The role of the museum as a source of information is discussed in response to the question about how museums can best augment school curricula. The relationship between schools and museums is investigated with respect to learning. Children must learn to learn—see, observe, conclude, and think—rather than memorize facts. Museums can teach this by offering an opportunity to look at the world from many realistic perspectives. An illustration of a good teaching-learning relationship is the use of a museum specimen to introduce facts in an interdisciplinary manner. A special advantage that a museum has, unlike schools, is its personal contact between students and the world. The Corpus Christi Museum is contemplating a comprehensive visiting program, called a "window program." Students would be offered a multitude of activities geared to individual student interests, such as working with specimens and making handicrafts. The major problem with this type of program is obtaining teacher interest in bringing students to the museum. For a special project, the museum arranged for a college student to fulfill his degree requirements by working at the museum. Based on that experience, a curriculum of 32 subjects and assignments was developed for future teacher training at the museum. The student's experiences are summarized in a short final report. (ND)
MUSEUMS AND THE STUDENT

By

Valbert Heine
DIRECTOR OF THE CORPUS CHRISTI MUSEUM

Published by
THE FRIENDS OF THE CORPUS CHRISTI MUSEUM
CORPUS CHRISTI, TEXAS
U.S.A.

2
MUSEUMS AND THE STUDENT

By
Aalbert Heine
DIRECTOR OF THE CORPUS CHRISTI MUSEUM

This publication was made possible with a grant from The Moody Foundation.
This publication was also made possible with the research and encouragement of the Chairman of the Friends of the Corpus Christi Museum, Mr. Frank Wagner.
"All are born Princes and Princesses. Someone turns them into Frogs."

Erick Berne – Rowan

Woe be to him who tries to isolate one department of knowledge from the rest... All science is one: language, literature and history, physics, mathematics, and philosophy: subjects which seem the most remote from one another are in reality connected, or rather they form a single system.

Jules Michelet (1798-1874)

Preface to Histoire de France
THE ROLE OF THE MUSEUM AS A SOURCE OF INFORMATION

In order to compile the following notes, a considerable number of references pertaining to museum education were collected and studied by the Corpus Christi Museum. Reports were received from a number of institutions in the United States, Europe, South America and even Russia.

From all the material, one aim, and only one aim stands out, namely the desire of the museum to conform:

“How can the museum best augment the school curriculum, how can it best serve the schools?”

The “schools” meaning, in various contexts, the educational system, from kindergarten through college.

From where arises this pre-occupation with “school systems”? Are the aims of the museum formulated just because the school system supports the work of the museum, with the implied duty for the museum to conform? In that case this attitude would be understandable and probably forgivable. “You pays your money and you calls your shots”.

But if this aim to please is created because the museum field has no values of its own, this catering to become a part of the schools would indeed be a sad phenomenon.

Reading through report after report, it becomes quite clear that the highest goal of the educators of the average museum is to become an adjunct to the school system. This is the system, not the classroom teacher. In conversation after conversation with candid museum directors, it appears that the average school teacher has little active interest in adding the museum and its collections and programs to the lesson plan.

Every museum has a small, dedicated group of school teachers who use the services to the fullest. Most other teachers will use it as a pleasant target for an annual field trip, with no structured preparation or follow-up.

There could be a third reason why the museum would try to emulate the schools. There is a possibility that the museum educators are, or were, teachers themselves and, by virtue of their training, are not inclined to develop an independent approach to the problems of disseminating the information contained in the museum, its collections and its resource people.

There is little evidence in the literature of museums of novel and independent or specific approaches to the aspect of giving out information. Whatever the reason for this may be, the fact is that museums find themselves in a narrow pattern of behavior and thinking, determined by our culture. This pattern is a complete circle, with no chance of escape. It has grown from our background experiences, dogmas, superstitions and our acquired knowledge.

This pattern limits our visions, our planning, our perspective and, because of that, it hampers our creative abilities.

One aspect of this pattern is our view of education. It is practically impossible for us to imagine education, without school buildings, teachers, classrooms, lesson plans and the new, improved and augmented and expanded curriculum.

In our system, the classroom, yes the whole building, is a virtual prison. Even the yard around the school is often fenced, adding to the feeling of captivity. The modern, air-conditioned schools are designed without windows, very much like a cellblock. Where is the world, where are the clouds, where are...
the flowers? The students are being prepared for the world, if that is the purpose of education, without being allowed to look outside. Teachers and books, it is assumed, will tell them all they need.

When air-conditioning was decided upon, it became a stronger factor than all other considerations of education. The price of heating or cooling of a building without windows is considerably lower than that of a building with windows. The cost of the electrical power determines whether children will be behind solid walls or if they will be allowed to look outside. Twelve years behind walls for the price of the electric bill!

Cost per pupil is very important in the political side of the education system. The public insists that the costs of developing our greatest resource, our children, be kept at the lowest possible level. The community’s tax money is always infinitely more important than the future of the children. This is not the only self-defeating aspect of our society, but it is one of its largest.

The price of the classroom visit to the museum is another one of these illogical aspects. At one time or other all museums are confronted with the question, “How much is that per pupil?” And the museum profession, caught in this cost accounting web and never sure about its own worth, will give dutiful answers. Something like, “fifty cents per child” always seems acceptable. How dare we put a price on the value of the museum? What is the value of the influence of the museum on a student? Are all these windows on the world, which the museum represents, valued at four bits?

