

## Creating a Model for Inquiry-Driven Innovation

In 2015, GEMS Education approached Project Zero with the idea for a collaborative research project framed around cultivating a community of innovation throughout the GEMS network of schools in the United Arab Emirates (UAE). Building on Project Zero’s long tradition of studying creativity and innovation, fostering inquiry-based practice, and collaborating with teachers through structured professional learning communities, the two organizations established a project entitled Creating Communities of Innovation (CCI). Over the course of several months, our Project Zero-based research team worked with leadership from GEMS Education’s Innovation, Research, and Development team to envision a collaborative inquiry that would explore how innovative ideas are developed, cultivated, and scaled in schools. This inquiry was also designed to learn more about the personal and professional developments in thinking that educators and administrators experienced as they pursued new approaches to practice within their schools and classrooms.



Christine Nasserghodsi, the Head of Innovation Strategy for GEMS Education, oversaw the project in the UAE. From its very beginning, Christine served as the CCI project liaison and a partner to the Project Zero-based research team in the intellectual and practical development of the project. Christine invited GEMS schools to apply for enrollment in the founding cohort of the study, with seven GEMS network schools in Dubai and Abu Dhabi ultimately participating: GEMS FirstPoint School – The Villa, GEMS American Academy, GEMS Modern Academy, GEMS Wellington Academy – Silicon Oasis, GEMS Wellington International School, Kindergarten Starters, and GEMS New Millennium School – Al Khail. This consortium of schools included one American curriculum school (following the United States’ Common Core State Standards), three British curriculum schools, two Central Board of Secondary Education (CBSE) Indian curriculum schools, and one combination Council for the Indian School Certificate Examinations/International Baccalaureate (CISCE/IB) school. The Project Zero research team comprised two Principal Investigators and Co-Directors, Liz Dawes Duraisingh and Edward P. Clapp, as well as Senior Project Manager Andrea Sachdeva and several student research assistants.

## Starting Out

Within each of the seven participating schools, teachers and administrators submitted applications to be part of CCI **study groups**—groups of several individuals that met weekly for 60-90 minutes to engage in activities and conversations outlined by the Project Zero-based research team. Supported by Christine Nasserghodsi, each participating school made an effort to assemble a study group that represented diversity in terms of the roles that prospective participants played at the school (both teachers and administrators), years of



CREATING THE STUDY GROUP

experience, participants' interests, and classroom subjects taught. Study groups ranged in size from four to nine participants, with a total cohort of 52 teachers across all seven schools. In addition to the weekly school-based meetings, these study groups contributed

to a project-affiliated online platform to share what they were learning and interact with other members of the cohort. They also met quarterly for full-cohort *Learning Community* workshops.



## Establishing Inquiry-Based Practice

For the first six months of the CCI project, study groups used tools and suggested activities provided by the research team to establish and cultivate inquiry-based practice within their schools and classrooms. Members of the study groups began to examine their school contexts, talk with various stakeholders to hear and consider multiple perspectives about teaching and learning at their respective schools, and establish a practice of documentation that would help them reflect on what they saw and heard. Following each weekly meeting, the study groups shared their documentation—including meeting notes, photographs, and personal reflections—with the research team. Building on these

snapshots of what the study groups were learning week by week, the research team created new tools and helped to craft a long-term trajectory for the overall community of study groups. At the end of their first six months of work, study group members began to reflect on what they had learned so far and think about the opportunities and challenges in their

schools that might be best suited for innovation through their involvement in the CCI project. As part of this reflection, the study groups started to trace the development of their CCI work over time in order to track and learn from it in an ongoing way. The study groups spent summer 2016 reading background literature that helped them to gain a better sense of some theories and precedents related to the opportunities and challenges they had identified.

## Finding Focus

Following the summer months, the whole-cohort Learning Community convened in the fall of 2016 to share what they had learned through their summer reading. At this convening, each study group also began to zoom in on an *inquiry focus*—a concrete question or testable proposition that study group members could investigate in their school. Study groups were asked to move beyond nationally-recommended educational goals in order to choose inquiry foci that felt personally important to the group members and also had relevance and importance for the broader school community outside the study group. They also strove to choose inquiry foci that exhibited complexity and would be best investigated over an extended period of time through changes in practices or new strategies, resources, or tools.

