A training program has been developed at the University of Texas at San Antonio to prepare community volunteers as museum tour guides. Since most teachers have not had training in the museum's role in education, it is often the museum docents who perform the teaching role in museums. A descriptive study was conducted as a preliminary phase of research into museum teaching and learning prior to establishing the program. Questionnaires were developed for docent tour guides and teachers who visit museums with their students, each intended to elicit preferences and needs for students' tours. Responses revealed the following problems: (1) Docents are asked to lead tours for all ages of children from nursery school through high school and are rarely informed in advance of what age group they may be addressing; (2) The group size determines the teaching techniques that will be used on a tour, and, for the most part, groups are too large for anything more than informed lecturing; (3) The amount of museum space that will be covered and the length of time available affect the amount of teaching that can take place; and (4) Communication between school and museum is often not enough to help docents understand what teachers expect of museum visits for their students. Particular emphasis is placed upon developing visual literacy in museum visitors. The need for collaborative programs between schools of education, museums, and the schools to develop effective training for teachers and docents in museum education is pointed out. (JD)
In 1980, a poll conducted by the National Research Center of the Arts found that sixty-eight percent of Americans are going to museums, representing a sizable increase over the sixty-two percent recorded five years earlier. The 1980 figures also indicate that the museum is becoming more attractive to Americans than sports events. The die is being cast for the museum's role as a popular cultural center. The American people are recognizing the museum's ability to educate.

Museum educators sometimes liken the museum's role in education to that of the library (Newsom and Silver, 1978). They are quick to point out that the school experiences of most people prepare them to better use the resources of the library than the museum for self-directed learning. The development of museum skills is strikingly absent in elementary, secondary and even postsecondary curricula and school experiences.

One could argue that the library skills of inquiry and research are suitable for study of the museum's contents. But the museum's presentation of information in nonlinear contexts requires more.

Like the library and the school, the museum shares a conserving function by offering organized knowledge to the receptive mind. But the basic skills taught in the schools are those best suited to reception of linear modes of communication and model
building. The printed word can be comprehended by those who have been taught to use and develop symbolic, linguistic, and rational models. The myriad meanings of the museum's nonlinear presentations can only be apprehended and understood by those who are also skilled in imagery and affective, intuitive ways of thinking. The school develops the former better than the latter and has yet to nurture their mix in the young mind.

Of concern to museum educators is the use of museums by many elementary and secondary teachers as places to visit rather than as places for learning. Young people rarely approach the museum with the same attitudes and mindsets with which they approach the library. Indeed, the number of visits they make to museums is typically fewer than those made to libraries in a month, a year, or even a lifetime. Experiences with museums are not only infrequent for most young people, they often also lack quality of purpose and preparation. Students and teachers make their visits without the appropriate museum skills. And they do not, sometimes cannot, return sufficiently often to develop them.

What is the museum's responsibility in improving its use as a learning laboratory? Even as Newsom argues that the museum is an educating institution, she states that the museum's primary purpose is to collect, preserve and exhibit—not to teach (Newsom, 1978: 490). She points out that museum staff members are not usually expected to have knowledge of child development, patterns of learning, content of school curricula, or the role of the classroom teacher. They are expected to know their disciplines. The classroom teacher is the developer of children's learning
experiences, including their exploration of the knowledge conserved and presented by museums.

In Jones' survey of museum directors in the United States and Europe, the major problems cited in the museum's ability to offer school groups worthwhile educational experiences were lack of trained staff, scheduling, and teachers' lack of interest (Jones, 1977, 40).

Inservice teacher education programs in museum education have been disappointing. Newsom (1978, 486) clearly states the problem:

Workshops, after-school consultation hours, previsit literature, special memberships, invitations to openings, in-service and in-training courses, and a host of similar encouragements to teachers on the part of museums have seemed over the years to enjoy little success in producing the desired cadre of museum-wise school educators who could be counted on not only to conduct their own tours but to follow them up in the classrooms.

