Projects Work!
Martin R. Textor

Quite often I meet teachers who feel bored by their work: Every day the same trot, the same children, similar activities. The course of the day, the teaching of children, the behavior towards them and their parents have become a routine. New challenges, new experiences, and contacts to other adults are missed. Especially older teachers with long job experience are dissatisfied with this situation.

Project work and opening the class for its natural, socio-cultural, economic and political context are good opportunities to break out of the daily trot and to try new ways. Projects ask for teachers' creativity and organizational talents, bring changes and adventure into their life, let them get into contact with other adults, and lead to new experiences and successes. Side-effects of projects are parent involvement, more respect for teachers in the community, and better public relations.

Moreover, project work is of a great educational value, which becomes evident if one looks at the life situation of today's children. Children are isolated from the world of adults, from their natural and socio-cultural surroundings. They live on small "islands" (like schools or day care institutions), around which life roars - but remains strange and is not understood. Learning by observation and experimenting, nature experiences, contacts to younger and older children or adults, motor activities, etc. are missing. Children live in special environments in which they are supervised, controlled, and taught according to specific educational goals and plans. The teachers plan and organize everything, they have the main responsibility.

Goals and Contents of Project Work

Projects are an answer to the aforementioned characteristics of childhood - as can be seen by looking at Table 1. The following example illustrates that. It also shows how the goals listed in Table 1 were fulfilled by the teacher: The project "Shopping" (cp. Katz/ Chard 1989) began with a group discussion about the topic "Where do the students and their parents buy what?" Then the children painted themselves shopping. During the next days a shop was built in the classroom with the help of large cardboard boxes and other materials. During the following weeks it was equipped with more and more items. From the beginning the shop was used for role-playing.

Table 1: Characteristics of Childhood - Goals of Project Work

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<tr>
<th>Characteristics of Childhood</th>
<th>Goals of Childhood Education</th>
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<tr>
<td>exclusion from the worlds of adults, living in special, child-specific contexts (&quot;islands&quot;) like schools</td>
<td>life-orientation, opening schools to the natural and the socio-cultural context (community)</td>
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<td>adult-determined activities, pre-planned according to educational goals</td>
<td>child-orientation, child-participation, self-determination</td>
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<td>loss of experience, few opportunities to learning by doing/ by experience, learning</td>
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During another group discussion the children were prepared for visits in shops and on the market place. For example, questions were collected which could be asked to the sales staff or to the market women - where the vegetables come from, which sorts are weighted and which are sold by piece, which sell best, which degenerate the fastest. The excursions were made in small groups during the next days - mostly on appointment. The children talked with the sales staff about their work like filling the counters, pricing the goods, advising customers, etc. They looked at the displays, observed the employees, and could also visit cold storage rooms or stockrooms. As they made different observations in different types of shops the children discussed their experiences in the classroom and expressed them in paintings. Thus the children learned to differentiate between shopping centers, department stores, supermarkets, mom-and-dad shops, market stalls, etc. They also broadened their role-playing by introducing new items and roles like the truck driver or window dresser.

Sometimes the children bought goods during their excursions. For example, fruits and vegetables were brought from the market. The children discussed which of these goods have to be peeled or just washed, which can be eaten raw or only cooked, which smell more or less intensive, which are more or less expensive. Different types of goods were categorized. Looking at advertisements in journals and at window-dressing at shops, the importance of marketing was found out. Thus the role of marketing specialist was introduced in role-playing who asked customers for their wishes, the quality of the service, the displays, etc.

In the context of this project the children collected different sorts of shopping bags and tested them with respect to their resistance to tearing and their compatibility with environmental standards. They also talked about the production process of certain goods like woolen pullovers. The project ended with children selected their best drawings and pictures for making a book entitled "We go shopping".

What are children learning in such projects, what are the advantages of project work? There are several possible answers, each of which may not fit every kind of project:

(1) Children are learning in typical life situations. They regain learning opportunities in their surroundings, in their residential quarters. They explore shops, offices, factories, museums, churches, and other institutions, get into contact with many different people. They begin to feel at home in their region.

(2) The children are confronted with many more stimuli for learning than in the
classroom. They gain new knowledge by asking unknown people, by observing and experimenting. Thus they get a better understanding of the world of adults and of nature, learn new terms, and expand their repertory of social and communicative skills.

(3) The continuous alternation between group discussions, excursions, experiments, role-playing, and creative activities - always referring to the specific theme of the project - leads to learning "in spirals". By using different methods, the children gain more and more understanding, get to know more and more aspects of the topic. Observing, exploring, experimenting, reflecting, discussing, acting, singing, expressing, etc. fit together - in contrast to traditional teaching in which different lessons and activities have little in common.

(4) By the very different methods used in project work comprehensive learning takes place; the cognitive, social, emotional, creative, motor, and personality development of children are furthered. The great variety of activities keeps children interested and concentrated, make them feel more content and happy.

(5) The children have many opportunities to decide for themselves and to determine the course of the project. They do not consume a prepared lesson or activity but influence the course of the project by their ideas. As different wishes and proposals have to be reconciled, they learn to express themselves clearly, to negotiate, to solve conflicts, and to make compromises.