What a lack of self-esteem there must be in the museum profession, in that vast unlimited theater of the skies and the oceans and the land, in that vast kaleidoscope of cultures, in that vast archive of human, natural and earth history, in that vast encyclopedia of practical and up-to-date knowledge! Is that whole museum worth only ten nickels? Those year-round exhibits, those special displays and exhibitions, those talks, lectures, slides, movies, classes, clubs and other activities would amount to only 50 cents per student per year?

Our culture is closely locked inside its self-defeating, circular thinking. “Learning can only happen in large buildings”, has become the ultimate truth for us. Therefore, when religious education is contemplated, Sunday “schools” are set up, with buildings, teachers, curriculums and prescribed textbooks. Religious education, that has no connection with reading or writing or the fundamentals of the drills of arithmetics, still has lesson plans and a superintendent, just like our traditional experience pattern tells us a school ought to be. And for an extra day a week children are imprisoned in time and space, and organized teaching can take place.

In the same manner as the Sunday school, the museum is a product of the community, with its traditional thinking. The museum, as a vulnerable, non-essential, is less the result of its own actions than it is the result of the forces inside the community. The general state of the economy, local ups and downs in the business world, even the favor of one large donor, can influence the well-being of the museum. This is especially true because, in a large majority of the communities, the museum is regarded as a frill, and a luxury. The opinions of the city council, of school authorities, or the chamber of commerce are vital to the museum. The nod of consent, or the withholding of same, by the power structure or influential citizens or groups can mean life and death to the average small town museum.
But smaller influences also determine the direction of the museum. All statements by the staff, the contents of exhibits and labels, are under continuous scrutiny by professionals, conservationists, militant students, teachers, hobbyists, history buffs, patriotic societies, political parties, artists, women's lib devotees, trade unions, religious leaders and laymen, local industry, racial minorities, large contributors, college professors, every visitor, with or without a high school education, and most of all, the local layman expert, who has lived here for 50 years and knows everything better.

No wonder that the small museum, that has to exist because of good relations with society, is so timid. It becomes an act of extreme bravery to formulate an independent opinion and to stick with it. Very few can do it, and even fewer get away with it.

And yet, the alternative is unthinkable. To give out opinions and information that are censured by the local community and made so bland that it stirs no one, renders no service to old or young, and is intellectually dishonest.

Correct information is so difficult to acquire anyway. If the knowledge given out is slanted for any reason, the museum has lost its reason for being. Wrong information is infinitely worse than no information at all. Incomplete information can be equally damaging or even misleading.

In addition to this, the world is rapidly changing, not at least because of the mass of new data being produced from day to day, in an ever increasing spiral. In order to stay up-to-date the museum staff must keep running to stay in the same place. In our changing society, with its vast, shifting emphasis, education for the citizen becomes a lifelong activity. There is no longer any chance of getting yourself "a good education in preparation for life". Facts, data and even skills can easily and instantaneously become useless in our modern society. Many of the specialists who were educated to do specific scientific or engineering tasks are now without a job, because the direction or emphasis of our national thinking has changed. A number of the specialists in the non-emphasized sciences are driving taxis or selling Indian jewelry. The citizen has to keep learning all his life.

Therefore, children must learn to learn. They must learn to cope with change. They must be taught to see, to observe, to make conclusions and to think. Their education must prepare them for a fighting chance through every change in society, in any change in priorities. In order to prepare the child for the future, we must redefine the difference between teaching and learning.

A museum is in the unique position of being able to create thirst for knowledge in a thousand different ways. Not by teaching topics, or by following a school curriculum, or by developing a lesson plan. Not by trying to copy the public library or by trying to become another school. But in its own unique manner, by being itself. By offering to the child and the adult, each on their own level, an opportunity to look at the world through an infinite number of windows.

It is difficult to disseminate knowledge by teaching, but it can easily be done by voluntary learning. If there is something the student wants to learn, be it bowling, whittling, the lore of minerals or old coins, and he wants it hard enough, he will learn it. A boy, in order to keep up with his peers, will learn to whistle, learn to skate, learn all the rules of baseball, and learn to sink a basketball with a left-handed hook shot. Strangely enough, it may appear
impossible to teach him to make his bed, wash the dishes or play the piano.

Years are spent in the classroom with teaching the rudiments of Spanish or French or Latin, with no real result. Teaching facts that are not of personal interest to the student can be an extremely unrewarding task. While his teacher is trying in vain to get the intricacies of multiplication and long division in the child's head, the student has memorized all the batting averages of the American and the National League.

In order to learn well and fast and in a permanent manner, the student has to be convinced that the goal is worthwhile. He must want to learn. The problem is that many of the interesting facts he voluntarily wants to learn are not necessarily the facts he needs in order to make a decent living in our society. Batting averages and details on yardage gained in last year's football season are interesting statistics, but have no real value. The skill of whittling has very little monetary purpose in our economy.

What is needed is learning to learn in our ever changing society, plus learning the tables of multiplication, logarithms and how to figure compound interest. The child needs to learn a second language and how to shop for bargains. Our offspring has to be taught how to think! But most of all, they have to be motivated so they want to learn.

