What is L.I.T.T.O.?
Developing Master Learners in the 21st Century Classroom

SUMMARY

L.I.T.T.O. stands for learning, independence, teamwork, time-management and ownership. This author-designed innovation teaches fifth graders to take charge of their own learning while the teacher integrates 21st century cognitive and affective skills across the curriculum.

Effective, active engagement in the learning process is the key to academic success in our highly complex and interconnected global society. The successful student in the 21st century must move beyond the traditional system of rote memorization, right or wrong answers, single perspectives, and teacher-centered instruction. Twenty-first century students must become inquisitive self-directed learners who actively question and passionately search for ways to integrate the knowledge and information shared by others into their own thoughts and objectives.

The 21st century student is expected to demonstrate learning and innovation skills; information, media and technology skills; as well as life and career skills. These include: critical thinking, creative thinking, collaborating, communicating, information literacy, media literacy, technology literacy, flexibility, initiative, productivity, and leadership (Partnership for 21st Century Skills — A Resource and Policy Guide, 2008).

The challenge for educators at the elementary level is how to implement practices that will help children develop these skills in meaningful ways while at the same time meeting the expectations of the Common Core standards. L.I.T.T.O. is one answer. In L.I.T.T.O. a student is never just learning one thing at any one time. As with the old LOTTO game of my youth, each task, each interaction, and each reflection is a part of the larger picture of every child's holistic development as a master learner in the 21st century.

The activities on a given L.I.T.T.O. matrix contribute to a student's academic growth and learning in different and engaging ways based on the Common Core standards. The way in which they approach these tasks combines practicing of academic skills with

Jean Hoins is a National Board Certified Teacher with a middle child generalist certificate and is a certified building-level administrator. Hoins has worked for 19 years in the classroom and has always been active in the development of district curriculum and assessment. She is currently a fifth-grade teacher in Ballston Spa.

Jean Hoins, Ballston Spa Education Association

developing interpersonal capabilities and metacognitive knowledge. This is accomplished through the use of weekly reflections on learning (Appendix 6), meetings and conferences, and rubrics based on the Ballston Spa School District Gradation Competencies (Dragone, Turner, & Smith, 2009) that assess academic and interpersonal behaviors.

Background

Research clearly shows that learners of all ages benefit from the integration of academic tasks and activities that require metacognition, or the reflection on one's learning behaviors and processes. "In this rapidly changing world, the challenge of teaching is to help students develop skills which will not become obsolete. Metacognitive strategies are essential for the 21st century. They will enable students to successfully cope with new situations" (Blakey & Spence, 1990).

That is where L.I.T.T.O. comes in. The ideas upon which L.I.T.T.O. was developed are not new, they combine ideas from Susan Winebrenner's "Teaching Gifted Kids in the Regular Classroom," published initially in 1992 (Winebrenner, Teaching Gifted Kids In Today's Regular Classroom, 1997). This work was extended to include considerations for the learning styles and challenges faced by children who have grown up in a culture of poverty, based on the works of Ruby Payne (Payne, 1996), who provides specific strategies for managing the development of cognitive strategies and learning process. "The support these students need are cognitive strategies, appropriate relationships, coping strategies, goal-setting opportunities, and appropriate instruction in both content and discipline" (Payne, 1996, p. 107). Payne's work led to the realization that the approaches that were intended to target gifted students were, in fact, even more appropriate for students from impoverished backgrounds and, indeed, equally beneficial for all regular education students.

Carol Ann Tomlinson's "Leading and Managing a Differentiated Classroom" (Tomlinson C. A., 2010) and professional training in 2001 on the responsive classroom-supported strategies for

L.I.T.T.O.

L ...stands for learning and encompasses ALL learning – academic, interpersonal, and metacognitive.

I ... represents the independence that is learned through practice, reflection, organization and increased feelings of competence.

T ...represents teamwork to emphasize the necessity for collaboration and development of interpersonal skills.

T ...is for time-management strategies which are integral academic and life skills underlying the 21st century framework.

O ...represents the responsibility for the ownership of one's learning in all aspects of growth and development.

Figure 1

L.I.T.T.O. Rubric

Use this rubric to reflect on your work.
Celebrate your successes and target areas
for improvement in the coming week.

Competency	4	3	2	1 – Meet with Teacher
Time Management • Self-directed Learner • Academically Skilled • Productive Worker	**ALL** of the requirements of each task have been thoroughly met with **exceptional** care, accuracy and attention to detail.	**ALL** of the requirements of each task have been met.	**SOME**: You are missing one or more of the requirements, OR the requirements of one or more individual tasks have not been thoroughly met.	**Fewer than half** of the requirements have been met, OR the requirements of three or more individual tasks have not been thoroughly met.
Effort • Academically Skilled • Productive Worker	**ALL** individual projects demonstrate **exceptional** effort and care. Work is **exceptionally** neat and detailed.	**MOST** individual projects **consistently** demonstrate effort and care. Work is **consistently** neat and detailed.	**SOME** individual projects demonstrate effort and care. Work is **inconsistently** neat and detailed.	Please work hard on demonstrating effort and care. Work is **very difficult to read**
Information • Information Manager • Effective Communicator	Information is **exceptionally** clear & correct.	Information is **consistently** clear & correct.	Information is **inconsistently** clear & correct.	Please work on making sure that your Information is clear and correct.
	Work demonstrates the communication of **exceptional** reflective thought and purposeful engagement with the text.	Work **consistently** demonstrates the communication of reflective thought and purposeful engagement with the text.	Work **inconsistently** demonstrates the communication of reflective thought and purposeful engagement with the text..	**Work on** demonstrating the communication reflective thought and purposeful engagement with the text.
Independence • Self-directed Learner • Academically Skilled • Productive Worker	You are "on task" and focused on doing your best. You make good decisions about your learning.	You are **consistently** "on task" and focused on doing your best. You make good decisions about your learning.	You are **inconsistently** "on task" but you need to really focus on doing your best without distraction. Work on making good decisions about your learning.	You need to focus on doing your best without distraction. Work on making good decisions about your learning.
	Work demonstrates **exceptional** self-direction and/or productive collaboration.	Work **consistently** demonstrates self-direction and/or productive collaboration.	Work **inconsistently** demonstrates self-direction and/or productive collaboration.	**Frequent redirection** is required - self-direction and/or productive collaboration are not demonstrated.
Language Usage • Effective Communicator	You **always** do your best to use correct spelling and punctuation in context. Your writing is **always** thoughtful and reflective.	You **consistently** do your best to use correct spelling and punctuation in context. Your writing is **consistently** thoughtful and reflective.	You **inconsistently** use correct spelling and punctuation in context. Your writing is **inconsistently** thoughtful and reflective.	You **need to work** on correct spelling and punctuation in context. You need to work on making your writing more thoughtful and reflective.

designing a differentiated classroom, including the assessment of individual student's learning and development (Northeast Foundation for Children, Inc, 2014). Additionally, Regie Routman's book "Conversations," (Routman, 2000) defined the role of the teacher as a learner and mentor and provided myriad activities for classroom practice based on modeling the behaviors of master learners in responsive and reflective ways. These works particularly inspired me to practice a child-centered approach to learning by providing models that could be responsive to individual students while at the same time being academically challenging.

