**Aligning Collaborative Learning Spaces and Common Core for 21st Century Learners**

**Abstract**

This white paper furnished for Camden City Schools by NJIT/Center for Building Knowledge, suggests a district priority and protocol for middle school educators that aligns Common Core learning objectives with mobile Learning Stations, focusing specifically on English Language Arts literacies as defined by the State of New Jersey Department of Education.

**INTRODUCTION**

Preparing students to engage as active citizens to successfully meet the challenges of the global workplace requires that we create dynamic and multilayered learning environments, which require mobile learning spaces.  In middle schools, rotating and mobile multimedia Learning Stations can be employed as activity-centered, often research-based, stations that reinforce and extend learning to further integrate 21st Century life and career skills.  This report for Camden City Schools, furnished by NJIT/Center for Building Knowledge (CBK), suggests a district priority and protocol for middle school educators that aligns the Common Core learning objectives with Learning Stations, focusing specifically on English Language Arts literacies as defined by the State of New Jersey Department of Education.  Primary attention is paid to informational and literary reading, digital literacy, Writers Workshop, and student choice. Guidelines are offered regarding how administrators can best support the Professional Learning Communities that meet to create units and lessons to promote Common Core skill acquisition through independent Learning Stations.  Architectural renderings of the space and furniture are provided as case studies and models--most specifically those explored at Riletta T. Cream Elementary School and East Camden Middle School.  District leaders are encouraged to present these models and findings to district educators meeting in PLCs, with district leaders offering continual, contiguous support during application.  For purposes of this report, and for application, standards for 7th grade will be exclusively referred to; district leaders and educators can easily translate the principles outlined to their respective age groups and audiences.

**PURPOSE**

Learning Research suggests that space design is critical to creating opportunities for student engagement and advancement, and as an institution's pedagogic ideology is embodied in its articulation of space, it is critical that Camden City Schools engage its 21st century learners in an interactive "first-person" learning environment.  Young learners are visually oriented, are highly networked and socially connected, are increasingly mobile and curious, prefer active learning, rely heavily on communications technology to access and engage information, and prefer multitasking as well as discreet, quick, nonlinear investigative experiences.

Learning Stations, facilitated by an educator to encourage authentic and independent learning, respond to these particular and contemporary needs and capacities.  Learning Stations don't simply provide students with essential opportunities for choice, but they additionally grant students autonomy and ownership of their own learning (Gregory & Chapman, 2002).   To be effective, Learning Stations must be designed to meet the needs of all learners and align with the targeted standards of Common Core.  Moreover, the mobility of Learning Stations conform, by intrinsic design, to the high-order thinking skills driven by Common Core.  Learning Stations, as they encourage exploration, collaboration, authentic and independent learning, and student-centered problem solving become primary vehicles for Common Core principles--such as analyzing, evaluating, information acquisition, gathering and engaging, adapting--that call for conceptual and critical thinking.  To this end, the district is encouraged to build on Carol Ann Tomlinson's (1999) identification of differentiation of content, process and product to include how the use of spaces in the classroom might further be differentiated in respect to Learning Stations.  Included are appendices for supporting the translation of existing lesson plans and objectives into 21st century learning stations.

**Essential Artifacts for Learning Stations Workspaces**

- Student Desks/Tables
- Designated Areas of the Classroom (Library/Windows)
- Carpet Squares
- Soft Furniture
- Classroom Corners
- Student-generated spaces
- Clusters of students working at a mobile technology base (smartboard, chromebook or laptop, etc.)