The student must not feel trapped, caught or imprisoned. The student must repeatedly be interested, a feat that is very difficult in the classroom, but in a museum, with its multi-disciplinary approach, this can easily be done. The teacher, or for that matter, the parent who exposes the child to the museum, to the world of real things, the world of real experiences, is a giant step ahead. Neither the values nor the results of a child's visit can be measured and tested.

A free flow of information exchange and encouragement between teacher and pupils is so vital to the learning process. A forced relationship of leader-flock, policeman-criminal, dictator-subject, jailer-prisoner, can never achieve what empathy can. If the basis of education is friendly encouragement, coupled with the desire to learn, then it follows that sitting down to talk and exchange experiences can be done as well under a tree on the beach as in a formal classroom.

An illustration of a good teaching-learning relationship would be the ultimate, simplified museum. Just one object, a square nail, bent and rusty. Theoretically this would be all that is needed to open up the world for the pupils. John Muir said, "When we try to pick out anything by itself, we find it hitched to everything else in the universe". Each specimen is connected with the whole universe, each specimen can be considered to be the center of the universe. The nail can be used to introduce the flow of knowledge:

- to an antiques club, to illustrate how the houses were built in the old part of town,
- to a student in mechanics, to unravel the forces that bent it, the kinetic force of the hammer, and the forces of friction that hold it in the lumber,
- to a historical society, to discuss how the extreme paucity of nails hampered our settlement of the prairie states,
- in a chemistry class, as an example of the process of oxidation,
- in an elementary class on arithmetics, to illustrate the meaning of numbers in "oldness" and then relevant numbers to them as their age and
their family's, for a geology class, to show the processing of ores to metal, for a student seminar or anthropology, to help discuss the stone age and the development of man's technology into bronze and iron and to discuss societies built without metals, in a discussion among astronomers, the nail may bring speculation about meteoric iron, or the core of the earth, in a boy scout group, to inform the boys how important a blacksmith shop used to be in a town, in a meeting on health, as an example of iron in the biological diet, and skin punctures and first aid.

The nail will also be of value to railroad historical societies, western buffs, shipbuilding enthusiasts, to an artist as a source of yellow ochre, to a boy who experiments with electromagnets. In short, this nail is the center of the universe, if we want to make it so.

Where do we find this teacher who feels confident to teach all subjects? Who has enough background to discuss the multidisciplinary aspects of that nail, an acorn, an event in history, a dinosaur bone, an ant, a scientific theory, the development of a philosophical thought, an Indian arrowhead or a jade carving? The accumulation of visions, interest, abstract ideas, perspectives and concrete specimens needed to meet their questions or problems is only available to children and adults alike at a museum. The secretary of the Smithsonian Institution, Mr. S. Dillon Ripley, states in one of his editorials:

"The study of objects has now become less respectable academically than the study of the printed word. It is paradoxical that most people would rather read about objects than study them directly. The assumption that truth can be learned, second-hand, by reading what someone else has written is all-pervasive. It dominates our thinking. It forms the foundation stone of our system of education."

Our civilization is geared to books, our belief in the ultimate usefulness of books is total. Even when experience teaches us that it is impossible to identify a simple rock with the help of a book, butterflies and other insects are also too elusive, even in colored pictures. And even leaves or wild flowers offer great resistance against being identified from descriptions, narratives and pictures.

Living on this diminutive spaceship called earth, we know almost nothing about the world around us. We are raising the next generation to take over the management of this frail, precariously balanced existence. The only knowledge we have to give them about these natural surroundings, this fragile life support we have, is second or third hand from what other people write about it. The essence of history cannot be distilled from the outcome of battles and the reigns of kings and terms of office of presidents. The feeling of history, the awareness of being a part of history, the proximity to people and events can be sensed, not from books, but from real objects from that time or place and pertaining to these events.

The museum offers a separate and most valuable approach to learning. The museum offers opportunities that are truly unique. The development of the museum as a separate educational entity has been hampered by the attempts by
generations of museum staffs, trying to justify the importance of the museum. This importance cannot be expressed in the usual terms of teaching and learning.

Therefore it appeared that the only justification for having a museum is to make it a small, insignificant branch of the formal educational systems of the community, while all the time the museum was something separate and different. In many instances in the old world the museum was seen as the mother of the university. The collections provided the real windows on the world, needed by the truly intellectual, the truly educated. A attic to keep the memorabilia of past athletic triumphs or leftover collections of professors who died in the saddle is not a museum.

In our study of museum education we have observed docents, guides, teachers, lecturers, volunteers, and instructors over a period of 30 years, in hundreds of museums, in Europe as well as in America. We have read annual reports, teachers' guides, handbooks, instructors' curriculums, lesson plans, promotional material and magazine articles written by staff members on all levels, describing the work of the educators' departments of their museum.

In the effort to emulate the schools the museum will go further and establish classrooms or whole education wings like a school. In all instances we notice that the museum is seldom seen as an independent decision maker about information, even by its own education staff. Always we notice museums teaching how and what others want. The curators teach college classes at the museum or elsewhere, with the specimens of the museum enhancing the college curriculum. The staff teaches high school classes, again often following the dictates of the school lesson plan. The elementary classes come to the museum for their Indians, the American West, life science and other topics, determined by cooperation between the museum staff and the school authorities, and faithfully following the school curriculum.