Winebrenner first introduced me to the idea of choice menus, or what she called "Extensions Menus." These menus were offered to gifted students who had completed assigned work in a given content area. She also described the use of "Product Choices Charts," which allowed students to demonstrate mastery of content in a variety of formats (Winebrenner, Teaching Gifted Kids in the Regular Classroom, 2001, pp. 79-144). Her work demonstrated the effectiveness of choice in the development of active engagement and ownership.

Tomlinson expressed the belief that "A teacher who honors the individual seeks to understand each student's particular progression of needs and to address those needs in a way that leads to both personal and academic growth" (Tomlinson C. A., 2010, p. 39). This belief is consistent with the premises supporting current trends in individualized instructional practices and many of the underlying beliefs that are at the foundation of the Framework for 21st Century Learning. In a 2011 presentation, Tomlinson commented on the relationship between differentiation, metacognition, and 21st century learning. "To solve the 21st century's challenges we will need an education system that doesn't focus on memorization, but rather on promoting those metacognitive skills we need if we perceive that our learning is not going well" (Tomlinson & Parish, Differentiating Instruction and 21st Century Skills: Preparing all Learners for the World Ahead, 2011, p. 6).

L.I.T.T.O. provides opportunities for students to think about their learning on a daily basis not only in school, but also in their work outside of school through the connection between the classroom work and the Reader Response Notebook entries completed in preparation for the next day's discussion and classroom tasks. Finally, the Responsive Classroom training that

What is L.I.T.T.O.? Developing Master Learners in the 21st Century Classroom

Process goals, in addition to content goals, must be established and evaluated with students so they discover that understanding and transferring thinking processes improves learning.

preceded the development of L.I.T.T.O. introduced several guiding principles for the development of a classroom community that would support student learning. Among these were the principles that:

- The social curriculum is as important as the academic curriculum.

- How children learn is as important as what they learn.

- The greatest cognitive growth occurs through social interaction.

- To be successful academically and socially, children need a set of social skills: cooperation, assertion, responsibility, empathy, and self-control (Northeast Foundation for Children Inc., 2014, p. 1).

Together these various philosophies and practices combined and modified over time have supported the transition to a child-centered classroom community that supports the intentions of the 21st Century Framework and the development of master learners at the elementary school level. Continued research supports the emphasis on self-direction through reflection (metacognition), collaboration (interpersonal skills), and differentiation to encourage students of abilities and backgrounds to actively engage in learning.

Over the years L.I.T.T.O. has adapted to the New York State Standards, the Common Core Standards, and now, the Framework for 21st Century Learning. Change is constant in the world of education and our global reality. The integration of these experiences resulted in the evolution of L.I.T.T.O. and a practice with an emphasis on the development of the student's awareness of academic, interpersonal, and metacognitive behaviors that can enable them to effectively adapt to and embrace change with agility and confidence.

The potential for this model is virtually unlimited and adaptable to changes in content and standards. "Problem-solving and research activities in all subjects provide opportunities for developing metacognitive strategies. Teachers need to focus student attention on how tasks are accomplished. Process goals, in addition to content goals, must be established and evaluated with students so they discover that understanding and transferring thinking processes improves learning" (Blakey & Spence, Developing Metacognition, 1990, p. 4).

Figure 2 provides an example of a science L.I.T.T.O. intended to provide experience with informational text in support of a science ecology unit. L.I.T.T.O. matrices (see appendices) have been developed to meet instructional objectives in different content areas to meet the rigorous Common Core Literacy Standards and to provide access to content knowledge and expression in a variety of formats.

Each L.I.T.T.O. integrates a variety of components and tasks across the content area in order to build a sense of the interconnectedness of academic and content area disciplines. The L.I.T.T.O. program includes the regular use of:

■ writer's notebooks and writer's workshop tasks

■ interactive read-aloud

■ reading response journals – tic-tac-toe and quartering the story

■ daily sharing and conferencing

■ content area journals, tasks and research projects

■ technology

■ teacher-selected and student-selected texts — narrative and expository

■ multi-dimensional rubric assessments

■ reflection on learning

By its very nature, L.I.T.T.O. is responsive to the ever-changing needs of all students in the 21st century. It is also intended to develop a learning partnership between the teacher who also practices the behaviors of a master learner, and the students in order to form a supportive and challenging community of learners focused on practice, reflection and growth. The L.I.T.T.O. experiences help young

Figure 2

LITTO – Informational Text - SCIENCE
Name: _____

Directions: Complete each of the activities in the boxes below in any order you want. You may work with people in your group, when appropriate. Make sure put your work in order and hand it in on Friday.

2. CLOSE READING	2. READING – Responding to Informational Text Questions	3. WRITING/TECHNOLOGY
Read the " Animal Kingdom" Text. Complete an "Informational Text" Quartering the Story.	Read "The Hunt for Pythons", complete the multiple choice questions	Use the links on my website to find and article about another invasive species in the United States. Complete a "Reading for Information Sheet.
1 2 3 4	1 2 3 4	1 2 3 4
4. CLOSE READING	**FREE SPACE**	**1. WORD STUDY**
Complete the "Detail and Topic" comprehension sheet for "The Hunt for Pythons"	Please take the time to make sure that your work is of the highest quality. Meet with a classmate to review each other's work. Handwriting will be taken into account as indicated on the LITTO rubric.	Find four new vocabulary words in "The Hunt for Pythons". Use a dictionary to find the correct definitions and use the word in your own sentence on the vocabulary sheet.
1 2 3 4		1 2 3 4
6. Compare & Contrast WRITING	**7. Informational WRITING**	**7. READING**
Write a Compare and Contrast Essay comparing the python invasion to the invasion by the species you learned about on my website. Use the essay template to plan your writing.	Complete the "Built to Hunt" activity in Time for Kids.	Read the article on "Earthworms" Complete an "Informational Text" Quartering the Story.
1 2 3 4	1 2 3 4	1 2 3 4

4	**Exceeds Proficiency Standard** Student Performance demonstrates a thorough understanding of the ELA knowledge and skills expected at this grade level.
3	**Meets the Proficiency Standard** Student performance demonstrates an understanding of the ELA knowledge and skills expected at this grade level..
2	**Meets the Basic Standard** Student performance demonstrates a partial understanding of the ELA knowledge and skills expected at this grade level.
1	**Below Standard** Student performance does not demonstrate an understanding of the ELA knowledge and skills expected at this grade level.

students develop an awareness of the habits of master learners and the opportunity to integrate those habits into their own practices. This is accomplished through daily classroom meetings, small-group and individual

What is L.I.T.T.O.? Developing Master Learners in the 21st Century Classroom

Effective, active engagement in the learning process is the key to academic success in our highly complex and interconnected global society.

conferences, reading and writing response notebooks, and teacher-student collaboration on tasks. The teacher communicates the idea that there is always more to learn, many ways to learn, and many ways to express what has been learned.

Thinking About Choices

Numerous studies have shown that opportunities to express preferences and make choices lead to greater motivation, academic gains, increases in productivity and on-task behavior, and decreases in aggressive behavior. Similarly, researchers report that student participation in goal setting leads to more positive outcomes (e.g., higher commitment to a goal and increased performance) (UCLA Center for Mental Health in Schools, 2008, pp. 15 - 16).

This approach to learning helps students actively practice making choices about the management of their learning in order to be effective, productive master learners. L.I.T.T.O. asks students to constantly think not only about the work they are doing, but about HOW they are doing it. (See rubric Figure 1.) Effective, active engagement in the learning process is the key to academic success in our highly complex and interconnected global society.

