

"Let the world be your classroom. Nature is man's teacher. She unfolds her treasures to his search, unseals his eye, illumines his mind, and purifies his heart; an influence breathes from all the sights and sounds of her existence."

---Author unknown

Field trips.. logistics is key to it all

By John Norris*

Let the world be your classroom.

A lofty statement, but one that carries an important message for any area of study. By using the world as a classroom, teachers can bring real life experiences to their students and create depths of understanding unequaled by any other method, particularly for the science student.

The science field trip provides opportunities for the student that make the work required well worth the effort. At the least, the excursion away from school can "open doors" for some students and allow them to see and experience things that they have never seen or felt before. The look of awe and wonderment on the face of the student who has seen her first porpoise makes every minute spent in planning that coastal field trip worthwhile. Not only does the field trip open new doors, but it also creates a "hands-on" approach to study. It allows the student to experience on a firsthand basis the theories and facts that have been discussed in the classroom. It brings to life those abstract ideas that have been studied.

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A field trip also can lead to, and in some ways provide for, potential vocations for science-minded students. By giving the students a firsthand look at the scientist or related science field worker, you are allowing them to see what the work involves. Students can ask questions and satisfy their curiosity. They can immediately gain a realistic picture — one that often may be quite different from the glowing account found in many information pamphlets. This interaction between school and vocational community can also be a positive public relations tool — something all schools can use.

Finally, the field trip can fulfill many social needs of the students. It can create unique opportunities for students to develop responsibility, self-discipline and initiative. The interaction between students can create a sense of belonging and camaraderie that will naturally lead to courtesy and good human relations. Also, the relationships between the teacher and the student will increase in quantum leaps as a direct result of the interactions on the field trip.

Undoubtedly, there are many benefits to be gained by a science field trip — but just going to the "field" is not enough. The trip must be thoroughly planned and thought through. For every trip taken, no matter if it is a ten-minute walk in the schoolyard or a week-long trip to the coast, the teacher and students must have a definite objective in mind. Under no circumstances should the trip be attempted if the objective is not clear to everyone.

Planning for the trip

A field trip is successful or doomed to failure by the teacher's preplanning. Haphazard

planning and vague ideas can only produce a haphazard field trip with ill-defined educational benefits. Thorough planning, on the other hand, increases the trip's chances for success and should result in an extremely pleasurable experience for the teacher as well as the students.

Preplanning can be very difficult for the beginning field tripper. The following list of questions can serve as a guide to planning the trip.

- Where will you go? Is the location a representative area with generalizable applications? Have you been to the area recently enough to know what to expect when your class goes? Do you plan to use special area consultants or guides? Do special area reservations need to be made? Are there any short, related trips that could be included with the longer one? Is there an area closer to home that will serve the same purposes?

- Will the school provide release time for you and your students during the school week? If not, are you willing to give up a Saturday? (*Ed. note — the author prefers the Saturday trip.*) Does the trip have enough value to justify taking class and teacher time? Is there sufficient time to adequately cover all points of interest? Will the school allow you to take an overnight trip? Is the trip far enough in the future to allow sufficient planning time? Will sufficient time be included for travel, activities, lunch breaks, restroom breaks, etc.?

- Who will be invited to go? Will there be a limited number? If so, what requirements will be used to determine the limiting factor? Will all students in a class be required to attend? Will there be adequate adult coverage for the group (parents or other teachers)? What is ade-

quate coverage? (This depends on the group, but there should be at least two adults for an extended trip.)

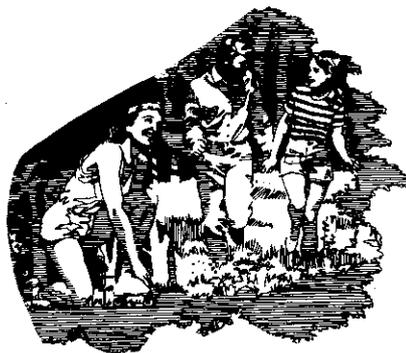
- How will you get there? Will you use school buses or personal cars, or will this be a long hike? If you use vehicles, who will drive? Can students drive their own cars? If you use a bus, can you obtain a chauffeur's license and drive your own trip? Or do you have to pay the expense of a professional driver?

- How will the trip be financed? Does the school or department have funds allocated? Will the school pay for part of the trip? Will the students have to support the full cost? If financed by the students, what is the minimum number that will allow the trip to go? Is there any student that would be excluded because of the cost? If so, will the school underwrite his or her expenses?

- Have the objectives for the trip been written down? Does the trip correlate with what is being studied in the classroom? Will the trip provide important observational experiences that are unobtainable in other ways? Are there career orientation implications that can be noted? Does the trip have a central theme, purpose or problem?