Where inservice programs have been successful, as at Old Sturbridge Village, the amount of time and commitment required of the teacher is extensive. Many teachers are not able to participate in expensive long-term inservice work. In discussing Sturbridge as a site for community study, Risnick (1975, 450) cites inadequate teacher training in community education by academic schools of education as a problem in the realization of the Village's educational potential. Newsom also refers to the lack of significant collaboration between teacher education institutions and museums as an important problem area. She recommends preservice training in museum teaching styles (Newsom, 1978, 494).
Most teachers have not experienced the museum as a learning laboratory in their pre-college schooling. Therefore, their own museum learning processes are poorly developed and continue undeveloped in professional training programs that ignore the museum's role in education. Without command of those processes, it is difficult, at best, for teachers to develop museum teaching styles that have the capability of teaching students to use the resources of the museum, like those of the library, for self-directed, lifelong learning.

Given these circumstances, maintained by a pervasive and limited perception of the museum as a showplace to be visited from time to time rather than "a great free university, a browsing library of objects, a random-access learning center and a place for Master Sightseers" (Newsom, 1978, 487), the task of developing students' museum learning processes falls by default to the museum. The inadequacy of teacher preparation programs to develop teaching competence for museum education shifts the responsibility for nonlinear learning to those persons the museum can train to work with visiting students. Typically, those persons are community volunteers.

THE PREPARATION OF COMMUNITY VOLUNTEERS FOR MUSEUM TEACHING

The idea of the museum docent was introduced by Benjamin Ives Gillman, Secretary of the Museum of Fine Arts in Boston from 1893-1925. The docent is distinguished from the community volunteer by a teaching function. Although Gillman's concept did not extend to the education of children, work with school groups of all ages
has emerged as a responsibility of docents with the museum's increasing awareness of its special instructional role.

The University of Texas Institute of Texan Cultures at San Antonio is concerned with conserving, exhibiting, and communicating the history of culturally diverse groups that have contributed to Texas history and life. The Institute's exhibit floor and productions are designed to encourage teachers and parents to use with learners cultural heritage or ethnic studies materials that have special applicability to the cultural pluralism of the American Southwest and Texas. They treat history from a human perspective, engaging people of all ages with individuals and groups who are the subjects of study by Institute researchers. A staff of museum educators works with schools throughout the state to offer children and young people opportunities to study the histories of Texans and their cultures.

In response to the large number of school groups that visit the Institute's exhibit floor each year, a training program has been developed to prepare community volunteers as tour guides. Concern for offering students substantive learning experiences at the Institute has promoted the collaboration of the museum's educational staff with teacher educators from The University of Texas at San Antonio. Now in its fourth year, the program is developing a growing cadre of docents who work with school groups daily. Precisely because most teachers are unprepared to use museums effectively for their students' instruction, the Institute's docents must perform teaching roles that are adapted to the museum's
nonlinear presentations. Their preparation for instruction in museum learning requires specialized training. It also raises new issues in education.

The Docent training program at The Institute of Texan Cultures which all new docents are required to attend consists of fourteen half-day sessions, and is conducted twice a year, in January and September. The program for four docents falls into three parts: an orientation to the Institute and the docent role, presentation of historical data related to the twenty-six ethnic groups represented at The Institute, and training in museum education.

The orientation to the Institute includes tours of the exhibit floor and the research library, and information concerning services provided by the Institute, such as educational programs, outreach to the schools and outreach to the aging.

Historical data concerning the twenty-six ethnic groups represented on the exhibit floor are presented by Institute staff and researchers who are knowledgeable of the histories and characteristics of the ethnic groups which settled in Texas. These include Indians, Spanish and Mexicans, Afro-Americans, Anglo-Americans, Northern European groups, late nineteenth century immigrants, and Asiatic peoples. Historical background information which is presented to the docents is related to the artifacts and information displayed on the exhibit floor.

Two sessions are devoted to training in museum education, conducted by teacher educators from The University of Texas at
San Antonio. The emphasis in these sessions is on making history come alive for children and young people. The following educational concepts are applied to museum learning and teaching in these sessions:

1) History is the story of real people;
2) An understanding of and appreciation for one's cultural heritage gives young people a broader perception of their own society and an enhanced self-concept;
3) Learning of new facts and concepts occurs through assimilation and accommodation: by using the "mental hooks" of past experience and acquired knowledge to develop new facts, concepts, and ideas;
4) Learning is most effective when the learner is actively involved in his own learning;
5) Museum education provides unique opportunities for the development of inquiry skills, and visual literacy.