Successful students in the 21st century must become inquisitive self-directed learners who actively question and passionately search for ways to integrate the knowledge and information shared by others into their own thoughts and objectives. Among other things, a master learner is a student who is:

1. *Inquisitive.* Master students are curious about everything, and ask questions that generate clarification, which can lead to a better understanding of the material.

2. *Able to focus attention.* Master students become absorbed in the process or activity and keep their attention absolutely focused in the here and now.

3. *Able to organize and sort.* Master students can take a large body of information and sift through it to discover relationships. They can play with information; organize pieces of data by size, color, order, weight, and other categories.

4. *Competent.* Master students are masters of skills. When they learn formulas, they learn them so well, they become second nature.

5. *Self-questioning.* Master students are willing to evaluate themselves and their behavior. They regularly examine their lives (Ellis, 1985, pp. 29-33).

L.I.T.T.O. encourages a classroom culture of active engagement in the process of becoming a master learner by asking students to constantly think about how they are approaching their academic work. L.I.T.T.O. emphasizes an ongoing focus on each student's academic and behavioral choices (Figure 3) and the results of those choices as evidenced in their work. Students have the opportunity to observe their classmates and teachers to see the ways in which other learners approach tasks. This provides models for behavior and options for future conduct. It is all part of an ongoing process of reflection and growth that involves both an individual and collective awareness of decisions.

A student's ongoing experience with academic choice leads to the development of self-direction, interpersonal skills and metacognitive strategies. In the L.I.T.T.O. environment, a student becomes a more proficient learner through the regular practice of choice and active reflection on the consequences of each choice. (Figure 3) Responsible choice generates ownership of the learning processes and outcomes. For example, on reflection a student wrote: "The most challenging task was the quartering the story because it took me a while to do the task. I also talked to my friends a lot while working which slowed me down. I will overcome that challenge by working by myself or sitting with my friends but not talking so much." The reflective piece encourages each student to evaluate the effectiveness of their choices as evidenced by the quality and completeness of their work.

Elaine Blakey and Sheila Spence of the Educational Resource Information Center (U.S. Department of Education, 2008) identified several strategies for developing metacognitive behaviors in students. Among these they included planning and self-regulation, which require an awareness of and responsibility for the consequences of one's actions and behaviors.

Students must assume increasing responsibility for planning and regulating their learning. It is difficult for learners to become self-directed when learning is planned and monitored by someone else. Students can be taught to make plans for learning activities, including estimating time requirements, organizing materials, and scheduling procedures necessary to complete an activity (Blakey & Spence, Developing Metacognition, 1990, p. 2).
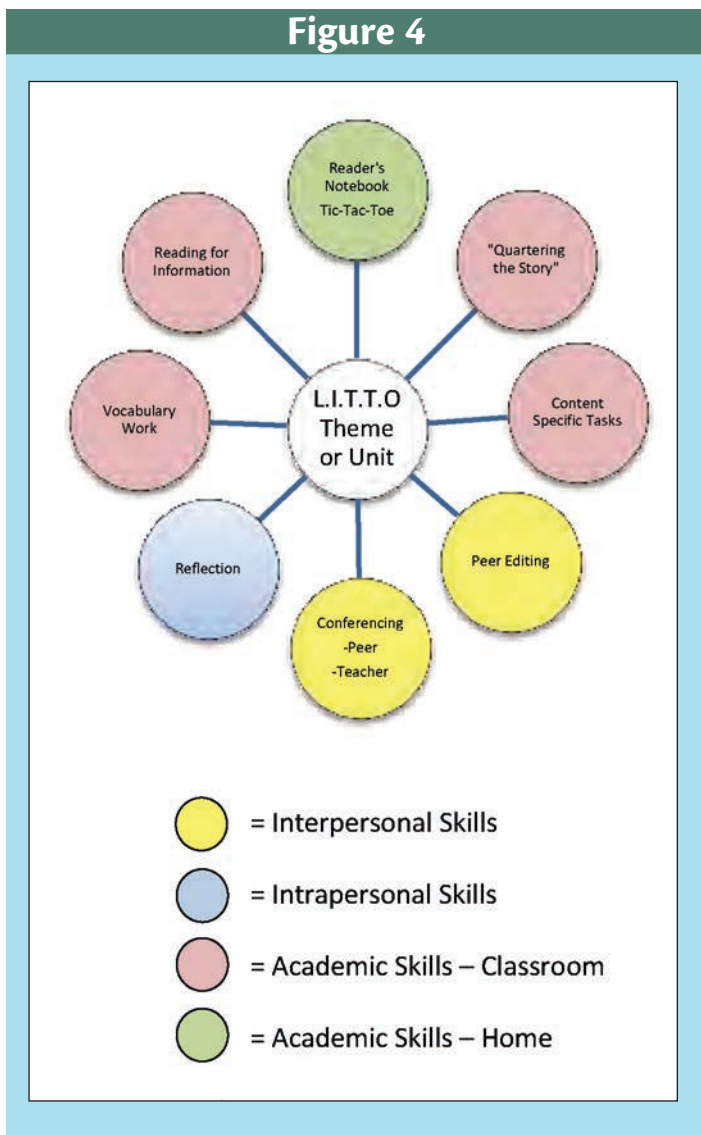
Figure 3

As a Master Learner I will choose:

- which tasks I will work on

- when I work on them

- where I will work on them

- who I will work with

- how I will know that my work is "good"

- who to ask for help

- where to keep my materials

- which resources I will use

- which tools I will use

- when I will ask for en editor to review my work

- when my work is ready to hand in

- how I can continue to reflect on my work and set goals for the next week

Figure 4

Reader's Notebook Tic-Tac-Toe

Reading for Information

"Quartering the Story"

Vocabulary Work

L.I.T.T.O Theme or Unit

Content Specific Tasks

Reflection

Peer Editing

Conferencing -Peer -Teacher

= Interpersonal Skills

= Intrapersonal Skills

= Academic Skills – Classroom

= Academic Skills – Home

L.I.T.T.O. requires each student to engage in responsible decision-making processes on a daily basis. These decisions extend beyond the classroom to the responsible completion of reading and responding to tic-tac-toe questions in a reader's notebook. The daily sharing of responses and discussion of reading help to foster a community sense of expectation and support. Students learn from each other and about each other as they share their responses to text. They practice thinking about other students' work and develop the capacity to integrate methods and approaches into their own.

The integration of tasks, frequent conferencing and sharing, peer editing, the responsibility for honest dialogue about work and effort, coupled with opportunities for revision and modification, cause each student to identify personal strengths and areas for improvement in meaningful and productive ways. They recognize that every other student is doing the same and that they can support each other in their efforts.

How Does L.I.T.T.O. Work in the Classroom?

Matrices are developed based on Common Core standards that are associated with targeted areas or units of instruction. While the tasks may change from week to week, the expectations of responsibility and effort as described in the rubric (Appendix 1) remain constant, as does the expectation of thoughtful reflection. The L.I.T.T.O. may include explorations of literary genre, literary elements, and author studies, units based on the navigation of informational text or topics in math, science and social studies. The L.I.T.T.O. matrix (Figure 4) is accompanied by materials, directions, tasks, or projects that are associated with specific sections of the matrix. If necessary, mini lessons may be associated with some of the items in the matrix.