Seldom if ever does the uniqueness of the museum itself come forward. If the children are shown twenty-five or so objects at the museum during the usual lecture-demonstration-plus film, why not send the material plus the film to the classroom and save the time of travel for the class and the confusion of the visit. Then the museum can spend its time and effort in enhancing the learning process its own way.

Libraries often have more self-esteem than museums. Seldom will we meet a public library consisting of books on local affairs alone, or on birds alone, or on Indians. It would be unthinkable to limit such a precious activity as reading to just one topic. There are hundreds of museums with just local collections, or bird collections or Indians.

In our search for better education within the circle of traditions, we have also discovered educational television, which is being used in a total negative manner. Just place the children in front of the set and education will happen! There is no passive way of learning, somewhere there must be a positive action by the student. A museum should allow no passivity for children. Its programs should be directed to action by children. The usual museum talk-demonstration-slide-film presentation often resembles a passive T.V. show.

On all of the museum field rests the responsibility of finding more things to do for children in the museum or, for that matter, for all its visitors. T.V. makes children grow up without adults. Because of lack of time or patience parents quickly “fix” things up for children to get them out of their hair. Buying toys,
especially finished toys, is one way to do this, the T.V. set is another. In this manner we seldom confront children with the reality of objects or situations.

We do not need T.V. or Sesame Street or Captain Kangaroo. Why not go on a trip to a farm? Why does the mother not tell the child where milk comes from?

In our present society there is very little residual communication between generations. Sure, T.V. programs can teach letters and numbers, but they do not mean anything. What is three or W? Certainly, children are able to memorize the alphabet in one semester, as taught on T.V. in children’s programs, but they could have been taught the same by a real, live, warm, soft mother in one week!

The greater problem is that T.V. education ignores abstractions or the three dimensional world. How does one describe a cube on T.V.? Only the real thing can do it. There is such a belief in “teaching” T.V. programs that mothers step aside and stop working with their children, feeling like unneeded amateurs. Even school teachers step aside and let the impersonal screen take over. It’s frightening.

The child loses its initiative and its explorative curiosity after hours before the tube, hours of no touching, no real things, no action, no personal experiences. Children may also become discouraged and feel inadequate in trying to copy the achievements of the little actors on the screen. And even if the T.V. would start to produce holograms on the screen, this would not take the place of real touching. It’s still a mere visual experience.

Upon entering the first grade, the average child already has more hours of viewing than are needed for a B.A. Degree. Unless we want to see real teachers fade away into ushers and paper graders, it appears imperative to keep T.V. out of the class, except for very special “specials”, that are previously explained and are used as work-projects after they happened.

T.V. in the Head Start program is a great waste of time, real experiences is what these children especially need. Parents no longer explain, because T.V. already did, they don’t teach counting because T.V. already did, they don’t teach reading because T.V. already did, they don’t even discuss cows because T.V. already did. T.V. children are truly “culturally” deprived. They lost, voluntarily, the most precious possession of any child, its parents. In its role as newly appointed, first parent, the T.V. is completely unsatisfactory or even detrimental.

Are data truly related to knowledge, to creativity, to intellectualism? Is a person who remembers a large number of data an educated person, an intellectual? Only the person with perspective, vision and the driving curiosity to keep gathering new knowledge, new data and new facts can stay ahead of this accelerating world.

Do schools give that drive? We have all met the teacher who answered every question outside the lesson plan with, “we will get that in the next grade”. The child cannot even visualize the time it will take to get to the next grade, the child wants to know now, it is ready, it has a valid question, now! Even in college we meet the, “We will deal with that in your senior year” professors.

In the museum we find very little material that is of different interest to persons of different ages. Rocks are fascinating to pre-school children, as well as adults. Elementary school pupils are as interested in dinosaurs and fossils and Eskimos and shells as are college graduates. The topic, we have discovered, has
very little to do with the interest, the approach and the interpretation. What is
of importance is how the topic, be it a bird, an antique or a butterfly, relates to
the student. It is not of importance what we think we should choose as a topic
for the student and exactly what we are going to tell him about it.

Try to recall the material in school or college in which you received A's.
You forgot, because you were fed information in which you had no interest.
What is more amazing is that you remember your grandparents teaching you
how to whittle or how to bake cookies.

Grandpa had no curriculum, he used no textbook, he had no well-developed
lesson plan, he did not refer you to the library and used no opaque projector or
other visual aids. Grandpa also did not know about education techniques, nor
did he do any research on the learning and teaching processes. Why was he so
effective? He loved you, he treated you like a grown up. Trusting you with his
knife, he boosted your self-esteem with his encouragement. He had that real
knife, and most of all, you had wanted to do this for such a long time. He
actually let you convince him that you wanted to learn.

If we taught babies how to walk in the same manner we force children to
remember data, namely with pressure, with the reminder of "see how your big
brother did", and punishment for falling and for low mileage, it would be a near
miracle if any child learned how to walk, or for that matter, cared to.

And what do data mean anyway? These data your teacher and your parents
conspired in forcing on you. Items you were allowed to forget immediately after
the test?

Many of these so-called facts we learned had a high probability of being
outdated at the time they were given to us. Many of them proved unnecessary,
useless, or plain wrong. The correct data we received may have been replaced
later by the progress of the sciences or by the development of new fads in
teaching. In addition, that information may no longer be valid, seen from the
point of view of a changing world, and almost certainly they may have been
colored by the teacher's interpretation or limited by the teacher's knowledge
and imagination. And always, even at best, these facts, of necessity, were
incomplete and often misunderstood by the pupil and even by the teacher, in
the first place.