(6) All children have abilities and skills which can be put into use during a project. As activities are more or less difficult and complex, also younger or less talented children can contribute something and thus feel acknowledged. Cooperation and the feeling of belonging to the group are furthered.

This shows that project work is a very good method of education. There are hundreds of themes for projects as can be seen in Table 2. Topics can cover all areas and aspects of our world. When one considers local conditions, however, some themes are more relevant than others. For example, it will be difficult to carry out a long-term project about swamps in a large metropolitan district or about ocean fishing in a mountainous area. But even in a city it might be possible to study insects at a pond in a near-by park or to keep frogs and reptiles in a terrarium. In order to observe how grain or vegetables grow, it is not necessary to visit a farm several times - they can also be sowed or planted in the garden of the school or child care institution. In all projects, however, similar skills and competencies are furthered. Only the knowledge gained depends on the topic of the project.

Table 2: Topic Areas for Projects

<table>
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<tr>
<th>Topic Areas</th>
<th>Examples</th>
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<tbody>
<tr>
<td>nature</td>
<td>exploring forests or farms, doing garden work, keeping animals, preparing a natural science collection</td>
</tr>
<tr>
<td>surroundings of the kindergarten</td>
<td>comparing homes of the children, different construction styles, and gardens</td>
</tr>
<tr>
<td>world of employment</td>
<td>exploring shops, factories, hospitals, offices, etc.; visiting parents at their job</td>
</tr>
<tr>
<td>cultural institutions</td>
<td>exploring theaters, museums, orchestras, etc.</td>
</tr>
<tr>
<td>history</td>
<td>discussions with old people, collection of old photos or items, &quot;stone-age living&quot;</td>
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<tr>
<td>other cultures</td>
<td>activities with parents of foreign children, make-belief journeys to other countries</td>
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Projects may even improve public relations as the following example shows (Sorg 1995): The project "Living Conditions of Children in Our Village" involved making photos of places where children spend their time, where they play, and where they may be in danger (such as busy streets or crossings). The pictures were taken during walks with the children and from their perspective. In the classroom the children made paintings about places where they live and where they love to play. They also made drawings of their "dream houses". Photos and paintings were exhibited in the school during enrolment time when many parents pass by. For the opening celebration all institutions and persons were invited with whom there was some contact. The guests were shown their village from the perspective of children. Thus they also got an idea of how many limits and dangers have to be faced by children.

**The Course of Projects**

A project is either initiated by the children or by the teachers, results from a specific situation, is started spontaneously or after some planning. For example, the initial event for the project "Our Hospital" (cp. Katz/ Chard 1989; Textor 1999) can be the hospitalization of a teacher or the report of a child who has broken his arm. Whether the idea or initiative is followed through depends on several conditions such as

- its importance for children's life (life-orientation),
- their interests,
- the composition of the children's group (e.g. social class, nationality, family culture),
- the variety of possible activities and learning opportunities (educational value),
- the chance of furthering all aspects of the child's development,
- the teachers' interests,
- the teachers' knowledge and experiences with respect to the respective topic,
- the chance to involve parents and other people,
- the season and other contextual conditions, or
- the availability of needed resources and materials.

In any case, the project initiative should be discussed in the class at a very early stage. Thus every child has the chance to voice his or her opinions. Usually children are quite enthusiastic when the topic of the project-in-discussion is related to their life or can be explored directly. For other topics (e.g., "Africa") their interest often needs to be stimulated. The children should have a say in whether the initiative will be carried out or not.

Especially long-term projects, those needing much preparation, and those involving many excursions or community contacts should be planned thoroughly. In these cases it might make sense to start with a brainstorming session. Then it becomes evident which aspects have to be considered. In the case of the aforementioned project "Our Hospital" it has to be discussed which parts of the hospital should be visited, which medical professions
interviewed, which materials (like gauze or clinical thermometers) introduced, etc. Also themes for continuing projects may become evident, e.g., about family doctors or ambulance cars.

After the brainstorming a possible course of the project can be sketched and put down in a project plan. However, as children are very spontaneous and have many ideas, the plan should allow for many changes by them. It also has to be decided whether the project will be carried out during a specific project day/week or during normal instruction time. Then the project has to be prepared, e.g., by contacting the director of the hospital and ask for his/her permission, by finding members of the staff for interviews, by pre-visiting the hospital, or by asking parents and other people for help (like accompanying the class during excursions, bringing relevant books or materials to the classroom, etc.). Visits at the library or at the pharmacy may also be helpful in procuring needed books, instruments, and materials (like anatomy books, clinical thermometers, first-aid boxes, etc.).

Has the project been exclusively planned by the teachers, it is important to stimulate the children's interest during the beginning phase of the project. This is easier when children are younger as they are naturally curious and their attention is easily aroused by new situations, objects, stories, pictures, or ideas. Having introduced the topic of the project the teachers can then assess the knowledge, experiences, and attitudes of children concerning it. With respect to our example they can be asked whether they had been in a hospital before. Often children who have been hospitalized before contribute very little to this discussion. This shows how traumatic such an experience is for smaller children. Other children, however, cover up their fears and do not report anything negative about their stay in the hospital. Thus it often is advisable to invite older children or siblings who have been hospitalized and interview them about their experiences. Alternatively, picture books or photos can be introduced for children to comment upon.