Whole group direct instruction is at a minimum except when introducing a new L.I.T.T.O., when there is an expressed need for clarification, or when specific skills are introduced.

Instead of whole group instruction, question and answer sessions, sharing, meetings and conferencing with individual students or small groups are integral parts of L.I.T.T.O.

Figure 5 shows an example of a narrative text L.I.T.T.O. that explores the literary concepts of identity and conflict. For this unit, students may select any work of narrative fiction with the help of the school library media specialist. The study includes a variety of books at various levels of difficulty and an ongoing read-aloud text that explores character identity development through conflict. The unit requires nightly reading and responses to tic-tac-toe prompts in a response journal. These journal responses are shared in the morning in a whole group setting or within the literature circle group studying a particular text.

All of the student work materials are housed in a Desk Apprentice which is a revolving counter-top open filing system. The materials are sorted in folders with numbers that match each section of the L.I.T.T.O. matrix. The L.I.T.T.O. tasks may also be kept in a file cabinet or a series of bins as long as they are easily accessed by the students. Other materials and resources such as accompanying texts or descriptions of tasks are arranged on the table or another readily accessible setting so that student may access materials independently. All necessary supplies (texts, scissors, glue sticks, card-stock, colored pencils, calculators, lap-tops, etc.) are situated nearby.

Figure 5

LITTO – Literary Elements – Conflict & Identity – Historical Fiction

Name: _____

TITLE: _____

Directions: Complete each of the activities in the boxes below in any order you want. You may work with your classmates, when appropriate.
Make sure put your work in order and hand it in on Friday.

1. LITERARY ELEMENTS	2. READING - WRITING Homework	3. LITERARY ELEMENTS
Read your assigned book and complete a "Narrative Quartering the Story" RL.5.1, RL.5.2, W.5.1, W.5.2, W.5.9a, 1 2 3 4	Complete four tasks on your "Conflict Tic-Tac-Toe". Write your responses in your Reader's Notebook W.5.1, W.5.2 RL.5.1, RL.5.2, RL.5.10, 1 2 3 4	Read your assigned book and complete a "Conflict" Quartering the Story RL.5.1, RL.5.2, W.5.1, W.5.2, W.5.9a, 1 2 3 4
4. WRITING Write a review of the book you are reading. Use the template in the folder. W.5.9a, RL.5.3 1 2 3 4	Complete the L.I.T.T.O. Reflection W.5.1	5. WORD STUDY Find four new vocabulary words in your book. Use a dictionary to find the correct definitions and use the word in your own sentence on the vocabulary sheet. RL.5.4 1 2 3 4
6. CHARACTER TRAITS Create and "Inside-Out" chart for one of the characters in your book. Follow the directions provided. W.5.9a,RL.5.2 1 2 3 4	7. WRITING Complete the Venn Diagram comparing the main character in this story to the main character in one of your previous texts. W.5.9a, RL.5.3 1 2 3 4	8. SEQUENCING Create a timeline of the important events in the story. Include at least 6 events. W.5.9a,RL.5.5 1 2 3 4

Figure 6

TIC-TAC-TOE READING RESPONSES Conflict & Identity

- **You must restate the question for your topic sentence and make use of transition phrases for each response.**
- **You must use evidence from the text to support each of your responses.**

1. Give an example of an event or dialogue that shows conflict between the character and their environment.	2. Copy down an example of descriptive language that helps you understand how the character is feeling.	3. Give an example of an event or dialogue that shows conflict between the character and somebody else.
4. What is your opinion of the main character? Why? Use evidence from the text.	5. If you could give the main character some advice that might help them solve a problem what would it be?	6. Give an example of an event or dialogue that shows conflict within the character.
7. Describe a problem that the main character has to solve. Be sure to include why it is important for the character to solve that problem.	8. Describe an event that changes the main character. How is the character changed?	9. Make a prediction about what you think will happen next in your story. Explain why and use evidence from the text.

4	**Exceeds Proficiency Standard** Student Performance demonstrates a thorough understanding of the ELA knowledge and skills expected at this grade level.
3	**Meets the Proficiency Standard** Student performance demonstrates an understanding of the ELA knowledge and skills expected at this grade level..
2	**Meets the Basic Standard** Student performance demonstrates a partial understanding of the ELA knowledge and skills expected at this grade level.
1	**Below Standard** Student performance does not demonstrate an understanding of the ELA knowledge and skills expected at this grade level.

At the beginning of the new L.I.T.T.O., the teacher reviews the matrix with the students and responds to any questions that the student may have about the content of the L.I.T.T.O. Most questions have to do with the specifics of where work can take place. "Can we work in the hallway?" "Would it be alright if we pushed these desks together?" There may also be questions about vocabulary, or task specific wording. Students might need help assembling a flap-book or folding paper for a triarama. They may need help finding a particular website or other computer application. After a few weeks, students are able to do these things for each other. Most often the questions that come up are related to time. "How much time will we have today?" or "Since we had Monday off will we get more time on Tuesday to work on this?" Following the introduction the students are free to determine how they will start the tasks and how they will proceed through the assignments. The teacher is free to meet with specific students at this time to select target tasks, or identify tasks that might be eliminated from the L.I.T.T.O. for specific students. This takes place during short one-to-one meetings where the students might choose which tasks are priorities and which ones will be extensions for them. This ability to modify the L.I.T.T.O. is particularly helpful for students who leave for the resource room, speech, music lessons, or AIS sessions. L.I.T.T.O is also available in the District Sakai Collaborative Learning Environment (similar to online course modules like Moodle or Blackboard) and on my website so that it may be readily accessed at home in case of absence.

Once the period has begun, the students are free to work where they choose, with whomever they choose, on any of the tasks that they have elected to begin their unit with. During this time the teacher is at liberty to circulate throughout the room to touch base with small groups or individual students once the work has commenced. The teacher may read with students, conference about writing, or help support students in their work as needed. If the expectation of effort and engagement and productivity is not being met, students may be asked to return to their own desks to ensure that the quality of the work is, in their judgment, their very best and that the classroom community is not being disrupted. Since work habits and collaboration are visibly assessed on a weekly basis, each student has a stake in demonstrating positive choices and effective learning behaviors. The expectations are clear in the weekly L.I.T.T.O. and Reader's Response rubrics (Figures 1 & 7). The rubric language guides expectations for behavior in discussions including collaboration and effort. The rubrics guide students in the process of setting goals in various behavioral and academic areas. Within each rubric cell the teacher may choose to highlight specific behaviors that require attention or may choose to comment on significant growth in one area or another. These rubrics go home with the students at