There is a difference between a teacher and a person who knows a large
number of facts. There is no reason why the two have to go together. But it is
imperative that the teacher realize this and not feel compelled to answer every
question immediately. Not knowing something is as important as being human.
It seems so terribly difficult for a person to admit that he does not know
everything. A teacher who gives a wrong answer or an incomplete one, or makes
one up just to prove to have all the answers is, at best, unethical.

The teacher needs not more data, facts, methods, curriculums and texts, but
he needs to establish an honest, one to one relationship with each one of the
students. He should build their self-esteem and show respect for their thinking.
The teacher needs to give them encouragement and try to follow them to the
limits of their ability. How many teachers have you known among your own
teachers?

The essence of a museum, too, is the personal contact. When the curator
gets too big to talk to the general public, when the teaching staff only deals with
"organized groups", the great advantage of having a museum has already been
diminished.
It is exactly the "work" with the rusty nail that stimulated the public. We can hardly expect anyone to learn anything of importance from the largest, most comprehensive, best documented, best lighted collection of bent, rusty nails in the world! From this it follows that the uniqueness of museum education is hidden in the staff of the museum, and nowhere else!

One of the formidable strengths of a museum is its immediacy, its presence. It stems from the fact that people are talking with people, explaining, challenging, showing, discussing and handling real specimens. The connection, the empathy, the setting of the stage starts with the man at the door, the colors of the halls, the cleanliness of the floors. Feeling at ease starts with the friendliness of the lady at the desk, the design of the exhibits and the state of the restrooms and the language of the labels.

Two-thirds of all visitors to the average museum are children. This fact automatically promotes all museums to the class of children's museums. This fact in turn forces upon it the role of educational institution. Here also opens up a necessity to define the nature of what exactly constitutes education.

Education is a condition, a feeling, the result of a special situation, not a place.

We are constantly confronted with a question brought on by our own doubts: "What did we teach our visitors in that short period they spent in our Museum?" If all the conditions to influence the visitor favorably were met and were operative, there is no need for doubt.

It makes no difference if the visitor remembers that you showed that the bird had four or five toes. What was of importance is that you and your enthusiasm and that your whole museum made that bird, or birds in general, or nature study or ecology so important that later on, maybe years later, your effort may prove valuable.

An educator hands out delayed action devices that will become operative all through the life of the student. A museum does this in a very unique manner.

'A different approach? Now seen from the inside, what does a museum do if it wants to dispense information? It is difficult to offer a plan because it will have to fit inside the circle of traditional thinking in order to be understood by the community.

Should we join the voices that proclaim that schools are no longer valid and we should find another system of fitting our offspring in an ever faster, changing society?

Should we adhere to those who advocate that the whole community, not just teachers, should be charged with raising its own children.

Should we give grades to voluntary visits to zoos, theaters, museums, breweries, cartwrights and hospitals?

Should each businessman, instead of paying school taxes, be obliged to take time out to show a child or a group of children the workings of his business?

Should there be a point for each book read, for each opera attended, or for each conversation with a bank president?

As tempting as some of these suggestions are, and as important they may be for the future, we have to stay within the circle. How then can we change, in all
our museums, what so obviously needs original thinking and improvements? We could first start with some obvious remedies.

If an associate curator or one of the volunteers is a thoroughbred shell collector, why should this person be forced to follow a school curriculum and work with that class on “Our town in the civil war”? She oozes with enthusiasm, anecdotes and inside tricks on how to collect shells. Here is the best resource person these children will ever meet, and of all things, she is forced to give a mediocre, standard talk about “Our town” which probably was already discussed by the teacher. This is especially true when the Museum uses the same textbooks and curriculum guide the teacher uses.

The busiest days in most museums for general visitation are Saturday afternoon and Sunday afternoon. This is the time all the “knowledgeable” staff is gone. Only the lady at the sales desk, who is busy selling and who has no time for small talk, is available to make the museum a better and more informative institution. Where did this one to one relationship on a multi-disciplinary basis go to on Sundays? The museum is used at its best if we emphasize its strong point and use well motivated resource people and let them talk with the visitor, with the school classes, with the old-timers. Not to teach, but to talk, to be amicable, to be pleasant, to be stimulating and to be scientifically correct.

But museums have to live too and pay the bills, they need the support of the schools, as much as they need all the other sources in the community. After all, they are inside the circle of traditions. Museums are expected to teach school classes, in the traditional sense. Giving facts, data and numbers, and if possible, within the range of the school curriculum.

For this phase of our work the Corpus Christi Museum is contemplating a more comprehensive approach. A visiting program to be called a “window program” considering the fact that a museum is a glass house, with an infinite amount of windows on the world. The class should be offered a multitude of experiences, instead of 20 minutes worth of birds in the halls, or a stereotyped spiel about dinosaurs, or a slide lecture on local history by a misplaced shell expert.

A visit to the museum should be a day to observe the world from as many angles as possible. The receiving person at the museum not to have a title as teacher, instructor or docent. Why should we emulate the schools again and turn many visitors off before we start? Why not a more museum-like title such as curator or science-assistant or even guide. In the eye of the public, “guide” is a time honored title, people ask for one, and often address museum personnel as “guide”. And furthermore, what is more gentle and friendly than guiding the learning of children in their museum adventure? Mind you, not teaching, but learning.

