

USA • Chicago based Global Citizenship Experience (GCE) Lab School

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The United States does not have a centralised, national curriculum. Each state has its own department of education, which sets educational standards, curriculum frameworks, standardised testing schedules, and teacher certification requirements. Schools may be classified as public (funded through taxes and run by the government) or private (funded and run by non-governmental entities). Independent schools are a special distinction of private schools that are classified as not-for-profit and governed by a board of trustees or directors. Private and independent schools are not obligated to follow the standards and testing requirements of the state in which they are located. In an effort to standardise curricula across the 50 states, the federal government introduced the Common Core State Standards Initiative⁶¹ (CCSSI) in 2010, which details what students should be able to know and do in English and Mathematics in grades K-12. Forty-one states use the CCSS, but adoption is optional (CCSSI, 2022). In 2013, the Next Generation Science Standards (NGSS) were released, providing recommendations for K-12 science education. The NGSS were developed through a multi-year committee process and in collaboration with a consortium of 26 states. Yet less than half the states, plus the District of Columbia, have adopted them⁶².

The NGSS include the subtopic of human sustainability and approach sustainability “as a set of global problems affecting all humans equally and solvable through the application of science and technology”⁶³. However, they have been critiqued for not including the ethical, social, and political dimensions of sustainability challenges (ibid.). While a WSA to ESD is not commonplace, nor promoted nationally in the USA, there are numerous standalone examples of schools that have taken the initiative to meaningfully engage with a WSA. The following independent lower-secondary school in Chicago, Illinois offers multiple entry points and examples of ways they have embraced a WSA.

Global Citizenship Experience (GCE) Lab School, serving students in grades 9–12, has consistently been named one of the most diverse private schools in Chicago⁶⁴, with students commuting from 35 neighbourhoods in Chicago and 6 surrounding suburbs. The school follows

a flexible tuition model that ranges from \$4,550–\$29,150 USD, with 86% of students receiving tuition assistance. The student body includes 53 students, with plans to grow to 175. The school was founded on the belief that to cultivate responsible global citizens in the 21st century, the traditional transmissive models of education needed to be rethought from the ground up. The keywords in the school's name—*global, citizenship, and experience*—have shaped the mission, identity and operation of the school since its inception in 2010.

The staff and faculty at GCE want the school not only to have focus on the global citizenship experience, but to embed these three key concepts into the DNA of the school. Figuring out what this means and how to do it has been a lengthy, ongoing process. In GCE's first two years, faculty and staff spent hundreds of hours on collaborative professional development in efforts to “unlearn” the deeply ingrained habits and expectations they had brought with them from previous educational environments. Teachers had dedicated time each week to write curriculum, reimagine assessments, test lesson plans, establish community partnerships, and support each other in this intensive work. Early in the school design process, GCE adopted sustainability pedagogies⁶⁵ with an emphasis on real-world, inquiry-, and project-based learning. This learning approach meant that the *how* and *why* of learning were foregrounded, and the *what* (curriculum) was an extension of these methodological values. A whole-school approach was needed to support such a learning model, so the mission, professional development, schedule, and curriculum were all in alignment. As a result, several features were built into GCE's core that may offer inspiration to other schools:

Vision and Leadership • GCE's [Portrait of a Graduate](#) (POG) resulted from a year-long strategic planning process that included a survey of the GCE community (including students, staff, parents, alumni, and board members) as well as research into 21st century learning frameworks put forth by organisations such as P21⁶⁶ and World Economic Forum⁶⁷. The POG includes five characteristics that describe a global citizen, according to the GCE community: Real-world educated; professionally prepared, culturally competent, independently motivated and consciously innovative. The POG guides the decision-making at all levels of the school, with the overall goal being to cultivate

graduates who have an understanding and awareness of the wider world and how it works, a sense of their own role as a world citizen, and who are willing to act to make the world a more equitable and sustainable place.

Curriculum, Pedagogy and Learning • Curriculum and pedagogy are inseparable at GCE. Starting in Grade 9, students begin a 4-year learning journey designed around integrated themes. Students take two core classes each term (one STEAM and one Humanities), which are supplemented by targeted skill-building classes in areas such as mathematics and writing, as well as areas like computer coding, woodworking, podcasting, and ethnography. STEAM is an educational approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking. The themes for each term

are meant to complement each other; for example, Grade 9 students take the *Food STEAM* course, which focuses on ecology, chemistry, and genetics, at the same time as they take the *Food for Thought* Humanities course, which investigates world history and geography through the lens of global food trade. This overlap encourages interdisciplinary collaboration in lesson planning and field experience excursions.

