

Unit 3: Kindergarten T&G

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Title Section

Department of Curriculum and Instruction



Belleville Public Schools

Curriculum Guide

Unit 3: T&G Curriculum Kindergarten

Belleville Board of Education

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Unit Overview

PHILOSOPHY

The philosophy of the Talented & Gifted Program for Belleville Public Schools is to recognize the unique talents and capabilities of all students. Students who demonstrate exceptional abilities require a challenging and a differentiated curriculum. We recognize that students learn in different ways and possess different experiences and levels of understanding. Students deserve an educational environment that is challenging, stimulating, individualized, and learner driven. The curriculum has been designed to maximize students' creative, cultural, and cognitive needs. The cornerstone belief of the Talented and Gifted Program is that children learn best when they are actively engaged in the quest for knowledge.

PURPOSE

The purpose of the Belleville School District Talented & Gifted Program:

- Provides students with experiences to increase their cognitive and affective abilities through frequent applications of creative thinking, problem solving, critical thinking, exploration, discovery, and experimentation.
- Provide a three-part model of learning activities:
 - Tier 1: Whole Group Instruction in the classroom setting during a typical school day involving cross curricular involvement. (K-5)
 - Tier 2: To further enhance the talents and abilities of students via the use of small group instruction in

guided reading and math groupings.

- The three characteristics used for identifying students are above average ability, task commitment, and creativity.
- Discover, encourage, and provide educational opportunities and activities to every student in his/her personal learning style, to include visual-spatial, musical, naturalist, bodily kinesthetic, interpersonal, intrapersonal, linguistic, verb-linguistic, and logical-mathematical.
- To develop and encourage students to apply higher level thinking processes to become producers of information as well as consumers of information.
- The program will enhance student's level of understanding concepts, ideas, and issues in the areas of knowledge, comprehension, application, analysis, synthesis, and evaluation.
- Intellectual architecture fueled by teacher designed lessons that build upon identified students' strengths, interests, and talents.
- This program is designed to be student driven, in which the teacher acts as an facilitator, guide, or resource for personal or small group inquiries and investigations.
- The three characteristics used for identifying students are above average ability, task commitment, and creativity.

Students are identified based on unique talents, abilities, and interests to form a talent pool.

At the K-2 levels, enrichment is intended for all students. It will be available to encourage students and give them additional opportunities to achieve their highest potential.

The activities in this unit reflect ELA, math, science and technology endeavors which support differentiated instruction that addresses grade level needs as well as high capability needs.

New Jersey Student Learning Standards (NJSL)

CCSS.Math.Content.K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
CCSS.Math.Content.K.CC.A.1	Count to 100 by ones and by tens.
CCSS.Math.Content.K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).
CCSS.Math.Content.K.CC.C.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
CCSS.Math.Content.K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
CCSS.Math.Content.K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.
CCSS.ELA-Literacy.L.K.1.d	Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).
CCSS.ELA-Literacy.L.K.5.a	Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
CCSS.ELA-Literacy.W.K.1	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...).

CCSS.ELA-Literacy.SL.K.1.a

Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).

CCSS.ELA-Literacy.SL.K.3

Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Exit Skills

By the end of Unit 3, all students should be able to:

- Identify sequence.
- Make inferences.
- Make and confirm predictions.
- Classify and categorize details.
- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.
- Compare two numbers between 1 and 10 presented as written numerals.
- Describe measurable attributes of objects, such as length or weight.
- Describe several measureable attributes of a single object.
- Directly compare two objects with a measurable attribute in common to determine which has “more of”/ “less of” the attribute. (e.g heights of two children).

Enduring Understanding

- A numeral stands for number of concrete objects.
- Measurable attributes are a way to compare objects.
- An object may have multiple measureable attributes.
- Multiple objects may have the same measureable attribute.
- Scientific knowledge is created and communicated using a standard tool called the “scientific method”.