- What activities will be included? Will special collecting permits be needed? Are the activities suitable for the intended grade level? Have students been organized into groups? If consultants are used, do they understand what you and your students are expecting? Does the school have sufficient equipment for all groups? If not, where can you get additional equipment?

- Have parental permission slips been prepared? Is a trip itinerary included with the permission slip? Has an emergency telephone number (if available) been left with the school and given to the parents? Have guide sheets describing the trip in detail been furnished for the students? Has teacher liability been considered?



- Has permission been applied for and granted from the central administration? Has your principal received a report detailing your objectives, activities and follow-up plans?

- Have plans been made to record the trip? Will you use movie cameras or will you take slides? Will your school buy film as an instructional tool?

- Are there alternative plans in case of bad weather? (*Ed. note — the author has found that unless the weather is horrible it is better to proceed as planned.*)

- Have safety precautions been noted and planned? Will students be notified of potential dangers? Is first-aid equipment readily available? Is your destination isolated from emergency medical care? Will the school's insurance cover field trips? Should trip insurance be purchased?

- If the trip is overnight, are the accommodations suitable? Did you plan for boy-girl separation, or do you need to worry about this? Will there be sufficient restroom facilities? Are there facilities for meals?

- Has sufficient planning gone into the trip?

Pre-trip activities

Pre-trip activities set the stage. These begin with an opening orientation session to discuss the major focus of the trip, the dates and times of the trip, the itinerary, and all necessary requirements. Parental information sheets should be handed out at this time. This session should be far enough in advance to allow for proper preparation. For a week-long trip,

this session might be held several months in advance, while it might be three to four weeks before an all day trip. An orientation session, preferably the day before, should be held even for a ten-minute trip to the school yard.

Detailed background information on the ultimate destination should be handed out, although, obviously, this will vary with the type of trip involved. A trip to a natural area requires the area's natural history, while a trip to a museum requires a discussion of its purpose, history and emphasis. The trip's relationship to class work also should be discussed.

Other pre-planning activities include:

- Detailed instructions on keeping a field log if one is required.

- Group assignments and delegation of responsibility. Depending on the type of trip, responsibilities may differ for each group or they may be the same. A trip to a bay area, for example, with considerable resources is best handled by assigning different responsibilities to each group in order to cover the most ground in the allotted time. It may be necessary to pre-teach field data collection techniques. Student groups then need to gather needed equipment, label it properly and pack it for the trip.

- Discussion of needed personal items. Students, and parents, should be informed of appropriate clothing, meal arrangements, needed money, and the advisability of such personal equipment as binoculars, bird books, etc.

- Information on safety pre-

cautions. It might be necessary to set specific rules of behavior. For instance, a trip to the coast might involve rules forbidding swimming, requiring that shoes be worn at all times, or staying out of the grassy areas of the dunes.

- A reminder that the students are official representatives of their school and that their contacts with other people will reflect on the school. If a specific set of conduct rules is necessary, then it is questionable whether the class involved is ready for a field trip.

- Establishing a common reference library. A student librarian can be appointed to care for and handle library materials.

- Presentation of slides from previous trips. Slides help give a general overview of what to expect, and should be shown after all other information has been discussed.

The trip

The actual trip is the culmination of all the planning that you and your students have done. Obviously, the more thorough the planning, the fewer the problems. There will always be a few, hopefully small, unanticipated problems, however. There are some things a teacher can do that will make the trip more successful.

Be early. No matter what time you tell your students to assemble, be there ahead of time. This is an excellent time to meet parents and to engage in a little public relations. Invariably, there are last-minute questions from parents, and it is best to plan sufficient time to answer these.

Have the students arrive in sufficient time to load the bus or cars, check role and leave at the appointed time. The question of what to do with late arrivals is always a sticky one, particularly if fees are involved. *(Ed. note — the author has been successful by setting a five-minute delay for late arrivals. After the first time a student is left at home, the word spreads fast and it rarely hap-*

pens a second time.) By leaving on time, you usually can stay on schedule.

Allow sufficient time for travel, lunch, restroom breaks, etc. This is particularly critical for the return trip, since late arrivals create ill-will among parents.

Start early if your trip is lengthy and planned as an all-day affair. Dawn is the best traveling time, and this also allows you more field time.

Areas of responsibility should be pre-assigned. This might include a trip-log recorder, equipment maintainer, trip photographer, class "body" counter, organism recorder and librarian. Each assignee will need certain equipment, and this should be checked before you depart.

Programs often benefit by involving parents as additional adult support. In most cases, the parent will become an active participant rather than a passive observer. This not only gives you additional adult supervision, but promotes good public relations as well.

