Designing 1-to-1 Physical Learning Spaces for Contemporary Learners

First let's talk about the learning, then we'll talk about technology
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Background: What are 1-to-1 learning spaces and why focus on these?

When we think about schools and classrooms, we probably think first about students and their teachers because schools are fundamentally about people. Next, we typically think about the activities students and teachers engage in while they inhabit those classrooms as well as the furniture and equipment, including technology, found within these walls. While these are typical and appropriate reactions, we must also consider another classroom perspective – one that is not often considered but that is just as vital for student success, and that is the vision of space and time in our 21st century 1:1 classrooms. This space and time can be encompassed in the term 'learning spaces.'

A learning space is, " a ***physical and/or virtual*** *space that supports multiple and diverse teaching and learning opportunties and associated pedagogies, including current technologies. Because of technology and the learning resources it provides, students need no longer be constrained by time and space, but instead can participate in seamless learning wherein they learn anytime and anywhere.* (1) A teacher's focus on creating effective 1:1 learning spaces enables them to maximize student learning.

1-to-1 Pedagogy

The goal with this work is not to replace all of traditional classroom settings, but rather to recognize that multiple settings are needed to effectively educate 21st century children. My assertion is that we must start considering the fact that classrooms are designed either to meet structures of the past (lecture focused) or are forward-thinking and that the educators that create these are exhibiting their pedagogical beliefs about how students learn, at what level, and under what means this occurs (for example, listening versus hands on engagement).
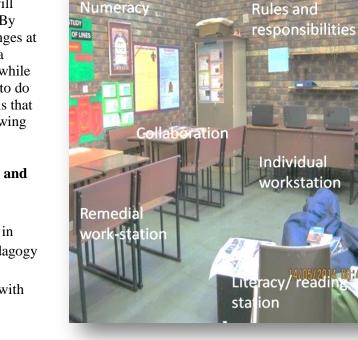
In designing effective 1:1 opportunities, teachers must first work toward linking their pedagogy to the learning spaces they are designing for their classrooms. Teachers must have access to the goals and school vision for implementing 1-to-1 initiatives in order to transition their classrooms. They should also rely upon their *1:1 Pedagogy Statements* that they have completed. Using these resources, identify the "must'have's" you want to include. Teachers will not necessarily be able to design and create effective 1:1 learning spaces from the ground up, however this is ongoing evolutionary work and there are multiple steps and changes that should be made immediately as well as over time.

Next, identify 1-2 design challenges you will address - a suggestion of no more than 2! By focusing on several learning spaces challenges at one time, you will find that you can make a sizeable contribution to the success of 1:1 while also providing students with opportunities to do things they have never done before at levels that were previously not achievable. The following are three learning space design challenges:

- **Challenge 1: Aligning pedagogy and learning spaces**
  - o How should I design my classroom learning spaces in order to reflect my 1:1 pedagogy and vision?
  - o How do I align pedagogy with space and time?
  - o Does my 1:1 vision and pedagogy address factor in the participatory culture in which students live?

- **Challenge 2: Designing for flexibility and sustainability in a seamless setting**
  - o How flexible with time and space can I be within my classroom?
  - o How can students and I modify our learning space quickly in order to meet needs (movement of furniture)?
  - o How does my 1:1 vision and pedagogy include opportunities for students to engage in formal as well informal learning opportunities in a seamless way?
  - o How will I identify space and time practices that should be built to sustainability?

- **Challenge 3: Designing physiscal and virtual learning spaces**
  - o What steps should I take to align the physical and virtual learning spaces in my classroom with my 1:1 pedagogy?
  - o How do the learning spaces in my physical and virtual class encourage a participatory culture? Which should I modify to insure this is the norm?

Moving Forward with this Work – Learning Space Considerations

Your shift to thinking about learning beyond traditional instructional practices and student tasks to include identifying how students will learn through time and space requires a shift in thinking about fundamental organization and systems management. The following chart will enable you to identify your next design steps and applies to both physical and virtual learning spaces:

Learning Space Design Considerations

Design Considerations	My Current Reality and Next Steps
1. Consult your 1:1 vision, goals, pedagogy, and what you want to achieve as you begin to design your learning spaces. Consider the types of movement students will be involved in then identify and create the space and time needed to support this work (group or team collaboration, direct instruction, simulation or exploratory, etc.)	
2. Learning spaces applies to both physical and virtual settings; consider the needs of your students within both.	
3. Consider the three Participatory Culture 'lens' presented earlier. What does the student learning space need to include or look like so students can engage in this manner?	
4. Bring students into the process—ask them for feedback (remember, we live in participatory cultures now and they appreciate, and potentially expect, to contribute-see Shared Beliefs for additional ideas).	
5. Provide learning spaces for both formal and informal learning. Design spaces that 'draw students in;' one student responding in a positive way influences others to do the same.	
6. Design your learning spaces for flexibility. Learning spaces can be fluid…students may be asked to move furniture to support different types of learning experiences and collaborative partnerships.	
7. Establish protocols and norms for your learning spaces (ex: collaboration expectations and norms). Teach your students these and hold them accountable for employing each.	