. To do this, sustainability literacy needs to be defined.

Miller (1990) whose academic work addressed assessing competence in the medical field, provides a surprisingly fitting and interesting framework to begin building a framework for sustainability literacy at The New School.

Miller first discusses the importance of knowledge as the base to learning – where it begins but certainly not where it ends. He quotes Alfred Whitehead to underline the importance of moving beyond mere knowledge, however:

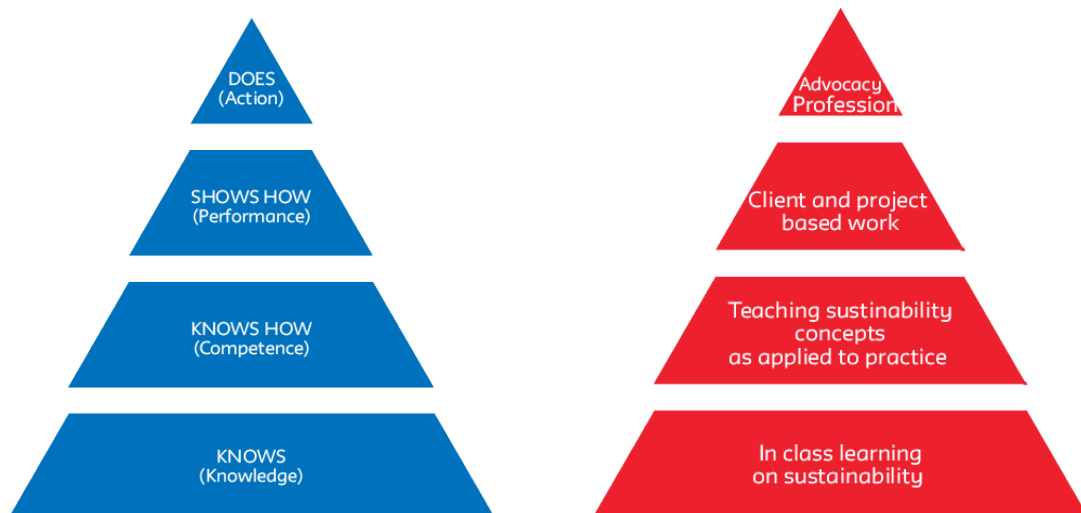
Nothing is more useless than a merely well informed man.
(p. S63, Miller. 1990)

At The New School, the classroom is the initial setting in which sustainability learning is most easily found, yet sustainability would be utterly useless as something students are merely “well-informed” on. Courses are where sustainability learning merely begins.

As students learn how to use what they’ve learned they begin to develop competence. The same can be said to be needed for sustainability, and it is something that can be developed as students not only study sustainability concepts, but at the same time are taught how those concepts apply to their artistic, design, academic or professional focus. Here it is important to remember the importance of developing expertise in one’s own particular discipline, even though interdisciplinary collaboration is certainly a characteristic of most sustainability work (Wiek et al., 2011, Barth et al, 2007).

For doctors, they are required to show how they know something through interactions with a patient. At The New School, where project based and socially engaged learning are a prime focus, skills are often developed and demonstrated through client work and the extra curricular programs mentioned under skills development. Testing out sustainability practices and engaging with the tactile and active components of sustainability through projects and community partnerships and real clients continues to build up sustainability learning and enhancing what it means to be sustainably literate.

The final top of the pyramid in Miller’s model is the action a doctor takes when she or he develop their own personal practice. The New School could conceptualize this as what steps a student takes once they step outside the university. This might be demonstrated during their education or through their choices after they graduate. This may be less of a literacy and more akin to a goal, but when talking about sustainability it represents the most important part of this project – the purpose of teaching sustainability is to see it happen in the world at large. This is, in fact, a prime necessity. Below is Miller’s pyramid on the left, and a re-conceptualized New School pyramid on the right.