Students should be required to keep individual field logs with all information concerning the trip. This should include pre-trip information, all pertinent data (class, destination, schedule, requirements, trip objectives, group assignment, instructor), field notes recorded during the trip (things seen, done, thought and learned), and a brief evaluation at the end of the trip.

Bus travel allows time to discuss the natural history of the area along your route. The bus can be stopped at particularly good spots, or leased buses frequently have built-in public address systems.

Include sufficient restroom breaks in your schedule. Think back to when you were your students' ages, and remember the helpless feeling of being unable to use the restroom when needed and how much learning took place during those times.

Make use of local experts whenever possible. Most areas will have someone that can and will lead your group on a

guided study.

Insist on courteous and respectful behavior at all times, particularly when meeting strangers. Permit no rowdiness at restaurants or other public places. Remind your students that field trips are a privilege that can be lost, and that their behavior is a reflection on their school.

The students and the trip can be excellent publicity for your school. A single bad incident, however, can give bad publicity with unpleasant consequences.

- If the whole trip, or a portion, is being led by a guide, the teacher should serve as a low-key disciplinarian. Generally, the guide directs questions to the students, not the teacher. If there is any questionable behavior, a quiet word spoken directly to the individual is much better than a loud reprimand.

- Be involved during the trip. Move from group to group and do whatever they are doing. If one group is seining, then you seine. If they are classifying vegetation, work with them. This allows you to know what is happening with all groups and to serve as a communicator between groups. It also gives you an opportunity to relate with your students on an individual basis.

- If field work is included, encourage and insist on conservation measures. Don't overcollect, and encourage students to leave areas relatively undisturbed and cleaner than you found them.

- Throughout the trip, question the students with probing and leading statements oriented toward the central objective of the trip. This helps them keep the objective in mind.

- You will have designated either a group, or the whole class, as a cleanup detail in the pre-planning. Be sure all trash is disposed of properly. If specimens are collected, be sure they are cared for properly. An unpreserved fish left over from a weekend trip can make Monday a miserable day.

- At the end of the trip, conclude with any special instructions and then compliment your students on their behavior and attentiveness.

Post-trip activities

The trip doesn't end with the return home. Follow-up activities can terminate the experience and leave students with a "job well done" feeling. Too often, teachers assume the attitude of, "Well, I'm glad that's over; now we can move on to bigger and better things," and neglect a formal closing for the field trip.

If the trip included an active field study, analyze the data collected. If collections were made, organisms should be properly and permanently preserved, identified and catalogued, and placed into the class collection or the student's collection. All equipment must be cleaned and returned to its proper storage.

Regardless of the trip's purpose, students will have a field log. Entries should be checked for completeness and logs turned in for evaluation. Students, either as a class or in groups, should discuss their observations. These observations, plus any data collected and analyzed, should be used to prepare a group report.

Plan at least one class session for a formal summary of all data and group reports. Each group should make a brief presentation of its findings and the impact of these findings on the overall trip. These reports can then be combined into a final class statement for the trip problem. This can be followed by a presentation of the slides or films from the trip. Often, this final presentation is the highlight of the post-trip activities.

While students work on their group reports, the teacher needs to be sure that thank-you notes are written to guides, parents who gave special help, resource people and the school administrator who authorized the trip. You can ensure further

help in the future by spending a little time expressing your appreciation.

Last, but not least, you as the trip leader should evaluate the overall trip. This not only will benefit you on future trips but also will be invaluable for other teachers wanting to make the same trip. The following questions are examples of the types of things that should be included in the evaluation.

1. Were the objectives of the trip met?
2. Was the trip worth the time and the expense involved?
3. Is there another place that might accomplish the same objective but be more accessible?
4. Were the facilities adequate?
5. Were there resource individuals available?
6. Was the length of the trip adequate?
7. What suggestions for future trips need to be made?

Let the world be your classroom. Travel your area of the state in your "free" time and find out what is there for you and your students. Consider all industries and medical complexes for possible educational-vocational tours. Become active in your local science organization and talk to your fellow science teachers. Share your knowledge of places to go, people to contact and things to see and do. Start an enrichment box and put in a card for every possible field trip situation that comes your way. Be as complete as possible with names, addresses, telephone numbers, distances, best modes of transportation, etc.

Let the world be your classroom. A lofty statement, but one that carries an important message for any area of study. Letting the world be your classroom is a time- and energy-consuming endeavor. It can take away much of your valuable weekend time, not only for the actual trip but also for the considerable planning time.

But following this philosophy may be the best way to tell your students you care. It may well

be that this philosophy is shared by that handful of teachers whose students, when asked why they chose a scientific career, answer, "Because I had a science teacher who cared."

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