Figure 7

Name: _____   **Date:** _____

Reader's Response Rubric

Competency	4 - Exceeds	3- Meets	2- Partially Meets	1- See Teacher
Effort & Engagement -Academically Skilled -Productive Worker -Self-Directed Learner	**All** individual responses are complete and demonstrate exceptional effort and care.	**All** individual responses are complete and demonstrate effort and care.	**Some** individual responses are complete and demonstrate effort and care.	**Please work hard** to complete your tasks and demonstrate effort and care. -Work is **difficult to read or incomplete**
Information & Evidence -Information Manager -Effective Communicator -Self-Directed Learner	Entries are **exceptionally** clear & correct. -Tic-tac-toe questions have been thoroughly answered. -Responses integrate **multiple effective examples** of evidence from the text. Work **always** demonstrates **exceptional** reflective thought and connection to the text.	Entries are **consistently** clear & correct. -Tic-tac-toe questions have been thoroughly answered. -Responses integrate effective **examples** of evidence from the text. Work **consistently** demonstrates reflective thought and engagement with the text.	Entries are **inconsistently** clear & correct. -Tic-tac-toe questions have been **inconsistently** answered. -Responses inconsistently integrate effective **examples** of evidence from the text. Work **inconsistently** demonstrates reflective thought and engagement with the text.	Please work on making sure that your entries are clear and effective. -Tic-tac-toe questions must be answered – restate the question or task to begin your response. -Integrate effective **examples** of evidence from the text. Work o**n demonstrating** reflective thought and engagement with the text.
Discussion & Sharing -Effective Communicator -Self-Directed Learner -Academically Skilled	-You are **consistently** prepared for discussions and sharing. -You participate actively in all sharing, discussion, and collaboration. -You respond to the ideas and work of others in a positive and thoughtful manner. -You express **detailed connections** between texts or text to self. -You demonstrate **exceptional** reflective practices and evidence of growth..	-You are **consistently** prepared for discussions and sharing. -You **consistently** participate in all sharing, discussion, and collaboration. -You respond to the ideas and work of others in a positive and thoughtful manner. -You may express connections between texts or text to self. -You **consistently** demonstrate reflective practices ad evidence of growth.	-You are **inconsistently** prepared for discussions and sharing. -You **infrequently** participate in sharing, discussion, and collaboration. -You **inconsistently** respond to the ideas and work of others in a positive and thoughtful manner. -You may **inconsistently** express connections between texts or text to self. -You **inconsistently** demonstrate reflective practices and evidence of growth.	You are unprepared for discussions and sharing and are often disengaged -You **infrequently** participate in sharing, discussion, and collaboration. -You **infrequently** respond to the ideas and work of others in a positive and thoughtful manner. -You may **infrequently** express connections between texts or text to self. -You **infrequently** demonstrate reflective practices or evidence of growth.
Independence & Self-Direction -Effective Communicator -Self-Directed Learner -Academically Skilled	Your entries and behaviors demonstrate **exceptional** self-direction in your ability to: -Restate the question -Make a claim – statement -Support your claim with effective evidence from the text with page number for each direct quote. -Utilize transitions -Express comprehension of the text and the tasks both in writing and discussion.	Your entries and behaviors demonstrate **consistent** self-direction in your ability to: -Restate the question -Make a claim – statement -Support your claim with effective evidence from the text with page number for each direct quote. -Utilize transitions -Express comprehension of the text and the tasks both in writing and discussion.	Your entries and behaviors demonstrate **inconsistent** self-direction in your ability to: -Restate the question -Make a claim – statement -Support your claim with effective evidence from the text with page number for each direct quote. -Utilize transitions -Express comprehension of the text and the tasks both in writing and discussion.	Your entries and behaviors **infrequently** demonstrate self-direction in your ability to: -Restate the question -Make a claim – statement -Support your claim with effective evidence from the text with page number for each direct quote. -Utilize transitions -Express comprehension of the text and the tasks both in writing and discussion.
Language Usage -Effective Communicator -Self-Directed Learner -Academically Skilled	-You use spelling, grammar, capitalization, and punctuation in a manner that assists considerably in communicating your ideas -You integrate new vocabulary in exceptionally effective and meaningful ways.	- You use spelling, grammar, capitalization, and punctuation in a manner that adequately aids in communicating your ideas. -You integrate new vocabulary in effective and meaningful ways.	-You use spelling, grammar, capitalization, and punctuation in a manner that may impede understanding of your ideas. -You may **occasionally** integrate new vocabulary in effective and meaningful ways.	You use spelling, grammar, capitalization, and punctuation in a manner that impedes understanding of your ideas. -work on integrating new vocabulary in effective and meaningful ways.

the end of each L.I.T.T.O., which adds another dimension of accountability and also helps guide parents in their efforts to support student learning at home.

What is L.I.T.T.O.? Developing Master Learners in the 21st Century Classroom

> Assessments, curriculum, instruction and student learning behaviors are vitally interdependent with the understanding that students may directly benefit from active reflection on their work and their interactions with others.

Modifications and Differentiation

Each one of the L.I.T.T.O. work matrices may be easily modified to account for different learning abilities. These modifications might include:

- Eliminating some of the tasks in conference with the student

- Ranking the tasks in order of difficulty or preference

- Changing the 1-4 rubric ratings to effort grades for special education students or English language learners

- Providing alternate texts at various levels

- Increased support from the classroom teacher of an academic interventionist (AIS provider, special education teacher)

- Allowing additional time

- Working in a small group with peer tutors

- Peer editing and revision assistance

- Exemplars

Modification and differentiation can take place in each of the L.I.T.T.O. tasks but the expectation is still that students will reflect on their own learning and work to develop academic habits that will enable them to perform to the very best of their abilities.

The L.I.T.T.O. rubric in Figure 1 shows how these expectations are communicated to students and parents as well as how they are assessed. This rubric is attached to each student's completed L.I.T.T.O., and accompanies the L.I.T.T.O. cover sheet with academic rubric scores to provide each student and family with a portrait of the child's learning behaviors and the effects that those behaviors have on their learning. This will also be followed by the student reflection (Appendix 4) after the work has been assessed by the teacher and reviewed by the student. These reflections are periodically shared with the whole class.

Evaluating Student Learning in L.I.T.T.O.

All good assessment provides information about learners and learning. As a student-centered approach, the purpose of L.I.T.T.O. is to guide students toward academic competency through the development of effective, independent learning capabilities. Assessments, curriculum, instruction and student learning behaviors are vitally interdependent with the understanding that students may directly benefit from active reflection on their work (metacognition) and their interactions with others (interpersonal/ collaboration).

Authentic, relevant and ongoing assessment is embedded in L.I.T.T.O. with clear and consistent expectations for all students to guide them in their
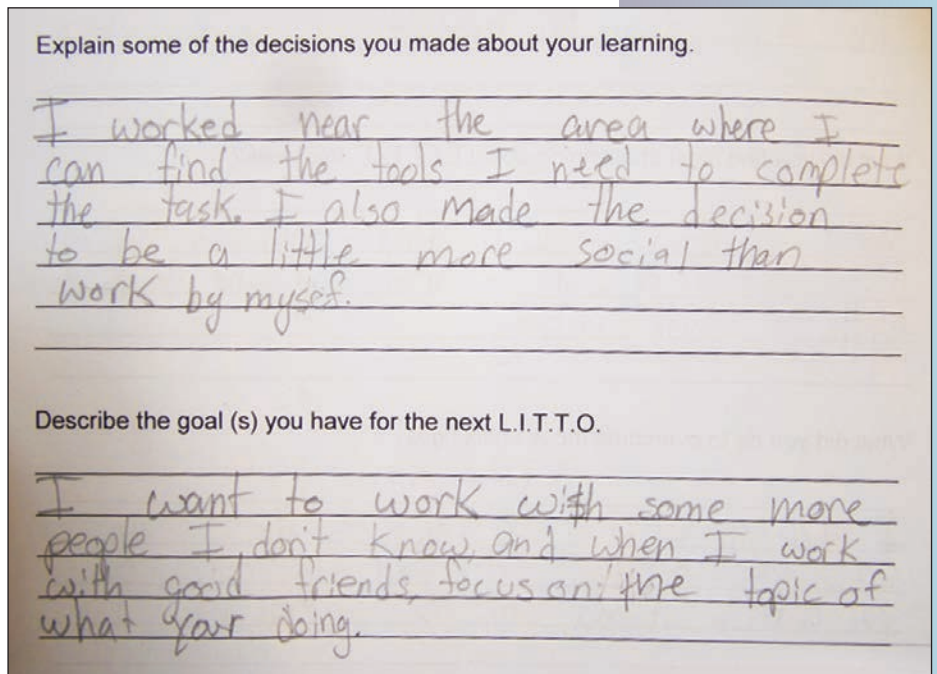
growth and to inform the teacher in the design of curriculum. As a result the assessment of student learning and development is multi-faceted and fundamentally differentiated focusing on growth and ownership.