**INTEGRATION OF 21st CENTURY TECHNOLOGIES AND INFORMATION ACCESS**

As per the Camden Commitment Promise #2 to bring 21st learning technologies to the each school building, the district has invested in mobile technologies such as Google Chromebooks and Dell laptops, which prove ideal for Learning Stations.  These can and should be employed with each execution of Learning Station lessons aligned with Common Core.  A traveling and dynamic lab allows for more complex organization of Learning Stations, allowing for more diverse lessons and skill practice.
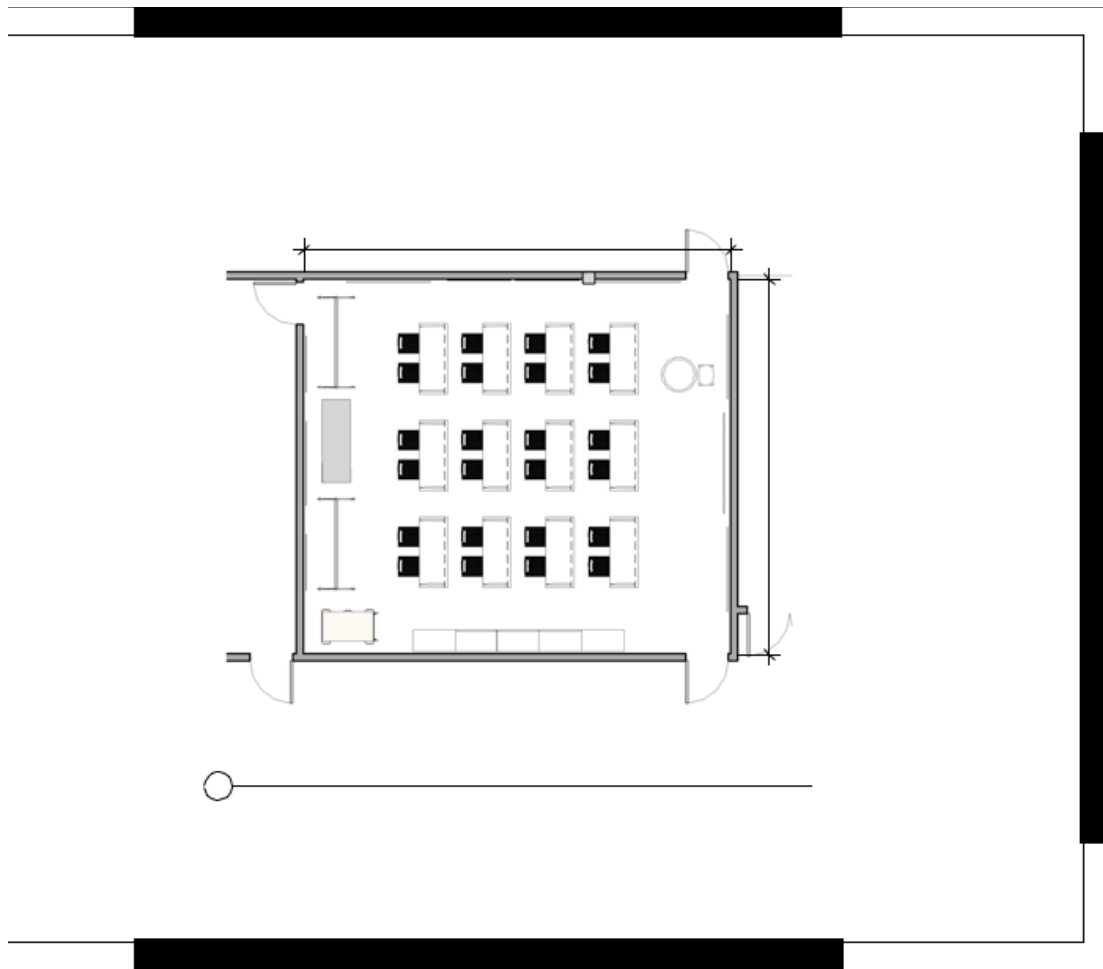
**LEARNING STATION MODELS/East Camden Middle School**
A collaboration between Camden City Schools, The Center for Building Knowledge, and intern architects at NJIT, this report offers various models for organizing mobile learning centers.
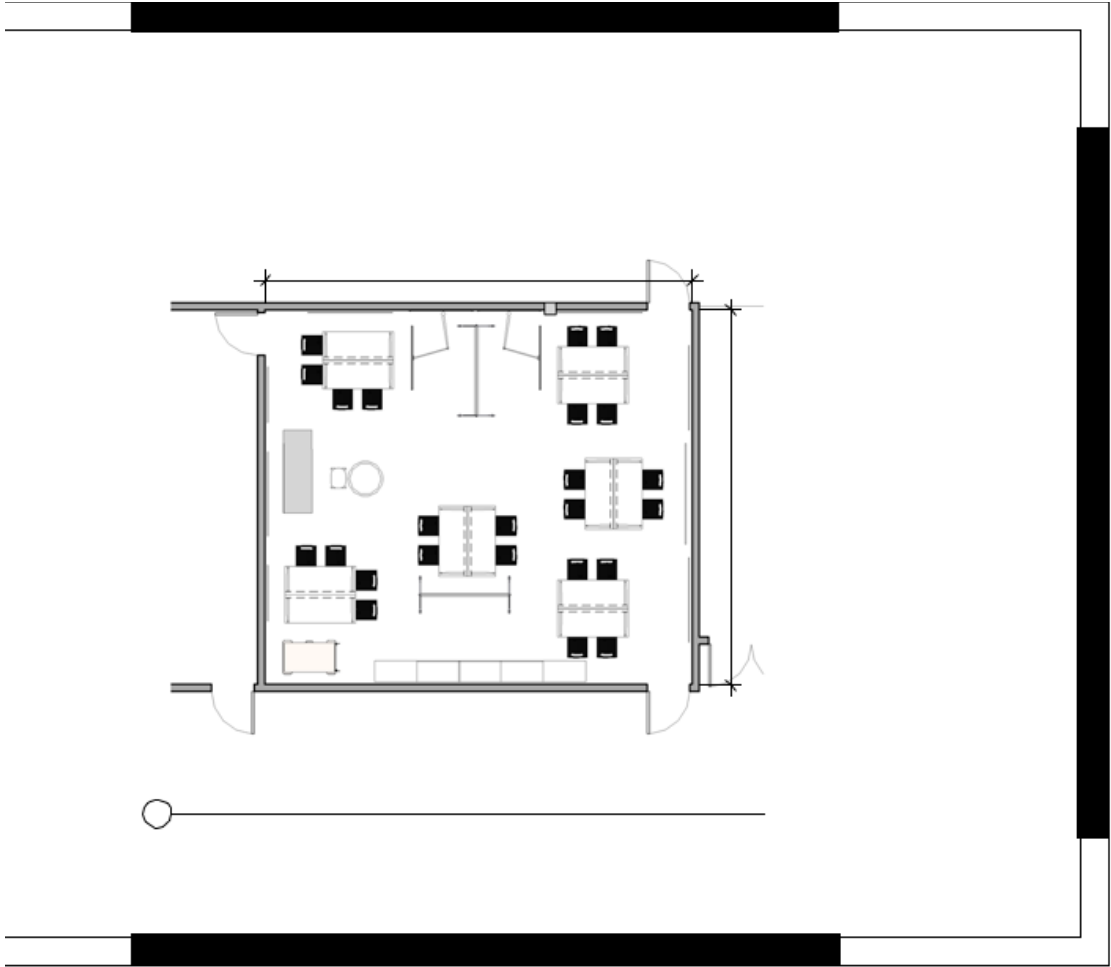
**East Camden PD Lab 214**
The East Camden Middle School pilot site offers a space