The curriculum is aligned with the Common Core State Standards and Next Generation Science Standards. In addition, each course is aligned with at least one SDG Target. For example, in the Water course, students learn Algebra and Earth Sciences while also investigating SDG 6 and how to achieve universal access to safe and affordable drinking water, sanitation, and hygiene. Most GCE courses are divided into three units, each of which follows a three-

Key WSA Principles in action at *GCE Lab Secondary School*

Capacity building

- All faculty and staff receive training in inquiry and project-based learning
- Teachers complete a Model the Learning experience that introduces them to the curriculum and invites them to customise courses for themselves and their students
- GCE offers professional development in teaching and designing project-based learning at other schools

Vision, Ethos, Leadership & Coordination

- GCE's Portrait of a Graduate guides the cultivation of graduates who have an understanding and awareness of the wider world and how it works, a sense of their own role as a world citizen and are willing to act to make the world a more equitable and sustainable place
- The Portrait of a Graduate guides decision-making for curriculum and other school programming

Curriculum

- Courses are interdisciplinary and thematic to foster critical and systemic thinking. All courses are aligned with the UN SDGs as educational standards, which provide a curricular grounding in sustainability and social justice
- Curriculum is digital and frequently updated with current case studies, news stories, and real-life data
- Imagining a Sustainable Future is a 3-part open-source curriculum that introduces students to the science of climate change (ReFueling the Future), design and systems thinking to propose solutions (ReDesigning the Future), and policy levers that can be used to enact change (ReMobilizing the Future)

Institutional Practices

- The campus is designed as a living laboratory for collaboration, community-building, data analysis, and critical thinking
- Features such as a living wall, aquaponics system, and rooftop garden will immerse students in a learning environment where they engage with natural systems and cycles

Pedagogy & Learning

- Sustainability pedagogies including inquiry- and project-based learning form the basis of GCE's learning model
- Teachers act as facilitators who model the learning process with students
- Learning is collaborative and student-driven. Students are encouraged to adapt projects and assessments, so they are customized according to interest and need

Community Connections

- Weekly field experiences out of the classroom and into the city allow students to make real-world connections and test classroom learning with local experts
- The Professional Immersion Experience for students in Grades 11-12 is an opportunity to become immersed in an internship with a business or organization of their choosing



During Covid-19, grade 9 students study SDGs 3 and 5 by meeting with artists to explore why gender disparities exist and persist, and how those issues often manifest as unsafe, insufficient, and/or inaccessible healthcare

part experiential cycle: 1) Internal Investigation (students pursue guiding questions that result in understanding foundational concepts); 2) External Investigation (real-world experiences provide context for classroom learning); and 3) Action Projects (students synthesise learning from Internal and External Investigations in multimedia projects). GCE's curriculum is digital, and teachers dedicate 3 weeks each summer to curriculum revisions, a process that includes updating multimedia sources, refining rubrics, and revisiting guiding questions.

Assessments have been an ongoing challenge for GCE. Currently, student evaluations are based largely on end-of-unit action projects, which include a rubric designed using a 100-point scale. Each action project has a suggested rubric, which teachers often modify in consultation with students when a new action project is introduced. GCE is a member of the [Mastery Transcript Consortium](#) (MTC), which is working to design and pilot an alternative to GPA-based transcripts and engaging with higher education institutions to rethink admissions indicators. The efforts of MTC are lessening the burden on GCE's school counsellor, who spends many hours on the phone with college admissions officers, interpreting GCE's courses and translating them into more familiar subject-based terminology.

In 2019, GCE partnered with the renewable energy investment company Greenbacker Capital to design a three-part curriculum series entitled [Imagining a Sustainable Future](#). The series is designed to encourage collaboration among teachers from different disciplines. It approaches sustainability from a science, design and engineering, and civics perspective. These open-source projects are available for teachers to download and supplement traditional curriculum. Each of the three

projects can be taught on its own or as a full package in regular classrooms, after school programs, or summer enrichment classes. The series begins with an introduction to the science of climate change (ReFueling the Future), then introduces design and systems thinking to propose solutions (ReDesigning the Future), then presents policy levers that can be used to enact change (ReMobilizing the Future).

Community Connections • GCE's weekly schedules are structured around hands-on field experiences. Each Wednesday, the schedule is divided into two long blocks, so students spend 3 hours in each of their core classes (STEAM and Humanities). This longer block gives teachers the opportunity to either plan a field experience into the city, host a guest speaker, or have dedicated time to work on a project. Example field experiences include neighbourhood walks and observations; meeting with non-profit organizations; visiting surrounding universities; interviewing local business owners; speaking with politicians; attending a play or other cultural event; or any other experience that can be conducted in the time allotted. There is a small budget available for field experiences, but most are arranged free of charge, and the only cost is public transportation for students. Field experiences allow students to connect and test what they're learning in the classroom with real-world applications. Many field experience partners go on to host GCE students for a Professional Immersion Experience, which students in Grades 11 and 12 participate in each December.