Essential Questions

- What do people, animals, and plants need to survive?
- Why is sequencing important to retelling?
- How can we compare two numbers or two objects?
- Why do we need to measure objects?
- What attributes are measureable?
- How can the scientific method be useful in my own life?

Learning Objectives

By the end of Unit 3, students will be able to:

- use the scientific method to make predictions about raisins and soda.
- create AB, ABC, ABCD patterns.
- put together puzzle pieces correctly and independently.
- create and measure their lego towers.

Interdisciplinary Connections

The T&G Curriculum areas of divergent thinking, convergent thinking, visual/spatial perceptions, interpretive thinking, and problem solving are integrated with Language Arts, Math, Science, and other content areas.

SCI.K-2.5.1.2.C

Scientific knowledge builds on itself over time.

Alignment to 21st Century Skills & Technology

Key SUBJECTS AND 21st CENTURY THEMES

Mastery of key subjects and 21st century themes is essential for all students in the 21st century.

Key subjects include:

- English, reading or language arts
- Arts
- Mathematics
- Science

21st Century/Interdisciplinary Themes

- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness
- Health Literacy

21st Century Skills

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- Information Literacy

Technology Infusion

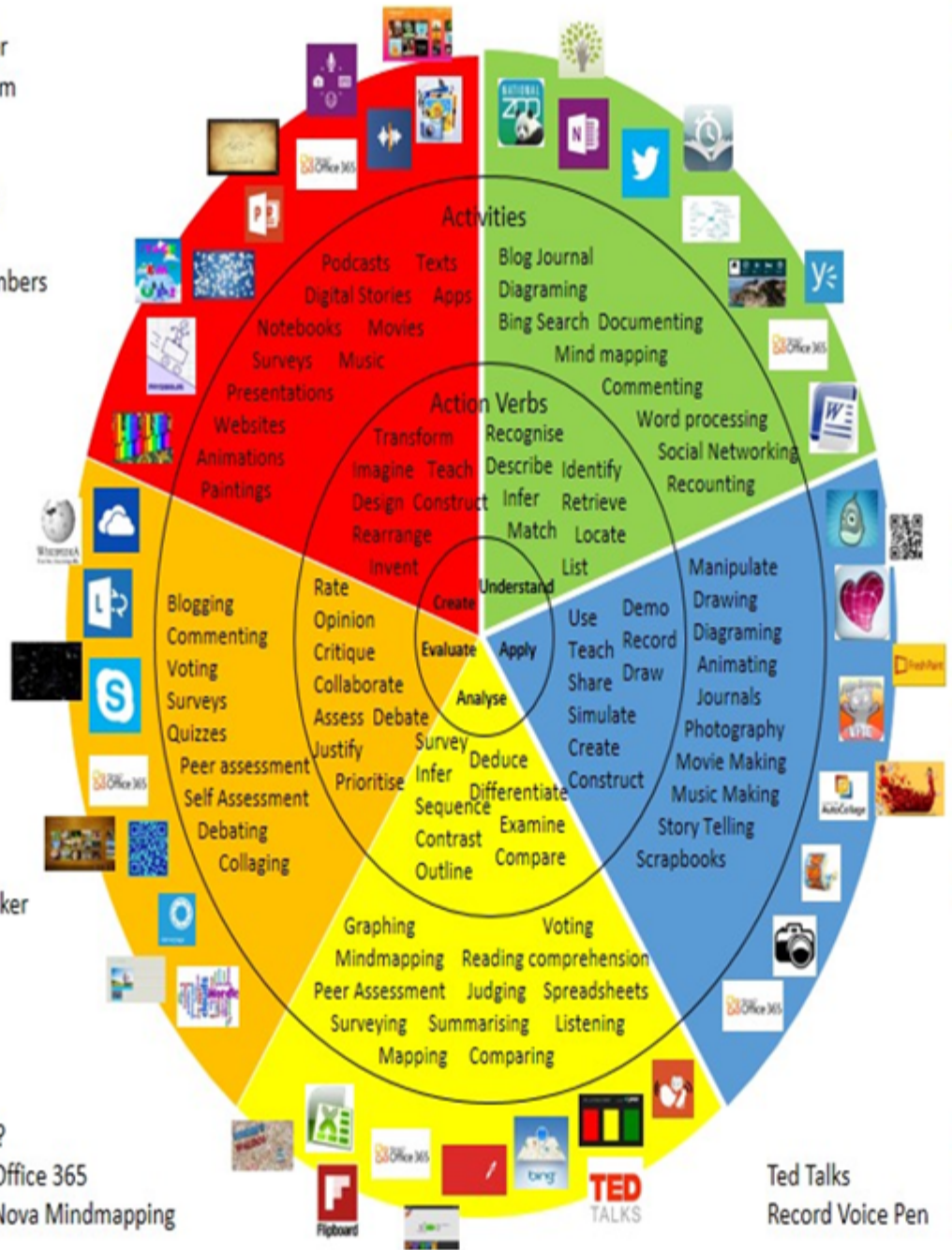
- SMARTboard
- Computers
- iPads/Tablets
- Powerpoint presentations
- Videos
- MS Office 365