for professional development, modeling lessons that teachers adapted directly to the classroom.  A more traditional configuration, as modeled in East Camden/Fig. 1, might be replaced and complicated to promote teacher-to-teacher and student-to-student engagement and autonomy.  School officials at East Camden Middle School reported particular success with the configurations seen in Fig. 2 and Fig.3.
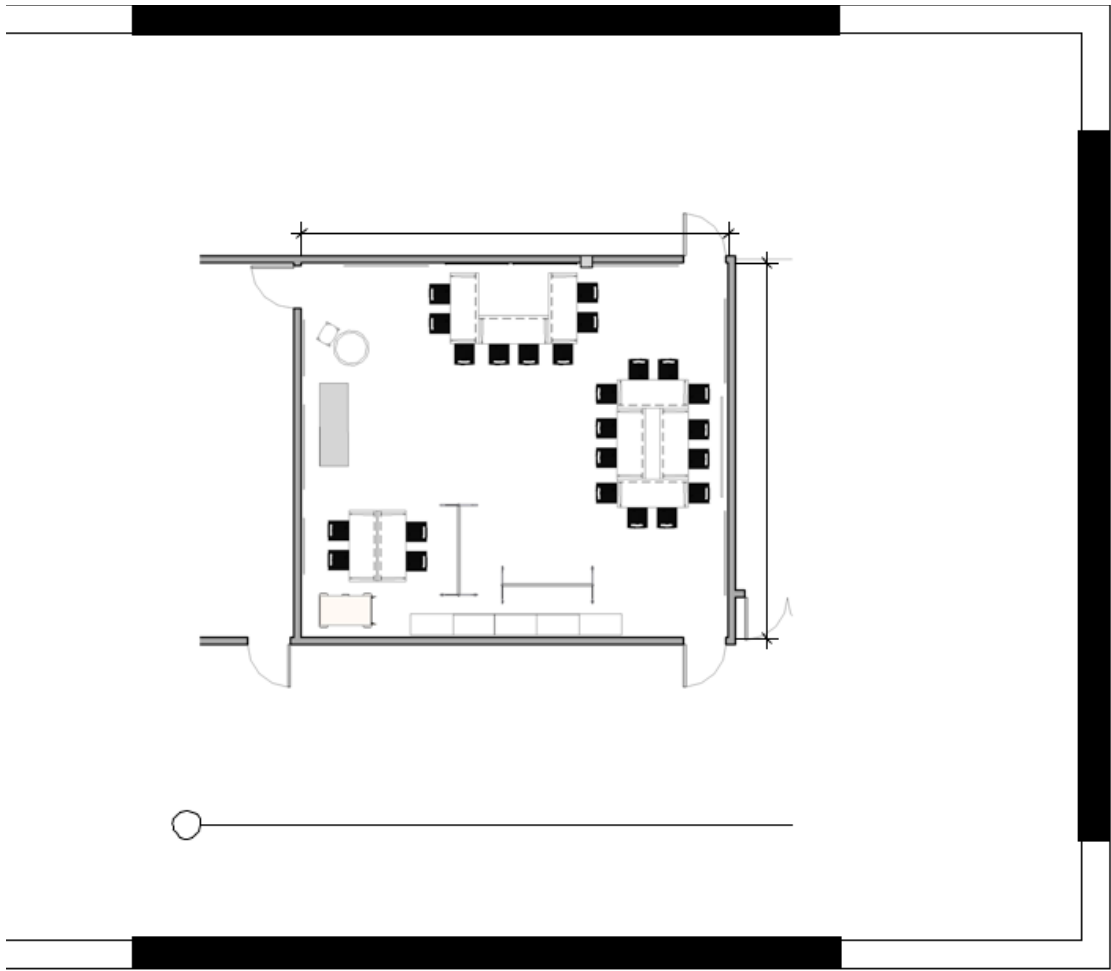
**East Camden PD Lab 214/Fig. 1**