These discussions bring children on a comparable level of knowledge, which is the starting point for the project. They may be followed by some practical work like drawing or role-playing. For example, the children can cooperate in preparing the picture story "When John was hospitalized".

This is the last time to involve the parents in the project. Thus children can be sent home with the task to ask their parents, whether they had been in a hospital before and what happened to them there. The information gained can be introduced during the morning circle of the next day and thereby lead the class back to the project. At the same time the children get new ideas for role-playing. Moreover, parents should be motivated - e.g., via notices or letters - to talk with their children about project activities at home or to give them relevant materials for taking to class. The parents' interest does not only maintain the children's motivation but also makes them repeat words just learned and deepen their knowledge.

The next step is to prepare children for visits, sightseeing tours, or excursions. Is a parent working in a hospital as a doctor or a nurse, he or she can be invited to the class in order to talk about his or her job. It is important to discuss with the children before which questions they will ask. Some days later the whole class or a group of children may visit the hospital or a part of it - taking paper and pencils, a cassette recorder or even a (video) camera with them. If the children are younger, several visits are recommended as they usually are so curious and
excited during the first one that they hurry from one room to the next and thereby miss many things. Moreover, when discussing the visits in the class or when reporting one's observations to those children who had to stay behind, new questions may arise. They can then be asked during the next visit.

The visit of the hospital can take different forms:

1. It is especially interesting when the group can experience the normal admission process, e.g. when one child is admitted because of a "broken arm", is examined by a doctor, led to the x-ray room, and then gets his or her arm put in plaster. The other children accompany him or her, observe, and ask questions.

2. Alternatively, a doll or teddy bear can be admitted. The teacher may secretly put a paper clip or another metal part in the bear's throat. When it is x-rayed, the doctor can show the children on the x-ray what it wrong with it. Then even surgery may be performed on the teddy bear - introducing the roles of the surgeon and the anesthetist as well as instruments like the scalpel. Afterwards the bear can be taken to a ward by a nurse.

3. The visit can be restricted to a (children's) ward if there is no danger of infection (sick children should never accompany the group). The children could go in groups of four or five into the rooms and interview the patients about their illnesses and treatment. With them or with the personnel of the ward they discuss the daily routine in a hospital.

4. A sick teacher of child from the class can be visited in the hospital. In these cases the children may prepare presents before.

5. In teaching hospitals the children may participate in a lesson at the nursing school. The students can show them skulls, skeletons, models of the eyes and ears, instruments, and other objects of interest. Together they may watch instructional films.

After the visit group discussions, creative activities, and role-playing are of great importance. The children work through new experiences, reflect observations made, explore relevant materials or instruments like stethoscopes or clinical thermometers, and ask for supplementing information. The teachers introduce relevant stories, photos, figures, slides or books. Sometimes the class starts a collection of items relating to the project, which then can be explored by the whole class or a couple of children during free play time. By drawing and painting they can express new observations and experiences. Quite often also experiments can be made in the class. For example, preparing dough with lots of yeast and watching it rise can symbolize the multiplication of bacteria or yeasts in human bodies. Or comparing drops of water from a puddle with drops of distilled water may give children an idea of the importance of hygiene in hospitals. Thus children acquire techniques of observation and experimentation.

Role-playing is of great importance. Often children "build" a "hospital" in the classroom - with admission, examination, x-ray, and operating rooms as well as wards. They make the backdrops, equipment, and outfits - thereby training not only motor skills but also observation skills, spatial thinking, etc. There may be real instruments, dressing materials, (empty) packages of medicine, first-aid boxes, white coats, and other relevant materials. Then the children play admission, examination, surgery, the daily routine in a ward, doctors'...
rounds, etc. The teachers may introduce new roles like that of visiting relatives, male nurses, ambulance drivers, hospital pharmacists, masseurs or midwives. Thus role-plays become longer as well as more and more complex.

After some time, the children's interest in the project declines. Then it is time to plan its end. In most cases there is a special final event, such as an exhibition or a festival. For example, the children can invite their parents to the classroom and show them their collection of items put together during the project "Our Hospital". Or they ask them into the role play area where the parents have to play sick or injured persons who are treated by the children. They can present their best drawings to them or put them together in a "book". The project can also end with a festival for which children dress up as doctors, nurses, sick people, etc. Another final event could be a presentation of slides or videos taken during the course of the project.

**Final Remarks**

After a project it is important to evaluate it. Thus teachers should reflect upon the planning process and the course of the project. They review the goals, the atmosphere in the classroom, the motivation of the children, the involvement of parents and other adults, the public relation effects, etc. By asking themselves what the children have learned it becomes evident that project work stimulates many areas of development. This - and the fun teachers and children had - may be a strong motivation for planning the next project...

**References**


