The Learning that Lies Between Play and Academics
in After-School Programs
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The increasing emphasis on student achievement and mastery test scores has many after-school programs struggling with the demand to improve academics and offer homework assistance, while also offering a well-balanced program that provides plenty of opportunities for play and social interaction. What can quality after-school programs do to encourage learning, while not creating an overly academic climate? The answer lies in part in project-based activities, activities that stand between play and academics and combine the best of both.

Learning Through Project Based Activities

Unlike the rather serendipitous learning that can occur through play, project based activities can provide more intentional and planned learning experiences, while still offering many of the attractive qualities of play. Play is typically *internally shaped by the child*, while project based activities are more *externally shaped* by program leaders. These activities are open-ended, challenging, and experimental in nature and can build on and further children's learning in a stimulating and creative way, thus maintaining the positives associated with play, while also helping children develop new skills and learn new information. Project-based activities generally share these qualities:

- The project is usually stated as an open-ended, *'there are many ways to do it and many potential outcomes'* kind of challenge to the children which encourages the having of many child originated ideas.

  Examples include, "Using fewer than 10 feet of masking tape and 100 paper straws, design a bridge that will span these two tables and hold the weight of the tape dispenser." "Test to see if plastic straws are better than paper ones for building." "Try wooden coffee stirrers instead of straws."

- The best projects have well-described variables, boundaries, and possible directions.

  The project above is a good example of an activity that describes the allowed variables, boundaries, and possible directions.

- Projects can be done privately or collaboratively.

  Example: "By yourself or with a friend: Find the dirtiest place in this room, and prove it by using sampling techniques".

- The project is so well-chosen that every child, young or old, can start off with a sense that they can be successful, and can use the skills and understanding they already have, along with varying degrees of instruction and assistance, to meet the challenge of the task.

  Example: creating and publishing a newspaper for the after-school program, such as "THE CENTER NEWS."

- The adults have sequenced and organized the project and have some sense of the project tasks and what it takes for children to access them successfully.

  Example: 1. Designing sleeping bags; 2. Locating the materials; 3. Learning how to sew; 4. Finding appropriate city locations; 5. Taking the sleeping bags to the homeless.

- As in peeling and opening an orange, children's involvement in the project helps them really understand and *uncover* (not cover) all the layers and major concepts of the project.

  Example: planning, organizing, and implementing a **Center Track Meet** requires children to consider everything from when, where, who, how, rules, spectators, prizes, publicity, materials needed, classes of runners, etc.

- There is depth to the project or study because of the many directions children can explore.

  For example, the "Building Bridges from Weak Materials" project can include: comparing paper with plastic straws; experimenting with clay and newspaper as construction materials; looking at bridge designs in the city; interviewing architects; looking in magazines for bridge photos; reading stories about famous bridges

in the United States; watching videos on making straw bridges in Guatemala; discussing what the expression "don't burn your bridges too soon" means.

Children typically enjoy these project-based experiences so much that while they are involved in the planning and designing, the risk taking and the collaboration, and the delight with the job being well done, it may look like play to an adult on-looker. As in play, children will get bright-eyed and excited as they realize they have an idea for how to meet the project challenges. They solicit their peers to join them in implementing an idea. They are industriously busy and perhaps noisy in their involvement. However, the tasks associated with the project require a different kind of cognitive rigor than play requires. The children also need a different kind of involvement on the staff's part than is needed during play.

The Role of After-School Staff in Project-Based Activities

In project work, the learner is often challenged to think about something in new or unfamiliar ways. Students in a project-based activity program are suspended in a complex and fluid body of ideas. Adults can guide them through choosing among those ideas, and to experience the challenge and hard work of engineering their own necessary bridges to understanding these new ideas. Part of that bridge building includes *the adult helping or assisting the child to do what he/she cannot do until they can do it for themselves.* Of course, the level of needed intervention will vary. The child who is self-assured and confident of his ideas will need less intervention than the child who needs structure and instruction.

Key components of adult involvement in successful project-based activities include:
- Encouraging the child to talk about what they are planning.

- Helping to break the project task down into manageable or do-able chunks of activity.

- If need be, suggesting routes the child might take to accomplish a task.

- Supporting and applauding the child's efforts.

- Give hints when the child attempts to take over the task but gets stuck.

All of this requires much more adult intervention than the activities generally associated with any kind of play. It also involves more preparation than supervising children on the playground and more creativity than helping answer questions about multiplication for children completing worksheets. Project-based activities can be worth the effort, both in terms of children's enjoyment and learning, but they do require more from staff.

Whether it's a project-based after-school program filled with challenging invitations for children; a community service program; or a play-and-teach program, the reality is that **children learn to solve problems by solving problems. They learn to read by reading; learn to compute by computing; and learn to plan and implement a plan by planning and implementing plans.**

After-school programs that offer project-based experiences where children can and need to read, compute and problem solve; children can both imitate and be instructed; children can convert that instruction into mastery and understanding; where children can spend time around staff who consistently recognize that there is much to learn and many ways to do it; provide a enriching, supportive atmosphere that complements and furthers the learning that occurs during the regular school day; and links appropriately with children's play are focusing on the importance of project- based activities.

Katz, L.,& Chard, S.C. (1989). <u>Engaging Children's Minds: The Project Approach</u>. Norwood, N.J.: Ablex
*A longer version of this article, with the same title, is scheduled to appear in the **21Community News,** Yale University, Spring 2000.

**TIP SHEET on PROJECT-BASED ACTIVITY
Projects: Qualities of Good Projects**

- Usually stated in an open ended way. There may be many ways to accomplish the project, and many potential outcomes.
- Have well described variables, boundaries, and possible directions. Open, but described.
- Can be done privately or collaboratively.
- Project is stated in such a way that everyone involved in it starts off with a sense of being successful, and can use skills and understandings they already have. Can see one way into the task.
- Tasks have been sequenced and organized by the adults.
- The major concepts and learnings are *uncovered* <u>not covered</u> by

learner, by way of their involvement in the project.

- There is depth to the project or study because of the many possible directions learners can explore. Web the potential directions the project can take.

Adult involvement with learners in project based learning

- Encourage the learner to talk about what they are thinking, planning.
- Help break task into do-able chunks of activity.
- Suggest routes, if need be, for learner to take to accomplish a task.
- Support and applaud learner's efforts.
- Give hints or instructions when learner attempts to take over the task but gets stuck.

Why Project Based Activity in After School Programs?

- Children learn to read by reading.
- Children learn to compute by computing.
- Children learn to solve problems by solving problems.
- They learn to plan by planning and implementing these plans.
- Project Based Activity provides a context where children need to read, compute, problem solve, and plan.
- After school programs are better able to instruct/teach only what needs to be taught, in order for a child to accomplish a given project task than they are at instruction on the general processes of reading and computing.
- In project based activity where the emphasis is on collaborative activity, there is more opportunity to imitate, and to be taught only what needs to be learned to do the project than there is in school instruction events where the relevance for what is being taught is not always clear to the learner.