The class could be divided sometime before the trip by the teacher, on suggestions and instructions of the museum, in independent teams. These teams will prepare beforehand for the visit. Some of these could be:

1. Art team
2. Mathematics team
3. Nature observers
4. Weather observers
5. Tripmonitors (behavior)
6. Diary team

(social studies)
(math)
(science)
(science)
(social studies)
(English)
7. Route team (geography)
8. History team (points of interest during the trip)
9. Poetry team (English) (history)
10. Ecology team (science)
11. Spanish language team (language arts)
12. Bibliography team (library)
13. Correspondence team (composition)
14. And any other teams possible or called for, one of special value to the climate or location of the school and the museum.

The children can prepare to bring cameras, tape recorders, art supplies, and to make observations and note their experiences, both on the way and at the museum.

At the museum the world should be open to them. Possible activities are:
- Specimens to touch
- Specimens to smell
- Paper and pencil activities in the halls
- Working with expendable museum materials, such as shell debris
- Mystery boxes
- Flashcard specimen hunts
- Native activities, such as buzzboard, bow drill, arrowhead making, toss catch game
- Holding or handling animals
- Solving museum puzzles
- Artwork of any kind
- Reading out loud by a guide (Moby Dick near the whale exhibit, etc.)
- Making sand paintings after Indian designs
- Paper crafts (at Japanese collection)
- Treasure hunts
- Do some weaving
- Make some paper

To keep a class busy in this manner, supervising activities, giving a helping hand, advice or a piece of information requested by a child is more work than teaching shells and showing the inevitable movie. But the visit is not over, reports are to be written at school, letters to be written to the museum, questions asked, experiences discussed and exchanged. Now the "window-box" will be used in the classroom. Each teacher, upon leaving, is given a cigar box which contains expendable items such as:
- shell
- foreign coin
- piece of unusual paper
- piece of interesting cloth
- flint
- some seeds
- square nail
- foreign stamp
- small fossil
- arrowhead
- sand from wherever
Each one of these items, you readily see, pertains to the whole world. Possible is that the museum adds to such a collection a list of observations, suggested projects, instructions, experiments and descriptions about these items, including instructions on how to make a classroom-museum-aquarium-terrarium-vegetable garden or whatever. A program without teaching, drilling, forcing students to perform. A whole program offering opportunities to learn the right way voluntarily.

The one major problem with this window-program is the school teacher. The circle of tradition, keeping us all captive, does not very well allow for this unstructured, unscheduled, unregulated attempt at learning without teaching, without the method of lesson plans, without the purpose of a curriculum. The great complaint heard at all museum meetings by all museum educators at conferences is that the average teacher is a passive field trip leader. The museum trip is often considered to be a bother and an interruption to the smooth flow of the daily routine. On the other hand, some see it as a welcome excuse to escape the routine of the classroom, especially in the spring, because we are all getting tired of school by that time.

Only a very few teachers apply for a second visit during the year. Only a handful come on their own with a class. Fewer still are the teachers who visit the museum on their own, to inform themselves of the opportunities the collections and the staff offer.

Many museums are searching for the elusive formula that will turn on the teacher. Especially because the teacher, from kindergarten through college, in the final instance is traditionally the major catalyst between the student and all the sources of information.

A vast growing area of museum education is the work with college level adults. The academic community is discovering the museum field and an interest is growing. A number of possibilities are available for sound museum-college cooperation. Some of these are:

- Student volunteers in various departments of the museum.
- Employing students part-time during the school year.
- Employing students during the summer. Subsidies are often available for this purpose.
- Working with visiting college groups. Lecturing, guiding or any special program, as requested.
- Work assignment for students in the halls of the museum, designed jointly
by the professors and the museum staff.

Actual lecturing at the college, either as a single presentation or as a series of talks as part of a set course. The growing interest in museums has resulted in the development of an academic field known as “Museology” or “Museography”. Words about as exact as “General Knowledge” or “Science”.

The most fruitful study of the museum and its infinite complexities can only be done successfully at the museum itself. For this reason the Corpus Christi Museum offered this opportunity to a senior student. Chosen was Will Thomson of Wesleyan College in Rocky Mount, North Carolina. In working at the museum, he fulfilled the prerequisites for his Bachelor of Science degree. The experiment was made possible with the help of a grant by the Moody Foundation. A course of study was built for him, with the permission of his faculty advisors. The two semester experiment reflected, as completely as possible, the total area endeavor of the museum.

Included were topics as far apart as floor maintenance, care and feeding of animals, playing games with children, temperature and humidity studies, addressing volunteers and making a one week study trip to Oberlin, Ohio, for the American Association of Museums workshop on conservation.

The accent was put on learning instead of teaching, and one major drawback of our conventional college methods became apparent immediately. Our colleges do not necessarily train the students to acquire knowledge on their own. As long as the student is present and works his assignments and memorizes the material, he will be tested on it and, if doing well, he is assumed to be becoming an educated individual. Our student had difficulty in adjusting to the fact that he had to collect his own knowledge. Either through observation, through oral contacts with the staff, through reading or by doing it himself.