The training sessions are designed to involve the docents in activities appropriate for use with children and young people, to encourage them to reflect on the educational principles inherent in the activities, and to help them adapt the activities to different age-groups and different exhibits.

For example, techniques such as story-telling, biographical sketch, Twenty Questions, treasure hunt, and work-sheets are demonstrated and discussed, and then the docents, working in groups, apply a technique to an exhibit and develop a brief presentation.
as a tour component. The presentations are followed by analysis of the techniques used with reference to basic concepts of museum education.

There is an emphasis throughout in developing questioning skills. The docents are encouraged not only to ask questions, but also to elicit questions from their audience, so that learners are involved in inquiry processes. Docents are also helped to relate the past to the present by finding similarities and differences between past and present life, helping learners to take the role of a character of the past, to share that person's interests, hopes, fears and aspirations, or examining an artifact with a purpose that is shared by similar modern day items. Another area of emphasis includes ways of responding to the particular needs and interests of different groups. Docents are trained to use appropriate language with learners at different developmental stages, and to incorporate learners' questions and ideas into their tours.

Two half-days is clearly a very short time to attempt to train a group of thirty to forty community volunteers to work effectively with children, especially in a museum setting. The docents, museum staff members, and the teacher educators who participate in docent training have noted problem areas in their attempts to develop quality education for students who visit the Institute. This study was conducted to better define the issues of museum education and the variables that affect them.
QUESTIONS ON DOCENT TRAINING AND MUSEUM TRAINING

Neither the processes of museum learning nor the most effective styles of museum teaching are well understood. In an effort to explore some aspects of one museum's educating role, a descriptive study was conducted as a preliminary phase of research into museum teaching and learning. The study was addressed to the following questions:

1) What are the needs of community volunteers who serve as museum guides for visiting school groups?

2) How do the docent guides perceive their teaching role?

3) What problems or concerns do they experience in conducting tours for students at the respective school levels, N-12?

4) How effective is the training docents receive in museum education for developing their abilities to promote children's exploration of the museum's nonlinear presentations?

DOCENT AND TEACHER QUESTIONNAIRES AND TOUR OBSERVATIONS

Questionnaires were developed for docent tour guides and teachers who visit the Institute with their students. Each was intended to elicit preferences and needs for students' tours from the docents and visiting teachers. Both questionnaires also requested evaluations of students' museum experiences from the perspective of the respondent's role.

The docent questionnaire was distributed during the fall, 1980 to all volunteers who had participated in the training program since September 1977 and who were still working as tour docents at the Institute. Forty-two of sixty-seven questionnaires were returned, representing docents trained between Fall, 1977 and
Teacher questionnaires were given to teachers when they visited the Institute with their classes. The teachers were asked to return the completed questionnaire by mail soon after the visit. Twenty-four teacher questionnaires were distributed; six were returned.

Structured observations of five experienced docents were made while each conducted a tour for school groups at the Institute on days selected for this data collection. Observations included docent work with primary and intermediate grade children. Records were kept of exhibits visited, time spent at each, instructional focus, and teaching techniques used by the docent. Tape recordings were made of the verbal interaction during the tour.

THE DOCENT'S TEACHING ROLE, NEEDS AND CONCERNS

The docent questionnaires supplied data on the ages and grade levels of children served by the docents and their preferences as related to age level, the techniques most commonly used by docents and the techniques which they felt were most valuable in educational tours, and their concerns in planning and conducting student tours. The observation records provided support for many of the docents' expressed needs and highlighted problem areas. The few teacher questionnaires that were returned suggest that teachers may be insensitive to those problems. The most significant findings pertain to grade level, teaching methods and the issues of group size, time, space; preparation and teacher expec-
tations. The problems identified by Institute docents underscore the difficulty of their teaching role. Their concerns are characteristic of all teaching situations but take on special significance in the museum's instructional setting.