**East Camden PD Lab 214/Fig. 2**
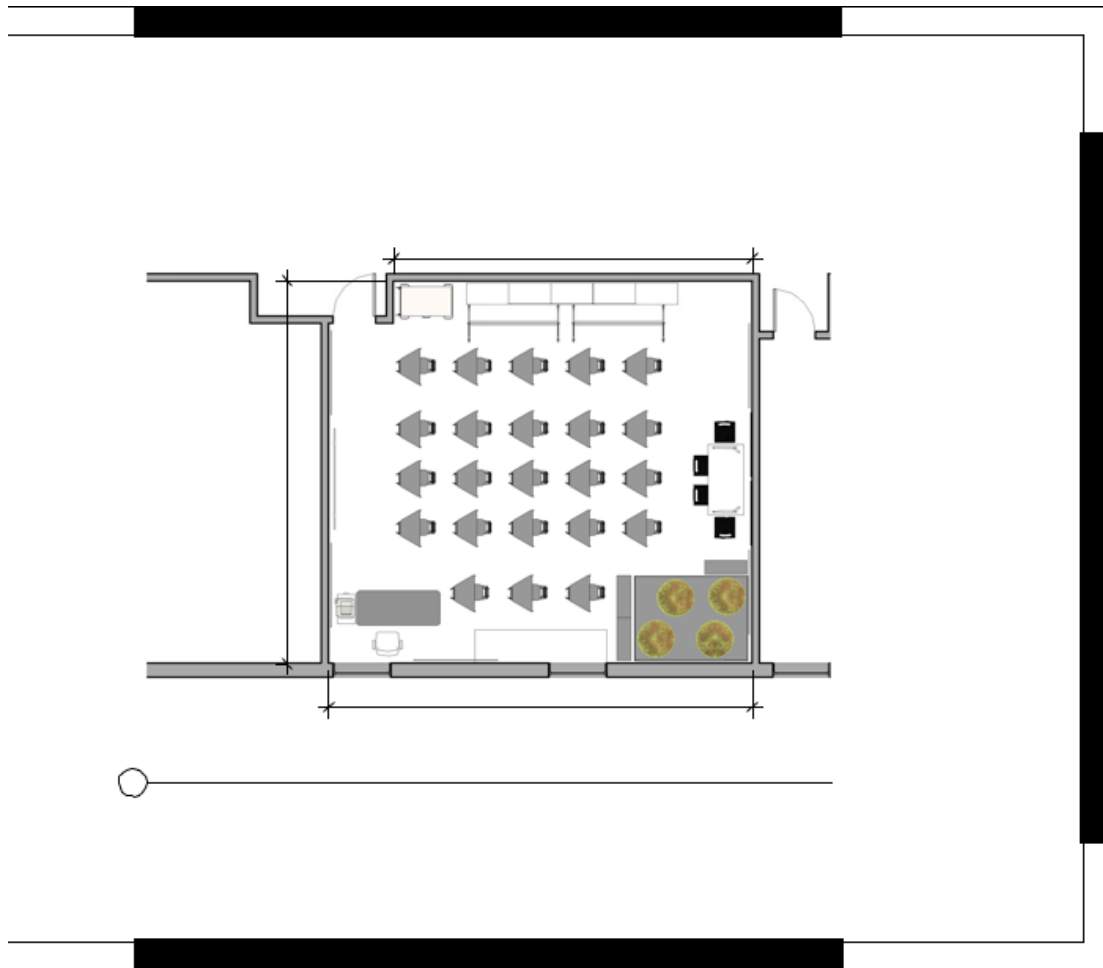
**East Camden PD Lab 214/Fig. 3**

**LEARNING STATION MODELS/Riletta T. Cream Elementary School**
A collaboration between Camden City Schools, The Center for Building Knowledge, and intern architects at NJIT, this report offers various models for organizing mobile learning centers.
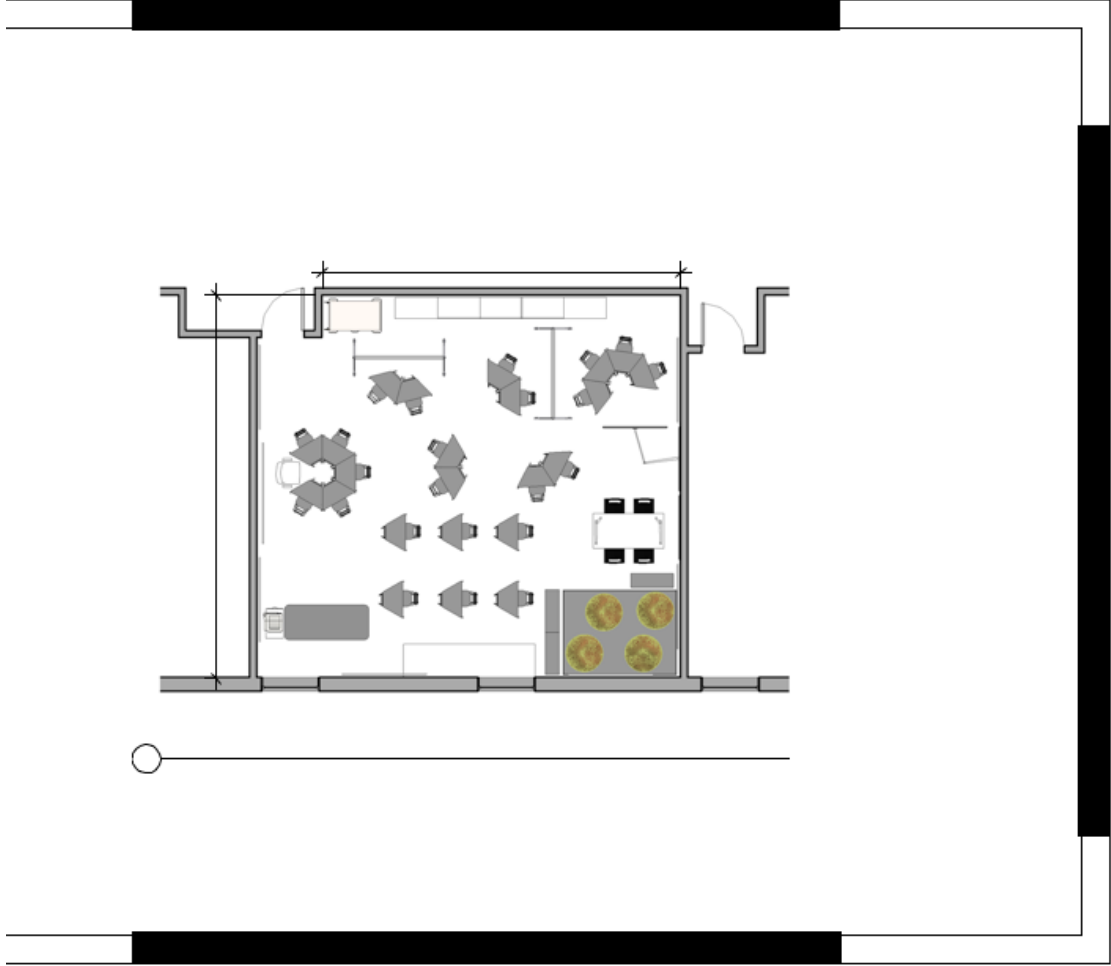