Many schools, churches, charitable organization service clubs, civil service departments, post offices are all instituted for a very specific purpose. After a very short period, the emphasis is switched from the purpose to the organization itself.

Window workers at post offices tend to treat the customers as if they are handing out favors, charity contributions go for office supplies and salaries, churches build larger sanctuaries and swimming pools, and the service club saves money for the annual picnic. An absolute minimum of help and service is produced for a maximum of effort. Schools build larger and larger hierarchies of people who are not in contact with the pupils. Teachers see more and more students on an impersonal basis.

The total experience on the college level was of importance to both parties. The museum staff learned to work with a senior student and his specific set of problems and circumstances. It was especially obvious how incomplete a college education is when it is seen as a realistic preparation for work in the outside world. The study, the school and the curriculum appears to be a purpose to itself. The reasons for the educational system, which is to produce whole citizens, prepared for a gainful relevant life, get vague because the system now seems to have acquired the purpose of maintaining itself.

The material that was judged most essential by the museum staff was divided into 32 subjects (for 32 weeks, one subject each) two appendices were added later, together with two semester assignments.
CURRICULUM

1. Functions of a Museum
   Visit with the Museum director to official meetings with City Manager, School authorities, Museum Advisory Board, Guild, Friends of the Museum and to staff meetings. Museum philosophy.

2. Financing
   Work in the Museum business office, with emphasis on budgeting methods and ways of financing the community Museum.

3. Business Procedure
   Correspondence, mass mailings, business machines, dialogue with other museums and universities.

4. Library
   Methods of the staff reference library: library research; connections with other libraries, museums and universities; Library of Congress system of cataloging.

5. Laboratory Experience
   Conservation, repair and preservation of specimens pertaining to anthropology.

6. Laboratory Experience
   Preservation of insects, marine specimens and other invertebrates.

7. Laboratory Experience
   Preservation of vertebrate specimens, dry and wet specimens; study skins of birds, small reptiles, fish, amphibians and mammals. Some basic skeleton work.

8. Study Collections
   Methods and management of a study collection of preserved material for use of staff, for study and identification purposes.

9. Archives
   Methods and management of the synoptic collections of the Museum, for exhibit use or for posterity. Control of pests and deterioration.

10. Art
    The student to spend a week at the Art Museum of South Texas, getting acquainted with the special procedures, problems and programming of a typical art museum.

11. Collecting
    Methods of an archeological dig. We will try to originate an actual dig, with the help of the local archeological society and museum personnel.

12. Collecting
    Series of field trips to collect insects, botanical specimens, marine specimens, etc. Visit wildlife refuges and the National Seashore.

13. Study Trip (financed by Corpus Christi Museum)
    The student to attend the annual meetings of the Texas Museums Association in Houston; visits to Houston museums.

14. Study Trips (financed by the Corpus Christi Museum, one day trips)
   1. San Antonio museums
   2. McAllen museum (sidetrip to Mexico)
   3. Kingsville museum
   4. Texas University Marine Station, Port Aransas
   5. Texas State Wildlife Museum (Rockport), and Aransas Wildlife Refuge (Austwell)
15. Television and Radio
   Program choice, preparation and actual live, on-camera assistance. (Museum T.V. program is in its fifteenth year.)

16. Safety
   Fire procedures, bomb scares, safety methods, first aid, insurance, alarm systems, supervision and handling of groups and crowds, etc.

17. Maintenance
   Building and grounds upkeep, cleaning methods, floors, toilets, glass, specimens, roof, and repairs, inside as well as outside of the building.

18. Research for Exhibits (Science)
   What topic to display, what aspect of it, how to display it so it is relevant to all visitors, from Head Start to adult.

19. Research for Exhibits (Anthropology)
   Same as 18.

20. Exhibit Design
   Design an actual exhibit at the Museum planning office, inclusive of color scheme, label contents, lettering, lighting, special effects and exhibit case (cost estimates).

21. Exhibit Case Construction
   Help the museum carpenter in the construction of exhibit furniture, study making of a blueprint, notes and actual use of shop machinery.

22. Exhibit Hall
   Make a comprehensive design for a hall, with about thirty related exhibits. Consider hall lighting, floors, ceiling and the management of the public.

23. Information
   Study and report on the amount and level of information in several museums; work with the general public as a representative of the Corpus Christi Museum.

24. Sales Desk
   Philosophy and procedures of this service, including staffing. Make a budget and a cash accounting survey for a small sales desk.

25. Education (children)
   Philosophy and methods employed by several museums. Observe children's reactions, actual teaching of children, between five and fifteen years old.

26. Education (adults)
   Observe museum staff in dealing with adult groups, prepare a "museum related" program and present this to five civic groups (Kiwanis, P.T.A., etc.). The goodwill of such groups is very important to community museum support.

27. Public Relations
   Study methods of using the news media as free advertising for the museum, writing actual news stories, study photography, taping, etc.

28. Museology
   Study the Museum's own collection of literature pertaining to museums from all over the world. Make a comprehensive report on unusual programs and projects, make a card file of these for the student's own future use.

29. Recreation
   Participate in the museum's programs for the general public, develop one program for children and execute it.
30. **Fund Raising**
   Study the methods of museum financing, and the procedures and sources for effective fund raising. Set up a schematic for an imaginary museum.

31. **Museum Accreditation**
   Make a study of the prerequisites for museum accreditation.