RECOMMENDATIONS

The framework discussed in this report represents a starting point for conceptualizing and formalizing the sustainability learning on-going at The New School. As is stressed in peer reviewed literature, contextualizing sustainability and encouraging active participation from the community are key to embedding sustainability in a university. I hope that the ideas presented here provide a solid ground for contesting the ideas presented and moving forward with more innovative and actionable ideas for formalizing a sustainability literacy that is transformative. Conversations with TEDC reveal a fairly well strategized plan for moving forward, and the recommendations provided below reflect both their already established plans as well as alternative suggestions. Some of the ways that I have understood TEDC's approach and that I envision TEDC's work and role in the future are as follows:

- Increase TEDC's visibility at a curricular level and encourage its inclusion as a resource for students on syllabi for classes TEDC can be a resource on.
- Build on the resources TEDC can offer. Molly Johnson is already actively involved with sustainability in all its expressions on campus and is mentioned as a resource by everyone working in this area. The next step is to provide curricular, project based and interdisciplinary tools that students can use. The visibility of these tools is an important part of this strategy. The visibility of TEDC as a strong support structure for sustainability resources and learning should encourage more students to take on sustainability challenges in their work.
- Build on the extracurricular sustainability work by developing incentives for the development of MOOCs (Massive Open Online Courses) out of the work faculty and students are doing in class and outside of class as well.
- Incentivize students to take on sustainability projects by offering academic credit. This will allow students to build this work as part of, instead of on top of, the credit burden a student takes on in a semester. This may mean relaxing requirements for programs that have a heavy core requirement burden.
- Building on the above recommendation, and derived from conversations with Yvonne Watson, TEDC could develop a multi-faceted conceptual model of sustainability literacy that houses the different kinds of sustainability expressions already on going in a formalized way and provides a required learning outcome framework for each school. Evaluations for learning done outside of the classroom can be done in a presentation setting that serve as opportunities to share knowledge gained and reflect on knowledge acquired.
- If Lang does engage in mapping sustainability across their syllabi as has been done on the topic of including a more culturally diverse base of academic material, TEDC could at least participate as an observer to the process to judge whether this mapping could be a model for analyzing sustainability at other divisions or schools.
- TEDC's next step is to develop an assessment tool for measuring current sustainability literacy. As part of this work, TEDC could begin to create an alumni association of students that have gone on to work on sustainability issues. This is

currently done through Milano alumni networking events, but TEDC could also add training elements to these engagements.

FINAL THOUGHTS

It is my understanding that TEDC aims to bring sustainability work out of the anecdotal and into a common spot light. What ultimately is going to be necessary to tackle after all this work is done, and what should inform this work as it evolves, is the lack of time students and faculty have to take advantage of newly discovered opportunities for engaging with sustainability issues. There are students who find the time by choosing the appropriate coursework or extra curricular engagement, yet there should also be a focus on disseminating this knowledge to everyone and many students simply do not have the time (and it should be acknowledged that there are also many that don't have an interest). Students are often expected to, or required by economic circumstance to, have a job, have an internship, and take a heavy load of classes. We as a society are much busier than past generations because of economic and technological factors. A decline in active citizenship has been sacrificed to this new busy lifestyle (although there are positive signs that this is changing under the new presidential administration).

TEDC could address this through some of the recommendations made above that involve giving credit for sustainability minded project and client work and so creating space within the academic burdens to take on sustainability. It could also create opportunities for reflection that are transformative. This may require a disruption day in which activity in a certain division, school or department stops, and not just to postpone, for the purpose of giving students room to reflect on or attend a day of Earth Day type events, for example.

The New School already offers a large trove of opportunities to learn about and take on sustainability challenges. An important, if in practice tricky, element to these is providing a learning culture which incentivizes and allows for the larger part of the student and faculty population to find the time to use these opportunities.

Appendix A: Keyword used for search.

MOST OBVIOUS

Community
Environment
Sustainable
Sustainability

Ecology
Eco

Development

Activism

Food

LESS OBVIOUS

Natural
Right(s)
Human rights
Politic(s)

Urban

Business
Innovation

Material
Water
Wood
Metal
Plastic

LEAST OBVIOUS

Studio
Project
Research

Ethic

Integrated
Integrative
Zero

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