

One Page Syllabus for PreK to 2 grade ... After School Program

Outline:

- Course Description
- Learning outcomes/Objectives
- Connection to the common core and early children standards
- Course expectations
- Course requirements and responsibilities for teachers
- Rubrics for teachers, Assessment and Feedback
- Course outline and details

Approach

- Children must have some control over the direction of their learning;
- Children must be able to learn through experiences of touching, moving, listening, seeing, and hearing;
- Children have a relationship with other children and with material items in the world that children must be allowed to explore and
- Children must have endless ways and opportunities to express themselves.

The topic of investigation may derive directly from teacher observations of children's spontaneous play and exploration. Project topics are also selected on the basis of an academic curiosity or social concern on the part of teachers or parents, or serendipitous events that direct the attention of the children and teachers

The role of teachers

In the Reggio approach, the teacher is considered a co-learner and collaborator with the child and not just an instructor. Teachers are encouraged to facilitate the child's learning by planning activities and lessons based on the child's interests, asking questions to further understanding, and actively engaging in the activities alongside the child, instead of sitting back and observing the child learning. "As partner to the child, the teacher is inside the learning situation" Two things are essential to after-school play: imagination and choice

Long-term projects as vehicles for learning

- Helping characters in the stories
- Feed the Neighborhood
- Heal/ Improve the Neighborhood
- Clean the Neighborhood
- Define: What's the weather in the Neighborhood and how does it affect us.

The curriculum is characterized by many features advocated by contemporary research on young children, including real-life problem-solving among peers, with numerous opportunities for creative thinking and exploration. Teachers often work on projects with small groups of children, while the rest of the ***class engages in a wide variety of self-selected activities typical of after-school classrooms.***

Possible activities for K-2nd grade students

K-grade 1:

- Learn vocabulary: design, engineer
- Children brainstorm, choose theme, plan and set up dramatic play area with science and math themes. Create a Design laboratory, etc.
- Practice observation and classification skills.
- Plan, create, and refine structures with blocks and other manipulative.

Grades 2/3

- Practice brainstorming.
- Begin to use design process in simplified form. Teacher models the process of brain storming. Teacher and students do the process together.
- Read stories using Reciprocal Teaching approach to engage students.
- Teacher presents a design challenge and a solution from a story that is familiar to the children. Invite the children to come up with another solution. (Choose a problem that will really engage the class.)
- Write to engineers, scientists, mathematicians. Invite some to visit the classroom to do a presentation/demonstration.

Example course outline and details

Class	Major Focus	Deliverables
1	Introduction, ground rules, Habits-of-Mind, Character	<ul style="list-style-type: none"> • Operating principles
2	What is Brain Plasticity?	
3	What problem do I want to work on?	
4	What do I need to know? 6-hats, Engineering is all around us	
5	How do I solve this problem?	<ul style="list-style-type: none"> • Design process
6-10	Define a solution	<ul style="list-style-type: none"> • Working design
11-12	Create visuals	<ul style="list-style-type: none"> • Drawing, Songs, Dance
13	Share solutions with others	

Parent Involvement

How do we get the parents involved with their child's learning? An attempt will be made to use the students as teachers of the parents. We hope to have the students teach the parents the power of asking them questions as a way of being involved with the learning.

Connection to the Common Core/ Framework:

Discipline	Major areas	Focus
Math		
Language Arts		
Science		

Emotional support:

Leads to students having a better social competence, higher level of satisfaction, fewer problems behavior, better attitude towards mathematics, and higher engagement.

Instructional Support:

Provide students with opportunities to develop higher-order thinking skills, learn and practice language, and communicate about their learning process.

Univ. of Virginia, Curry School of Education

[http://curry.virginia.edu/uploads/resourceLibrary/CASTL_Research_Brief-Curby_et_al._\(2013\)_JSP_updated.pdf](http://curry.virginia.edu/uploads/resourceLibrary/CASTL_Research_Brief-Curby_et_al._(2013)_JSP_updated.pdf)

Course Expectations:

Learning Outcomes/ Objectives:

Principles and Practices of Responsive Classroom

<https://www.responsiveclassroom.org/>

Guiding Principles

The *Responsive Classroom* approach is informed by the work of educational theorists and the experiences of exemplary classroom teachers. Seven principles guide this approach:

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1. The social curriculum is as important as the academic curriculum.
2. How children learn is as important as what they learn: Process and content go hand in hand.
3. The greatest cognitive growth occurs through social interaction.
4. To be successful academically and socially, children need a set of social skills: cooperation, assertion, responsibility, empathy, and self-control.
5. Knowing the children we teach—individually, culturally, and developmentally—is as important as knowing the content we teach.
6. Knowing the families of the children we teach and working with them as partners is essential to children's education.
7. How the adults at school work together is as important as their individual competence: Lasting change begins with the adult community.

Possible lesson plans:

Lesson One

Introduction to engineering: Does anyone know an engineer? What do engineers do?

Give simple definition: Engineers design things (and ways to do things) to solve problems that people have. They have to know a lot of science and math to make their designs work.

Vocab – design, science, math, engineer

Give some examples of things that are in the classroom that kids are very familiar with:

- 1) Show unsharpened pencil – What problem needs to be solved so that you can use the pencil? What did engineers design to solve the problem?
- 2) Show several separate sheets of paper that I want to make into a book. What problem needs to be solved to put the book together? What did engineers design to solve this problem?
- 3) Show a large piece of paper that I want to use to give smaller pieces to my friends. What problem needs to be solved so I can divide the paper with my friends? What did engineers design to solve the problem?

Tell the class that they are going to be engineers by finding problems in a story we read together and thinking of ways to solve the problems...solutions to the problems. Vocab. - solutions

Lesson Two

Reread the story.

- Create a simple story map on a large chart and fill in with the class, using the following vocabulary on the chart but clarifying verbally with descriptive language.
- Setting (where the story takes place)
- Characters (who are the people/animals in the story?)
- Plot (what happens in the story/story sequence/main ideas)
- Problem(s)
- Solution(s)

Lesson Three

- Review the story elements on the chart.

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- Focus on the problem(s) on the chart. Are there any more problems that the characters in the story have? Review the story sequence while looking at the pictures to think of other problems that the characters have. List these.
- Choose a problem to solve. Children might choose problem or teacher might choose.
- May need to insert a mini-lesson re brainstorming here, depending on children's experience.
- Brainstorm possible solutions to the identified problem and list them on a large chart. Encourage creative thinking!
- Invite children to give teacher more ideas during the day if they think of something.

Lesson Four

Options:

1) Teacher may choose a solution to work on and materials to use for all children

2) Children may vote on a solution, given requirements (i.e. must be something you can really build with materials we can get, must be safe) by the teacher.

3) Children might be divided into small groups. Each group decides on a solution, given requirements by the teacher.

In small groups, children draw (and label) plans for creating or building the solution. With guidance from an adult, they compare and discuss plans, deciding on the best plan (possibly combining ideas from different plans).

Children may need to bring materials from home for the construction stage.