Three types of assessments are embedded in L.I.T.T.O. for the purposes of gathering data: diagnostic, formative, and summative.

Diagnostic Assessment

Diagnostic assessments include the use of the Columbia Teacher's College Running records for fluency, independent reading level and comprehension benchmarks. These are administered three times each year. Additionally, the district mandates the use of the i-Ready diagnostic assessment for reading (also administered three times a year) a district benchmark, (mid-year) and the New York State English Language Arts tests. These assessments provide an overall portrait of each learner in a standardized setting.

In the classroom, writing samples are evaluated, along with entries in the reading response notebook and the writer's notebook. Observations of behaviors, peer interactions, and conferences provide a sense of how the student performs behaviorally as a learner in the classroom setting. These behaviors are central to student growth and development and are not only included

Explain some of the decisions you made about your learning.

I worked near the area where I can find the tools I need to complete the task. I also made the decision to be a little more social than work by myself.

Describe the goal (s) you have for the next L.I.T.T.O.

I want to work with some more people I don't know, and when I work with good friends, focus on the topic of what your doing.

in the rubrics, but openly discussed in the classroom.

Formative Assessment

Formative assessments in L.I.T.T.O. are intended to guide the learner and communicate the expectations for reflection, ownership, and individual growth. Assessment that guides the learner includes meetings, conferences, peer interactions and, ultimately, the gradual development of self-assessment capabilities. Expectations are clearly articulated throughout the classroom and within the various associated rubrics.

Charts, rubrics, and meetings identify precisely what students should be doing in specific realms of development

to demonstrate growth on the continuum delineated in the Common Core Learning Standards, 21st Century Learning Framework, and the Ballston Spa School District Graduation Competencies (Dragone, Turner & Smith, 2009).

1. Academic performance and productivity

2. Interpersonal skills — communication and collaboration

3. Self-direction and independence

Student proficiency is monitored and evaluated to determine the level of competency, engagement and growth, informally, on a daily basis through observation, and formally on a weekly basis using the rubrics indicated above. The broader objective is to help students learn how to assess their own work and progress effectively toward independence and mastery through reflection and personal behavior modifications. Peer editing, conferencing and meetings are important elements of formative assessment that help the students internalize various models for discussion and collaboration that can contribute to interpersonal growth and self-assessment.

Formative assessment is ongoing and collaborative, forming the foundation for work in the classroom. Assessment is precisely connected to the integration of academic, personal, and interpersonal work. It expresses high expectations for all students in those three interconnected realms. Formative assessments focus on improving learning in a holistic and responsive manner.

Summative Assessment

Evaluative summative assessments occur at the end of an instructional unit or at a specific period in the academic year to assess mastery. Summative assessments for the purposes of gathering data or determining grades come in four basic forms. The smallest grouping is performance relative to classroom expectations and the size of the test population grows broader with each step.

Classroom – student work including specific products, completed long-term projects and tasks and end-of-unit quizzes and tests of various design (for report cards and placement).

District – multiple choice and short response writing tasks assessed by classroom teachers.

Web-based – i-Ready and Harcourt Benchmarks administered online and scored by computer (limited item analysis).

State and national standardized exams – New York state tests, and PARCC (limited item analysis).

In order to be perceived as proficient, a student in the 21st century classroom must be able to demonstrate effectiveness in all of those diverse assessment environments. Since many of these assessment instruments are new and evolving to meet the Common Core standards it is not reasonable to expect that teaching to the test will provide successful instructional practice. This is particularly true where the development of 21st century skills is considered. For this reason, it is critical for students to develop confident reflective practices, broad literacy skills, time management and ownership so that they can demonstrate mastery in a range of environments.

How does L.I.T.T.O. fare?

I feel compelled to preface this by saying that my fifth-grade students are participating in this sort of learning for the first time. At the beginning of the year they are not accustomed to self-direction or practices that require a focus on metacognition. Additional time is given and the first "week" of L.I.T.T.O. is stretched out over two weeks in order for students to gain a working understanding of the processes and rubrics as well as a sense of time management.

Initially, students generally find it difficult to remain on task without direct supervision from the teacher. This allows for teachable moments that include meetings with the whole class to discuss academic behaviors and learning styles. As the students test the teacher's expectations and follow up, the quality of the student's work is often low and many tasks represent minimal effort or are incomplete. Students complain that they cannot finish the work in the time allowed, which provides an opportunity for individual and group discussions about strategic approaches to learning.

Some students demonstrate behaviors that interfere with their own work and with the climate of the classroom. This is addressed through individual conferences, attention to IEP requirements, and interactions with academic interventionists, special education teachers, and other school support staff. These dialogues are intended to set reasonable goals for the students to work toward in the development of the capabilities set forth in the L.I.T.T.O. program. The matrices and assessment expectations are readily modified for those purposes.

Students coming into fifth grade may have limited experience with effective collaboration. Teams must be carefully constructed and progress must be closely monitored. A very specific product with clear expectations helps guide the teams in their work and leads to the development of collaborative

It is critical for students to develop confident reflective practices, broad literacy skills, time management and ownership so that they can demonstrate mastery in a range of environments.

Figure 8

2013-2014	Average Percent Completed – September			Average Percent Completed – January			Average Percent Completed – May		
Homework	60%			75%			90%		
Classwork	57%			70%			95%		
Grades – Classroom	# Level 3 or Above ELA Composite 3/21			# Level 3 or Above ELA Composite			# Level 3 or Above ELA Composite 12/21		
District Mid-Year ELA NY Ready Benchmark				< 90 — 6/21	<70 — 12/21	<50 — 3/21 / >50 — 0/21			
i-Ready – Local Measure of Student Growth	# At or Above Grade Level 1/21	# < than 1 Grade Below Level 1/21	#> than 1 Grade Below Level 8/21	# At or Above Grade Level 14/21	# < than 1 Grade Below Level 4/21	#> than 1 Grade Below Level 3/21	# At or Above Grade Level 16/21	# < than 1 Grade Below Level 5/21	#> than 1 Grade Below Level 0/21

and engagement, the practices supported by various dimensions of the L.I.T.T.O. objective improved their ability to perform on a number of summative measures. (See Figure 8.)