Grade Levels

Docents are asked to lead tours for all ages of children, from nursery and kindergarten through high school. A ranking of grade-level groups according to the docents' interest in working with that level showed a preference for the intermediate grades (four and five). Middle school grades (six, seven, and eight) were ranked second. Primary grades (one, two, and three) were ranked third. High school students (grades nine through twelve) were considerably less popular and were ranked fourth, but the group which was of lowest interest to docents included nursery and kindergarten children.

On the days of observation, the docents observed did not have advance knowledge of the grade levels with which they would be working. Having no time to prepare for the group they would lead through the exhibits, the docents tended to fall back on a basic, generalized tour format that relied heavily on the incorporation of demonstrations and presentations offered by museum staff members. Two of these presentations, one on the Indian tepee and one on the life styles of early Spanish settlers in Texas, were included in all five of the observed tours.

The grade levels represented by visiting groups on any day can range from nursery through secondary and, sometimes, college-age
students. Several comments by docents indicated that they felt that museum tours, as they are currently conducted are inappropriate for very young children. They suggested that the tours are too long and that children's attention span at this age is so short that they have to be taken to a large number of exhibits. One docent indicated that at this age, informal visits with parents were more appropriate than formal tours.

Preparation

In addition to the real possibility of working with the full range of age and grade levels in any one day, the docent must be prepared to conduct tours of any of the twenty-six exhibits on the respective Texan culture groups. This required the docent to possess knowledge of each culture that can be adapted to the widely varying interests and abilities of visiting students on a moment's notice. Docent questionnaire responses referred to their need to quickly adjust to different grade levels and to prepare for each within very short timeframes. Doing so with ease and teaching effectiveness demands considerable understanding of developmental levels that is not typically required of most classroom teachers.

Teaching Methods

Seven techniques that are presented in the training program were listed, and docents were asked to indicate which of these techniques they had used. A second question asked them to rank the techniques according to their usefulness in conducting tours for students. The seven techniques listed were: Answer-a-Question, Story Telling, Biographical Sketch, Demonstration of Artifact or Process, Worksheet, and Treasure Hunt.
The Demonstration technique was reported in use by 88% of the respondents, and was ranked first in terms of usefulness. All respondents indicated that they use the Answer-a-Question technique. This was ranked as the second most useful. Story Telling is used by 81% of the respondents, and ranked third in usefulness. The Biographical Sketch is used by 62% of the respondents and ranked fifth. The least used techniques are Treasure Hunt, Worksheet, and Twenty Questions. These were also ranked lowest as the least useful.

Tour observations confirmed the docents' self-reports about teaching techniques used most frequently. The five observed docents asked questions but they were typically narrow, calling for yes-no or one-word responses. Lecture was, for all, the dominant instructional mode. The reasons for this appear to be the influence of group size, space and time constraints, and teacher expectations.

Group Size

Typically, the larger the student group, the more difficult is instruction if its purposes are to promote interaction, involvement, insight and the development of skills. The docents' identification of group size as a problem suggests that they are not seeking opportunities to lecture, but to involve students with the contents of exhibits. Guiding class groups of thirty to forty around an exhibit floor is not an easy task. Engaging that many students in inquiry into artifacts, displays and demonstrations requires considerable skill. It is virtually impossible to do so with groups numbering one hundred or more. Increasing transportation
costs are certainly responsible for the frequency of visits to the Institute by large school groups but so, also, are school expectations for the experience. When the purpose is to take children on an outing, more is better. This effectively thwarts the Institute docents in their attempts to use instructional methods with students that promote inquiry. It is no wonder that they are frustrated by the sheer number of students who arrive for tours, sometimes unannounced.

Space and Activity

The Institute's exhibit floor is large. Exhibits are well spaced. But large numbers of students can effectively reduce floor seating area and the walking space that permits careful viewing of artifacts and displays. The docents who cited 'space as a problem usually also referred to lack of sufficient time to accomplish their instructional purposes. The problems of classroom organization are considerably less complex than those of the exhibit floor. The museum's nonlinear presentations cannot be examined from one position. Students must move around them, look from more than one perspective, discuss them with one another, and sometimes, return for a second viewing. It is no small tribute to the docent that group control is not one of their major problems.