Win 8.1 Apps/Tools Pedagogy Wheel

Podcasts
 Photostory 3
 Kid Story Builder
 Music Maker Jam
 Paint A Story
 Office 365
 MS PowerPoint
 Stack 'Em Up
 NqSquared Numbers
 Physamajig
 Xylophone 8

Wikipedia
 Skydrive
 Lync
 SkyMap
 Skype
 Office 365
 Puzzle Touch
 Easy QR
 Memorylage
 Life Moments
 Word Cloud Maker

Where's Waldo?
 MS Excel
 Flipboard
 Office 365
 Nova Mindmapping



Ted Talks
 Record Voice Pen

Originally taken from <http://www.coetail.com/zimmer/files/2013/02/iPadagogy-Wheel.001.jpg>
 And adapted for Windows 8.1 devices by Charlotte Beckhurst @CharBeckhurst

Differentiation

Special Education

- printed copy of board work/notes provided
- additional time for skill mastery
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- preferential seating
- preview of content, concepts, and vocabulary
- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet

ELL

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarify
- allowing students to correct errors (looking for understanding)
- decreasing the amount of work presented or required
- having peers take notes or providing a copy of the teacher's notes
- tutoring by peers
- using computer word processing spell check and grammar check features

Intervention Strategies

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- decreasing the amount of work presented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- tutoring by peers
- using videos, illustrations, pictures, and drawings to explain or clarify

Evidence of Student Learning-CFU's

- Common benchmarks
- Compare & Contrast
- Define
- Describe
- Evaluate
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- KWL Chart
- Question Stems
- Red Light, Green Light
- Think, Pair, Share
- Think, Write, Pair, Share

Primary Resources

- Envision Mathematics
- Scott Foresman Series
- Reading A-Z
- Decodable readers
- Being A Writer
- Leveled Readers
- Running Record (DRA)
- Sadlier Resources
- Recipes for Reading (Orton Gillingham)

Ancillary Resources

www.discoveryeducation.com

www.readinga-z.com

www.watchknowlearn.com

www.mobymax.com

www.readtheory.org

www.starfall.com

www.brainpopjr.com

Sample Lesson

1. Dancing Raisin Experiment https://www.youtube.com/watch?v=mEGCvj977_A (PDF)

2. Rainbow Popsicle Sticks (PDF)

You can use different colored popsicle sticks (or color them with marker or crayon) to use with these printable cards. There are a variety of different patterns included so there would be options for students who were beginners and those who were more experienced. There are AB, ABC, ABCD, etc. patterns included.

3. Lego Pattern Cards (PDF) Students will use these pattern cards to create these patterns using legos.

4. The Hungry Caterpillar Activity (PDF)

5. Lego Length Tower

Students will use Legos to create the tallest tower in the time allotted. They will complete this activity in small groups. Then, students will measure (standard or nonstandard) their towers and record their measurements.