**Riletta T. Cream Elementary School Room 312**
At Cream, the pilot site reflected many of the classroom spaces seen throughout the district. The more traditional configuration modeled in East Camden/Fig. 1 might be replaced and complicated to promote student-to-student engagement and autonomy at learning stations. School officials reported particular success with the configurations seen in Fig. 2 and Fig.3.
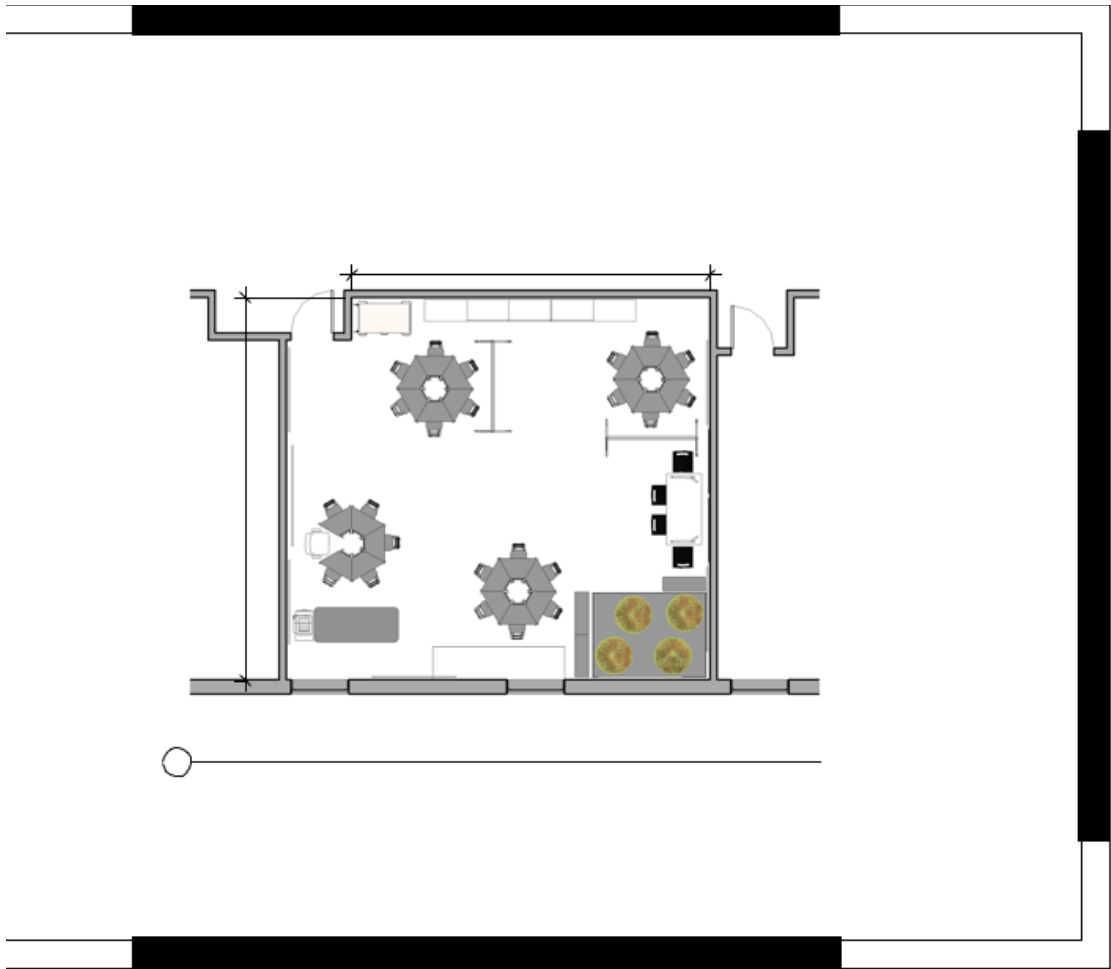
**Riletta T. Cream 312 Pilot Classroom/Fig. 1**