BUILDING  
INQUIRY SKILLS

JUNE  
2016

GATHERING  
INSPIRATION

SEPTEMBER  
2016

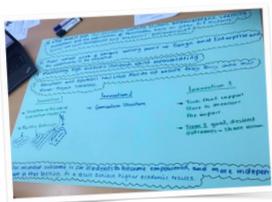
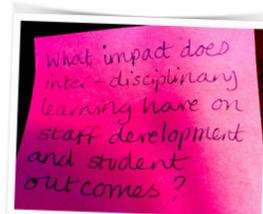
DEVELOPING AN  
INQUIRY FOCUS



## Creating Communities of Innovation | PROJECT STORY



The schools began with a diversity of inquiry foci, ranging from improving school assessment systems, to engaging in more student-centered pedagogies, to making better use of the physical environments around their schools. With these initial ideas in mind, each study group used the CCI resources and tools to refine an inquiry focus that felt relevant to the local school context and what study group members had seen and heard through their initial explorations of inquiry-based practice. The study groups continued to refine their inquiry foci over the course of the coming weeks. Each study group then created a *Theory of Action* diagram that helped them to articulate the connections between current practice at the school, desired long-term outcomes, and the envisioned new practices or approaches that could help them to achieve their stated outcomes. These new practices and approaches crystallized into *innovation projects*—new processes, frameworks, instructional activities, tools, etc. that the study groups introduced into their teaching and learning contexts. The CCI approach to innovation was guided by a “new to you” approach to practice, rather than focusing solely on brand-new and untested approaches to school administration or teaching and learning. In other words, the innovations that were being developed throughout this study were new to the school or to the teacher who was implementing them in practice but may have already been implemented (perhaps even extensively) in other contexts within or outside of the education field.



### Trying It Out

With a draft plan in place, members of each study group started prototyping their innovation projects by trying out short-term experiments in their own classrooms, or by partnering with educators at their schools to pilot-test new practices. In some cases, these pilot tests involved trying out new pedagogical approaches or classroom routines, while in other cases the study groups drafted new frameworks or prototyped classroom tools.

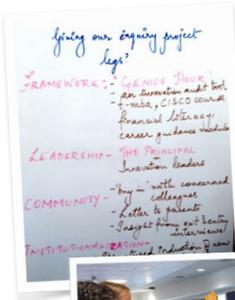
Throughout this period of pilot testing, the study groups drew on their inquiry-based practice skills to collect documentation and other data that helped them capture and learn from their experiments. The study groups also used a suite of data analysis tools (developed by the research team) to identify appropriate indicators of impact from the data they collected, devise a data sampling strategy, and analyze their data. As they gathered for whole-cohort Learning Community sessions, the study groups began to create exhibitions of their work for each other and offer feedback on what other groups might do to continue to iterate on and further develop their innovation projects. The study groups also revisited their Theory of Action diagrams and made tweaks and



refinements based on what they were learning by prototyping their innovation projects in practice. They continued to reflect on the process of innovating by using CCI tools to look back on their overall learning journeys over the course of the project.

### Going Deeper and Broader

As the study groups continued to implement innovation projects in their schools, examine data, and learn from peer feedback, they iterated on their initial ideas and, over time, arrived at innovation strategies that were responsive to their home teaching and learning contexts, driven by purposes and intentions that felt important to the study group members and their schools, and built on multiple perspectives from within and outside of their study groups. Through this process, many study groups also developed a supportive network of peers and advisors within and outside of their schools that helped them to move forward and continually improve and extend their innovation projects.



By this time, about a year since the study groups formed, some innovation projects were beginning to scale throughout the school and even to other schools outside of the CCI Learning Community. At this point, the study groups took a step back to consider how to make their school-based innovations sustainable and more participatory for stakeholders outside of their study groups.

### Where to Next?

By the conclusion of this first phase of the CCI project in December 2017, a new cohort of CCI schools was beginning to form across the GEMS Education network. Some of the founding members of the initial seven schools stepped up to mentor these

new schools and share their experiences, while others began to scale the study group model at their schools in order to engage more teachers in developing their own inquiry-driven innovation projects. Informed by the first two years of work of the founding Learning Community, the research team began to revise and document a CCI model for Inquiry-Driven Innovation, including research-based frameworks, educator tools, and case studies.



APRIL 2017



DECEMBER 2017+