Based on 2013-14 i-Ready Diagnostic scores for reading, these students experienced 200 percent progress toward growth as the average across all students from September to June, with an average scale score increase of 38 percent. There is evidence of increase in all areas assessed by a variety of assessments accompanied by a zero incidence of behavioral referrals. Intangibles include increased time on task, improved attitude, more effective collaborative work, increased self-direction, better quality work and more effective choices in learning. These results have encouraged me to continue my work on the development of L.I.T.T.O. by finding ways to better assess those factors using rating scales that would further increase engagement and self-reflection.

Supporting Materials

Over the six years that I have been working to develop the L.I.T.T.O. approach I have created some work templates that are used regularly in order for the students to be able to focus on features of the text, rather than the details of the task. These

evaluation. Initially, group work often requires constant modeling and it is helpful to have the students watch videos from Teacher Tube to see how students do this work. As the year goes by, cooperative processes become more and more central as the students' self-direction and reflection capabilities improve. Their reliance on the teacher for direction and validation decreases.

Nine of 21 students attended Academic Intervention Services for reading and four attended resource room for special education language arts instruction at the beginning of the 2013-14 school year. As the students' experience with the program progressed there were several indicators that these diverse students were successful. Beyond the improved classroom environment, independence,

materials include a variety of quartering the story templates, reading response tic-tac-toe, reading informational text templates and vocabulary forms. This consistency encourages confidence and independence. When a student is familiar with the expectations of the task then he is able to focus on answering the task by reading carefully and thinking about the reading. The attention is on the text, not the task. These pieces — quartering the story, tic-tac-toe, and word study — are included in all L.I.T.T.O. work to encourage students to make individual choices about their interactions with text.

L.I.T.T.O. generates the expectation that students will work to develop the habits of a master learner as an integral aspect of their academic work. Students in the L.I.T.T.O. classroom are expected to try different strategies for gathering, organizing, synthesizing and expressing knowledge, concepts and ideas to determine the most effective ways for them to approach various tasks and projects. It is an adaptable method that can be integrated into any classroom setting across all content areas.

L.I.T.T.O. is a means by which students may learn engagement in active learning based on the interrelationship between metacognition, interpersonal experiences, and academic practices.

Figure 9

Students who are intellectually agile and thoughtfully responsive to our dynamic reality are students who possess the confidence and skill sets to approach tasks and challenges using different kinds of tools, and technology with dexterity. These students have developed the capacity to question, to analyze, to hypothesize, reflect, and to filter information from all sources for different purposes. These students are master learners with the thinking skills, personal and interpersonal behaviors to be successful in the culture of the 21st century.

Figure 10

TIC-TAC-TOE READING RESPONSES-
Evidence from the Text

1. Give your opinion of one of the main characters. Use at least one quote from the text to support your opinion.	2. Tell about the mood of the story and use at least one example from the text that illustrates that.	3. Describe the relationship between two of the characters. Use at least one quote from the text to prove your statements.
4. What do you think the theme of your story is? Use evidence from the text to support your choice.	5. Describe an event that changes the main character. Use at least one quote from the text to prove your point.	6. Tell about how the main character solves a problem or learns a lesson in the story. Use evidence from the text to support your point.
Describe a central problem that the main character has to solve. Use evidence from the text in your description.	8. Find places where the author uses dialogue to tell about a character. Use at least one quote from the text.	9. Find quotes that describe settings in the story. Explain how the author provides a good picture of where the story is taking place.

REFERENCES

Blakey, E., & Spence, S. (1990). Developing metacognition [white paper]. Retrieved from *http://files.eric.ed.gov/fulltext/ED327218.pdf*

Columbia Teacher's College Reading and Writing Project. (2010). The reading and writing project. Retrieved from *http://readingandwritingproject.com/*

Dragone, J., Ph.D, Turner, K., & Smith, J., Ph.D. (2009). Using electronic portfolios for student assessment. Retrieved from *http://www.nyssba.org/clientuploads/nyssba_pdf/PrintOnDemand/Thursday/Approach%20for%20the%20Ballston%20Spa%20Central%20School%20District%20using%20Student%20Electronic%20Portfolios.pdf*

Northeast Foundation for Children. (2014). Principles and practices of responsive classroom [fact sheet]. Retrieved from *http://www.responsiveclassroom.org/sites/default/files/pdf_files/rc_fact_sheet.pdf*

Partnership for 21st Century Skills. (2008). 21st century skills, education & competitiveness. Retrieved from *http://www.p21.org/storage/documents/21st_century_skills_education_and_competitiveness_guide.pdf*

Payne, R. K., Ph.D. (1996). *A Framework for understanding poverty* (Fourth revised ed.). Highlands, TX: Aha!Process, Inc.

Rethinking Learning in the 21st Century. (2010). On rethinking learning in the 21st century [video file]. Retrieved from *https://www.youtube.com/watch?v=c0xa98cy-Rw*

Routman, R. (2000). *Conversations: Strategies for teaching, learning and Evaluating*. Portsmouth, NH: Heineman.

Tomlinson, C. A. (2010). *Leading and managing a differentiated classroom*. Alexandria, VA: Association for Supervision & Curriculum Development.

Tomlinson, C. A., & Parrish, W. C., Jr. (2012). Differentiating instruction and 21st century skills: Preparing all learners for the world ahead. Retrieved from *http://www.caroltomlinson.com/Presentations/Brisbane_Aug2012.pdf*

UCLA Center for Mental Health in Schools. (2008). Engaging and re-engaging students in learning at school. Retrieved from *http://www.smhp.psych.ucla.edu/pdfdocs/engagingandre-engagingstudents.pdf*

Winebrenner, S. (2001). *Teaching gifted kids in the regular classroom.* Minneapolis, MN: Free Spirit.

ADDITIONAL RESOURCES RECOMMENDED BY THE AUTHOR

Baker, L. (2009). Metacognition. Retrieved from *http://www.education.com/reference/article/metacognition/*

Balsley, J. (2012). How to use choice boards to differentiate learning [blog post]. Retrieved from *http://www.theartofed.com/2012/07/11/how-to-use-choice-boards-to-differentiate-learning/*

Blair, N. (2012). Technology integration for the new 21st century learner. Retrieved from *http://www.theartofed.com/2012/07/11/how-to-use-choice-boards-to-differentiate-learning/*

Cao, L.N., & Nietfeld, J.L. (2005). Judgment of learning, monitoring accuracy, and student performance in the classroom context. Retrieved from *http://cie.ed.asu.edu/volume8/number4/*

Checkley, K. (1995). Student-directed learning, balancing student choice and curriculum goals. Retrieved from *http://www.ascd.org/publications/newsletters/education_update/dec95/vol37/num09/Student-Directed_Learning.aspx*

Education Week (Ed.). (2012, October 11). How do you define 21st-century learning? One question, eleven answers. Retrieved from *http://www.edweek.org/tsb/articles/2010/10/12/01panel.h04.html*

Ellis, D. (n.d.). Becoming a master student [white paper]. Retrieved from *http://www.bmcc.cuny.edu/lrc/studyskills/masterstudent.pdf*

Glass, K. (2012). Differentiated instruction aligned to the ELA common core standards [lecture notes]. Retrieved from *http://www.kathyglassconsulting.com/documents/LearningForwardHandoutsKathyGlass2012.pdf*

Hall, T., Strangman, N., & Meyer, A. (n.d.). Differentiated instruction and implications for UDL implementation. Retrieved from *http://ok.gov/sde/sites/ok.gov.sde/files/DI_UDL.pdf*

