Code to CONNECT Building Relationships and Competencies for Complex Learners

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School District: Niagara Children's Centre School Authority





What We Did

Our belief: ALL students, inclusive of those with the most complex needs, are capable of learning and demonstrating the higher level critical and computational thinking required to be successful with coding and other 21st century technology, given the right support.

Our Goals: The initial intent of our project was to develop opportunities for our students with complex learning needs to connect and develop relationships based upon a shared engagement and interest in coding, robotics, and technology-based activities. We wanted to increase our capacity as a staff to support the learning of our students in these areas. We recognized that this meant first growing our own learning about not only the tools and technology, but also around our own understanding of the skills required to participate in these tasks, and how we could best adapt, accommodate or modify the skills and activities, and document the growth and learning of our complex students in a way that captured their knowledge and understanding.

Our Pivot: As with many projects, we had to pivot and adjust our focus with the restrictions and dynamics in place this year. Our student population is highly medically fragile, and so safety precautions were heightened. Our school enforced strict rules around cohorting, and there was no opportunity for any sharing of materials or collaborative group work as we had envisioned. We also had much of our technology redeployed for remote learners, and so we really had to press pause on the rollout of some of our goals with our students. Our team believes that it actually ended up being a positive for our team. It forced us to take a step back, and prioritize our focus on our own learning and capacity building as educators, prior to rolling out of desired learning with our students.

With a lack of in-person professional development opportunities, and not having the opportunity to have our students interact collaboratively as we would have hoped, we shifted to use the release time we were able to take for our own research, collaboration and growth and make use of some of the funds to engage in virtual professional learning opportunities. We spent the release time engaged in rich discussions, unpacking the new coding and social emotional learning skills embedded in curriculum, transcribing the global competencies into accessible language to help our students understand what was being asked of them, and developing rubrics to assess their progress in this learning. We decided that beginning with "unplugged" coding opportunities based on literature would be a good entry point for many of our students, and worked on building a resource library of activities and resources to share with our staff. We also spent time exploring Micro Bits, Lynx, Scratch, Makey Makey and other resources as a team, to increase our own understanding of the tools and technology, and make us more effective evaluators of the appropriate tools to engage a wide variety of different student learning profiles.



What We Learned

We really learned to critically evaluate the expectations being placed on our students. With a shared belief that our students are very capable of being included in learning opportunities related to coding and computational thinking, we needed to really reflect on how we would go about more explicitly breaking down and teaching the skills that create global competencies, and develop strong social emotional learning skills. Due to the increased amount of challenges that our students face, we wanted to ensure that we were prepared to support their learning with a fulsome understanding of what we were really striving to teach. I think that the time that we took to slow down and really examine what it was that we wanted to accomplish with our students, will only benefit their learning in the long run. It's not just about diving into a cool coding activity, but really reflecting upon the many skills that are required to successfully engage with technology



How We Shared Our Learning With Others

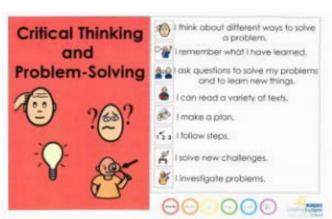
We have created a 21st learning PLC within our school community, drawing other teachers and educational support staff into our project. Our goal is to continue the work that we began with plans to continue creating an activity resource library that all of our classes can access.

As we begin to implement our learning more with the students, we will share with our school community and families via social media. It is also our hope that we will have opportunities to share our work with our coterminous boards next school year when we hopefully return to our regular calendar of professional learning support.



Links to Our Work





Competency Posters

https://drive.google.com/file/d/1yP7sNaH1uhLff_RvGRGQdCMeHM8_-bWc/view?usp=sharing

Rubric Sample - Critical Thinking and Problem Solving

https://drive.google.com/file/d/1en7aSShAQrvu3v-aNRWI5nlzn38NaPyu/view?usp=sharing