**Riletta T. Cream 312 Pilot Classroom/Fig. 2**

**Riletta T. Cream 312 Pilot Classroom/Fig. 3**

**ENGLISH LANGUAGE ARTS LITERACIES & LEARNING STATIONS**

**Writing Learning Stations**
Learning Stations are ideal for the writing process, which relies on a writer's ability to independently advance, revise, and revisit a given piece in a flexible but supported environment. Because writing is a recursive and nonlinear process, Learning Stations allow students to participate authentically in their zones of proximal development, offering freedom of engagement. Supported by an educator, students at various Writing Learning Stations might engage in generating ideas, collecting entries and artifacts (through tradition and digital text stations), planning drafts, revising, conferencing with peers or instructors, and publishing. Students might work at learning stations independently or in small groups in response to an activity that is designed, for example, to respond to CCSS.ELA-LITERACY.W.7.7, which asks students to "conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation." Similarly, another station might support CCSS.ELA-LITERACY.W.7.8, which requires that students "Gather relevant information from multiple print and digital resources."

The National Writing Project and The Writing Workshop--a method of instruction developed by Lucy Calkins and educators involved in the Reading and Writing Project at Columbia University--each offer dynamic models that align with Common Core standards for writing and can be immediately applied to Learning Stations. ReadWriteThink exists as an exceptional resource for district leaders who want to offer additional support during application of Writing Learning Stations. {See List of Resources}

**Reading Learning Stations**
Expansion and a broadening of the Reading strand to emphasize Informational Text, in addition to Literature, suggests that Reading Learning Stations are particularly crucial for student learning and investigation. Both divisions of the Reading strand asks that students engage in analyzing, citing, comparing/contrasting, inferring, determining--all of which are dynamic cognitive processes that are not addressed by passive learning or through modes such as lecture. Reading Learning Stations offer opportunity for students to engage in inquiry projects, authentic tasks, and reading for pleasure, language acquisition,

A Learning Station dedicated to reading might ask students, as per CCSS.ELA-LITERACY.RI7.7, to individually or in small groups respond to a text or audio, video or multimedia translation of a text by comparing/contrasting or analyzing the artifacts portrayal of the subject. A group, for example, might listen via headphones to the delivery of a civil rights speech and then respond to a teacher's prompt or scaffold.