32. **Museum Philosophy**
   Design and send out a short questionnaire to a small number of museums in order to find the basic philosophy of the museums and their raisons d'être.

**Appendix**

1. Supervision, care and maintenance of the small live animal collection of the museum.

2. Help in building the exhibit installations in the small South Texas Art Mobile.

---

**Assignment 1:** To develop a plan for a small museum with a 100,000 dollar per year budget. The plan to include:
- Floor plans
- Exhibit plan
- Program plan
- Staff chart
- Annual budget

**Assignment 2:** Develop a general exhibit on insects of interest to all age levels. Write the labels, do the art work, make a mock up, full size exhibit.

The candid comments of the student are included in this report, as they again illuminate the learning side of the program.
The writing of a final report on anything strikes one with a feeling of mixed emotions — the realization that once more, something is coming to an end... consolation to that being that an end is the predecessor of a new beginning. Any new beginning leaves me with a sense of excitement.

This year has been a paradoxical one for me. So long, yet so short; so complete, yet unfinished; so satisfying, yet frustrating. In this short term of 9 months I was trained for the beginning of a profession, but more than that. My whole life has been altered — thought, outlook, person, everything was swept away. Perhaps something of a melodramatic statement — because everybody changes, and frequently, but it is not usually the product of one experience.

To attempt a synopsis of what I learned at the Corpus Museum would be impossible at this point. My notes already fill a packing box and a spinning head. It would be more practical to turn myself to how and why I learned in this experience. I ask myself what I have gained and the list becomes endless. Friends, learning, hunger, these things I was given and they can't be summarized on paper.

The project itself was new, and different. So different for me that it took some adjusting to. Thrust into new surroundings, in a different atmosphere, and a unique outlook on learning — my circuits nearly overloaded. The friendliness of the whole crew enabled me to make the adjustment quickly and I felt immediately a part of the whole operation. As the year went on I had different tasks and responsibilities to the Museum as well as myself and though at times confused or out-of-place with things, everyone was always surprisingly willing to help.

The educational value of such a program is that nowhere else could such an education be provided in a work-study orientation; the advantages are numerous over the traditional system. The first and most important aspect of this type of education is that it is practical rather than theoretical. In the classroom I was told that this is the way it works; in the Museum I did it because that was the way it was done. The learn-through-doing experience is more valuable to me for several reasons. First of all, this type of experience is easier to understand, for obvious reasons. Secondly, I felt that I was making an active contribution to the operation of a Museum, for the most part. Thirdly, the retention ratio of information gained in this manner is higher — more of what I have learned has stuck. Finally, my mental attitude was brighter, because of the independence and the variability of day to day activities. As opposed to my classroom experiences, I practically never got bored.

The general purpose of the study was to acquaint me with museum procedures — every facet of the operation of a public museum was studied. I attended valuable seminars, conferences, made field trips, worked for a short time in two other museums. The opportunity for learning was constant — I spent longer "in class" than I had at Wesleyan, working 8 to 5, five days a week. I had the opportunity to work with children, and did a television show, as well as 4 radio tapes.
Above these other things I have mentioned that can't be picked up in a classroom experience is the exposure to the politics of museum life. I got a real feeling of the frustrations of working with the boards, the city, the public and other museums. There is no other way to obtain so complete an education. It combined teaching block, lab, field trips, seminars and classroom experiences into one total educational experience, everything tied together, aimed at one thing — the museum.

Of course, in any type of educational system, there are a few problems. The first of these to arise was a disorientation due to the new freedom I had to study what and where I felt I needed to. At first I felt like I was imposing on members of the staff who had their own work to do — and the fact that I was in a new community in new surroundings added to the confusion. Also, during the first semester I didn't set up a rigid work schedule, so my short range objectives became a bit fuzzy. Sometimes, as in my college days — the goof-off syndrome would overtake me, but here at Corpus it was easier to overcome. My other problems — logistics, funds, etc. were overcome in January by the arrival of the Moody Grant — and since I had had Christmas break to think things and and reorganize, things ran much smoother during the second semester. We began active scheduling in advance, projects were assigned more frequently, transportation eliminated problems with getting to and from work, and generally speaking, there was more to do during the second semester. Conferences, three trips to the Art Museum, two trips to McAllen, the Oberlin seminar, and reorganized regular duties.

I could go on for hours on the benefits of this type of a project, but time here prevents it. A complete analysis of this program will take a while to complete. But as far as this one is concerned — it was the most singular experience of my life so far.

In conclusion, the only recommendations I would have would be to lengthen the time involved in covering the same material to maybe a year. The problems that the museum has in regard to me I cannot analyze. Also, going it alone was rough sometimes, in the sense of not having peer group communication. Not serious.

The only thing I can say in conclusion is that I'd do it again in a minute. I loved it, and I'll never forget it.

by Will Thomson
May 23, 1973

Conclusion:

The museum still has to find its role in the community. A role that is larger than being the attic of the community, or the repository of someone's private, professional or hobby collection or the leftover from the life work of a college professor, or the project of the shell club. Nor is a museum an agency that is the extension of the schools.

May we suggest that, to protect the public, the first part of the remedy should be accreditation. After that, standards and inspection. Maybe the time has arrived for a separate organization of accredited museums.

The museum field has a long, long way to go.