Capacity Building • The onboarding process for new staff members at GCE includes an introduction to inquiry- and project-based learning. All employees are required to participate in this training, even if they are not classroom

teachers. This reinforces the school culture that learning happens anywhere, at any time, with anyone. Teachers also participate in a Model the Learning course, which guides them through the process of being a student in their own classroom. As teachers new to project-based learning, this requirement allows them to get to know the courses they will teach, do sample action projects, modify rubrics, test sample lessons, and get feedback from peers. GCE offers these training modules as professional development courses to other educators and schools who are introducing project-based learning.

“There is a through-line in the history of GCE Lab School about working within boundaries and means, while at the same time pushing forward with ambition and vision. Because we have integrated courses and dedicated time to get into the real world, we can lean on existing structures to continue our ambitions rather than fight against a system designed for unsustainable practices: our school was designed to remove many of the internal institutional barriers, leaving us more time and energy to push past other barriers such as social expectations, limited resources, and the problems facing our world at large. This is reflected in our use of the UN Sustainable Development Goals to guide our curriculum and class explorations.”

Aaron Moring-D'Angier, Curriculum & Instructional Specialist, STEAM Teacher

Institutional Practice • GCE moved into its first dedicated space in 2022, 12 years after it began admitting students. Until then, the school rented space from other organisations and community centres until it raised the funds to purchase a location in downtown Chicago. The design process for the new campus was a collaboration among three architecture firms: One specialising in social justice, one in sustainability, and one in educative design. The resulting design was influenced by more than two years of planning, with input from students, staff, and the wider GCE community. For the first time in its history, GCE's campus is an expression of its core values and educational model.

The new campus includes spaces such as an open teaching kitchen, a living wall and a community circle to create

dynamic areas for collaborating, socialising, and community programming. Data on energy usage and air quality are prominently visible, and this information can be used in STEAM classes and school-wide activities. Plans are in the works to build an aquaponics system and a rooftop garden or apiary. Students engage in a mixture of low-tech and high-tech tools, including a wood shop equipped with a table saw and drill press, as well as a digital fabrication lab with a laser cutter and 3D printers; a manual typewriter lab housed in the same room where students learn computer coding; and a music room where students play store-bought instruments or build their own as part of a STEAM course. In terms of facilities and operations, one long-standing challenge for GCE has been its food program. Due to budgetary constraints and lack of certified food facilities, it has been difficult to build a food program that reflects the school's commitment to sustainability and responsible consumption. The new campus includes plans for a teaching kitchen that will be used for preparing community meals, composting waste, and nurturing a culinary culture at GCE.

Strengths/Prospects

- GCE had the freedom to build the school model from the ground up and did not need to transition from a previously established school model
- Staff realised the importance of “unlearning” the deeply ingrained habits and expectations that stand in the way of sustainability
- A small staff and student body make the GCE nimble and well-equipped to experiment with new approaches to schedules, calendars, and curriculum
- Connecting the curriculum to the UN SDGs offers immense opportunity for inquiry-based learning and making connections between local and global issues

Challenges

- The work is intensive and there is always a risk of teacher and staff burn-out
- There are many well-established and reputable private schools in Chicago. Convincing families to invest in GCE's approach to learning can be challenging
- Assessing and communicating student performance is an ongoing question. Until higher education moves away from GPA-based student evaluations, GCE will need to translate the school model into language that colleges understand
- Being located in an urban environment can make a focus on sustainability a challenge. Making connections between social and ecological problems is difficult when many students witness and experience violence and extreme income disparities across the city

GCE has spent over a decade refining the elements of its WSA to sustainability and continues to revise each dimension in response to the needs of students, families, and the world. A longstanding commitment to community-building has led to a sense of shared ownership and trust among students and staff; this trust in turn enables support for innovation and experimentation. For other schools transitioning to a WSA approach to sustainability, this stakeholder buy-in is essential, so that the resulting school model is localised and relevant to the community it serves.

Transitioning to a whole-school, project-based learning model can be difficult and time-consuming for teachers and staff. Shifting from being a “teacher of content” to being a “facilitator of learning” changes engrained power dynamics with students, as well as approaches to lesson planning. The unpredictability of a project-based environment can be unsettling and physically draining for unaccustomed

teachers. Therefore, it is essential to build in supports such as mentoring sessions, extra planning time, and ongoing professional development.

Students also experience an adjustment period when they arrive at GCE, as school-related habits and expectations are modified. Since the program only starts in Grade 9, students enter the school with years of training in a more traditional “banking” model⁶⁸, where they are not required to participate, and where test grades are the primary measurement of success. On average, students need six months to adapt to the high demands of a project-based setting and GCE’s intimate environment where every staff member knows them and checks in on them. The personalised approach to curriculum is unfamiliar to the majority of new students, and it takes time to build agency and confidence.

On September 20, 2019, GCE Lab Schools students participated in the Global Climate Strike in Chicago as a part of a series of international strikes and protests to demand action be taken to address climate change. The protests took place across 4,500 locations in 150 countries and were a part of the School Strike for Climate movement, inspired by Greta Thunberg. The September 20 protests were likely the largest climate strikes in world history