Iowa Department of Education (Ed.). (2007, September 17). Characteristics of effective instruction, student Centered Learning. *Retrieved from http://www.iglls.org/files/classroom_brief.pdf*

Kohn, A. (1993). Choices for children, why and how to let students decide [white paper]. Retrieved from *http://www.alfiekohn.org/teaching/cfc.htm*

Livingston, J. A. (2003). Metacognition, an overview. Retrieved from *http://files.eric.ed.gov/fulltext/ED474273.pdf*

Motschnig-Pitrik, R., & Holzinger, A. (2002). Student-centered teaching meets new media: Concept and case study. Retrieved from *http://www.ifets.info/journals/5_4/renate.html*

Patanio, J. (2010). Choice menus for differentiating student learning. Retrieved from *http://www.uft.org/teacher-teacher/choice-menus-differentiating-student-learning*

Stevens, M. (2011). 21st century learner create! Communicate! Collaborate! Retrieved from *http://www.nea.org/home/46989.htm*

Thamraksa. (2013). Student-centered learning: Demystifying the myth. Retrieved from *http://www.sc.mahidol.ac.th/sclg/sllt/Issue5.pdf*

Tillman, M. (2003). Differentiated Instruction. Retrieved from *http://www.3villagecsd.k12.ny.us/Instructional_Technology/TchLrn/Differentinstructoverview.htm*

Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners.* Alexandria, VA: Association for Supervision & Curriculum Development.

Tomlinson, C. A. (2001). Differentiation of instruction in the elementary grades. Retrieved from *http://www.ericdigests.org/2001-2/elementary.html*

Wells, G. (Ed.). (n.d.). Action, talk and text: The case for dialogic inquiry. Retrieved from *http://people.ucsc.edu/~gwells/Files/Papers_Folder/ATT.theory.pdf*

Wells, G. (2001). *Action, talk, and text, learning and teaching through inquiry.* New York, NY: Teacher's College, Columbia Univeristy.

Westfal, L. E. (2007). *Differentiating instruction with menus - Language Arts-Grade 3-5.* Waco, TX: Prufrock Press.

Zmuda, A. (2008). Springing into active learning. Retrieved from *http://www.ascd.org/publications/educational-leadership/nov08/vol66/num03/Springing-into-Active-Learning.aspx*

Appendix 1

LITTO – Social Studies Content Area Text

Name: _____

Directions: Complete each of the activities in the boxes below in any order you want. You may work with people in your group, when appropriate. Make sure put your work in order and hand it in on Friday.

1. FLUENCY	2. READING	3. READING -WRITING
RL.5.2	RI.5.2 - W.5.2	RL.5.5 - W.5.2
Read "Dangerous Crossing" text on pages 327 – 339 and complete a "Narrative Text" Quartering the Story.	Create a poster that teachers the reader about the Boston Tea Party. Read "Tea Time" on pages 374-380) Use specific evidence from the text.	Read "Revolution and Rights" on pages 344-348. Complete a time-line showing the sequence of events before and after the American Revolution. Use specific evidence from the text.
1 2 3 4	1 2 3 4	1 2 3 4
4. READING	5. WRITING	6. Comprehension
RI.5.1	W.5.2d	RL.5.3
Read "James Forten" on pages 420 – 431 text and complete an "Informational Text" Quartering the Story.	Create a "Found Poem" for two of the texts that you read for this LITTO.	Complete a graphic organizer describing the relationship between two characters in "Can't You Make Them Behave, King George?"on pages 258-259
1 2 3 4	1 2 3 4	1 2 3 4
7. WRITING - OPINION	8. WRITING - OPINION	9. READING -
W.5.1	W.5.1	RI.5.3 - RI.5.5
Compose a review of one of the texts that you read for this LITTO support your point of view with reasons and information.	Which of the texts that you read for this LITTO did you learn the most from? Compose a persuasive essay convincing the reader to choose that text over the others. Use the Scholastic Program on my website to learn how to do this.	Compose a Compare and Contrast essay that compares any two texts from this LITTO.
1 2 3 4	1 2 3 4	1 2 3 4

Production and Distribution of Writing

CCSS.ELA-Literacy.W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

CCSS.ELA-Literacy.W.5.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 5 here.)

CCSS.ELA-Literacy.W.5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.

Geometry L.I.T.T.O.

You must complete ALL of the gray projects! Choose two others. Enjoy.

Brochure	Poster	Multi-Media
Create a brochure that describes 6 different kinds of polyhedra. Explain their similarities and differences. Persuade the reader that the polyhedra is important in the real world and tell about where they can be seen in the surrounding environment. 1 2 3 4	Create a poster describing the different types of quadrilaterals and triangles. Explain what makes them quadrilaterals or triangles. Persuade the reader that one of them is more important than the other. Then tell about where they can be seen in the surrounding environment. 1 2 3 4	Create a multi-media presentation describing the major types of angles. Explain what makes them all angles. Persuade the reader that the angle is visible in the real world and identify some places where they can be seen in the surrounding environment. 1 2 3 4
Geometry Flap Book Directions and materials in the center. 1 2 3 4	**MATH LAND PROJECT!** Directions are attached. Work with your team. 1 2 3 4	**Newspaper Article** Create a newspaper article that tells about your "Math Land". • Must include visual images • Describe all of the geometric shapes, lines and figures that were used in its design. • Describe the extra features you included. 1 2 3 4
Reading Read one of the Geometry books in the basket. Complete a "Quartering the Story". 1 2 3 4	Tessellations! Create your tessellation in Art class. Use the digital camera to take a picture of it. Upload your picture into Sakai. 1 2 3 4	Geometry Cootie-Catcher Make your own Geometry Cootie Catcher to help you learn the vocabulary of geometry. Look at the example in the center. 1 2 3 4

Name: _____   Date: _____

Appendix 3

READING INFORMATIONAL TEXT

Name: _____ Date: _____

Before you read the text, complete these statements. Write complete sentences using your best spelling and grammar.

Title: _____

I predict that this text will give me information me about …

_____

What makes you think that?

_____

After Reading the text, complete these statements. Write complete sentences using your best spelling and grammar. Use evidence from the text when possible.

The main idea of the text is

_____

Two facts from the text that I want to remember are

_____

Something that the author did to make the text interesting is

_____

Something that I would like to ask the author is

_____

One new or interesting word I found in reading the text is

_____

The meaning of the word is

_____

I know this because I used: context clues   dictionary   non-text items

Some of the graphic aids and illustration aids that the author included in this text were…

_____

Of these, the feature that helped me learn the most about the topic was…
because…

_____

Draw a picture to help you remember what you learned from the text. It may be a sketch, a diagram, a map or any other visual representation.

Caption: Write complete sentences using your best spelling and grammar.

_____

LITTO REFLECTION

Name: _____ Date: _____

Describe the theme of the L.I.T.T.O. you worked on this week.
_____
_____
_____
_____

What did you find most challenging about L.I.T.T.O. this week?
Why?_____
_____
_____
_____

What did you do to overcome those
challenges?_____
_____
_____
_____

Describe some of the interpersonal (collaborative) skills that you used:
_____
_____
_____
_____

Describe some of the academic skills that you used.
_____
_____
_____
_____

Explain some of the decisions you made about your learning.
_____
_____
_____
_____

Describe the goal (s) you have for the next L.I.T.T.O.
_____
_____
_____
_____
_____