**Speaking/Listening Stations**

An essential component of Learning Stations is the free exchange of ideas. Discussion-based learning remains foundational for collaboration, as argued by social constructionist Lev Vygotsky. "Language is the main tool that promotes thinking, develops reasoning, and supports cultural activities like reading and writing," (Vygotsky 1978). Discussion--scaffolded and with purpose--allows for meaningful exchange and deeper understandings. In Learning Stations, teachers can allow for some flexibility and independence while rotating to ensure that students are able to focus on a given task.

The particular configurations defined in the models for Cream and East Camden Middle School grant educators the opportunity to support CCSS.ELA-LITERACY.SL7.1, engaging students "in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly." Learning Stations promote dialogue that whole-group discussions cannot always support, and, consequently, are better able to promote the skills cited in CCSS.ELA-LITERACY.SL7.1.C, which requires student to "pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas," as well as CCSS.ELA-LITERACY.SL7.1.D, which asks that students "acknowledge new information expressed by others and, when warranted, modify their own views." This report recommends that students at Stations are given the opportunity not only to discuss a lesson's content, but to reflect on their learning with their peers through group discussion.

**INTEGRATION OF STRANDS**

While this tool offers discreet consideration for Learning Stations on Writing, Reading, and Speaking & Listening, none should be employed to the exclusion of others. In fact, a hybridized model is highly encouraged, as literacy as defined by Common Core suggests a dynamic integration of each strand. District Leaders might occupy some planning time in PLCs to foster a discussion among educators as to how to implement, manage, and facilitate concurrent strands, pairing, for example, Writing with Reading or Reading with Speaking & Listening.

**Extension: Media Centers**

Middle School Learning Commons can be created in either a classroom space or traditional media center. Learning Commons are modeled on college centers and as such offer opportunities for built-in collaboration simply through sheer adjacencies. Renovating a currently inhabited academic space from the ground up allows for adapting a traditional school space to Project-Based Learning and technology and information literacies, as demonstrated by the San Francisco Friends School, located in the Mission District of the city.

**Appendix**

Blooms Taxonomy Question Wheel {Appendix A}
Translating a Lesson for 21st Century Learning {Appendix B}
Learning Center Design Template {Appendix C}

## List of Resources

**Student Learning**
**21st Century Learners**
http://edglossary.org/21st-century-skills/

**Common Core Standards**
http://www.corestandards.org/ELA-Literacy/W/6/

**Designing Collaborative Learning Spaces for 21st Century Learners**

**Leading the Transition from Classrooms to Learning Spaces**
https://net.educause.edu/ir/library/pdf/NLI0447.pdf

**The Center for Teaching and Learning:  Collaborative Learning Spaces**
http://teaching.uncc.edu/learning-resources/articles-books/best-practice/collaborative-learning-spaces

**Redesigning Learning Spaces for the 21st Century**
http://home.edweb.net/re-designing-learning-spaces-21st-century/

**Designing Spaces for Effective Learning**
http://www.jisc.ac.uk/media/documents/publications/learningspaces.pdf

**Case Study:  Irvington Learning Stations**
http://irvington.k12.nj.us/depts/sdv/post_sub/12-13_diff_instr_handbook.pdf

**Teacher Resources**

**Ten Steps to Transforming Past Lessons for 21st Century Learners – Jukebox to iPod!**
http://www.techlearning.com/Default.aspx?tabid=67&EntryId=3317

**Learning Centers:  A Research-Based Approach**
http://www.ourclassweb.com/sites_for_teachers_new_learning_center_research.htm

**ReadWriteThink** http://www.readwritethink.org/

Gregory, Gayle, and Carolyn Chapman. *Differentiated Instructional Strategies: One Size Doesn't Fit All.* Thousand Oaks, CA: Corwin, 2002. Print.

Vygotsky, L.S. (1978) **Mind in Society:  The development of higher psychological processes.**  Cambridge, MA:  Harvard University Press.