Observation data showed the docents to frequently use exhibit areas which contained tactual materials. Brief stops on tours for young children, in particular, were made where touchable buffalo hides, cotton bales and woven wall hangings are located.

Time Constraints

The need for flexibility was cited by docents as critical to
their ability to cope with unexpected groups and the limits of
time. Encouraging students to look, probe, and question; to
question and hypothesize, to make inferences and develop concepts
takes time. These instructional goals are hard to achieve in the
classroom. Although the museum's exhibits contain excellent re-
resources for children's inquiry, their value is diminished by the
pressing need to move many groups along through the many exhibits.

Lack of sufficient time to involve students with exhibits
for inquiry and concept development results from the steady arrival
of groups for relatively brief tours with teacher requests for
the inclusion of a number of exhibits in the tour. The docents
observed attempted to meet teacher requests but had to limit the
depth of student exploration of each exhibit. Given this time
constraint, the docents could not use extending inquiry or dis-
cussion methods. Instead, they tended to pose a question now
and then to prompt children's thinking about the content of ex-
hibits but spent most of their tour time lecturing to the students.
Very little time, if any, was given to helping students "read"
an exhibit's artifacts or visuals. That takes too long.

Teacher Expectations and Perceptions

Communication between school and museum is often less than
adequate to help docents understand what teachers expect of museum
visits for their students. The docents referred to this as a prob-
lem which is compounded by the many possibilities for study offered
by the exhibit floor. Concern over having enough knowledge of all
exhibits to meet unspecified expectations for students' learnings
can be debilitating. The docent who does not feel sufficiently
well prepared to conduct tours of all exhibits is placed at an
unfortunate disadvantage when little information is supplied about the purposes of a group's visit. When making arrangements for visiting the Institute, teachers typically indicate only which exhibits they wish their students to see. The teachers whose classes were guided by the five observed docents made their requests known to the docent at the time of their arrival.

Those relatively few teachers who returned evaluation questionnaires after their students' visit to the Institute gave glowing reports of the experience. If they are aware of concerns reported by docents, they did not mention them. If they are not aware of them, perhaps there is a substantial difference between the purposes of teachers and docents for students' museum learning. Though based on limited data, this inference is consistent with assessments of teacher evaluations at Boston's Museum of Fine Arts. Teachers' lack of knowledge of art history and low expectations for art museum programs are viewed as reasons for the limited value of their evaluations (Newsom and Silver, p. 244).

THE MUSEUM AS AN EDUCATIVE SETTING FOR THE DEVELOPMENT OF VISUAL LITERACY

This study sought to obtain answers to questions about the teaching needs, perceived role, and problems or concerns of volunteer docents and the effectiveness of their training program. Questionnaire and observation data strongly suggest that the docents are expected to perform a teaching role that neither they nor the teachers who bring student groups to the Institute clearly understand. Considering the constraints with which they must cope, it is remarkable that the docents do offer children enjoyable
experiences and, especially, that they continue to volunteer their services.

Examination of the broader context of the study's data indicates that the museum is a unique setting for educational purposes that are not well represented in the school curriculum.

William Ivins Jr., curator at the Metropolitan Museum of Art from 1916-1946 saw the museum's purposes as offering people not merely aesthetic pleasure; but a conscious awareness of their past (Tompkins, September 15, 1980, 101). Gaining a sense of one's past from museum exhibits requires more than casual looking or even attentive listening to tour guide presentations and careful reading of printed information about displays. It requires ability to derive meanings from visual data, to inquire into what is viewed and to intelligently make connections between what one sees, what one knows, and what one needs to find out.

We tend to encourage passive viewing rather than active inquiry in the museum, reinforcing (perhaps being reinforced by) the dominant style of viewing TV and film. This was very evident in the mode of presentation of exhibit material by the docents who were observed while conducting tours. The multidimensionality and simultaneity of visual images when examining displays and the artifacts within them was essentially ignored and sometimes subverted by overemphasis on narrow questions and particular facets of an exhibit to the exclusion of others. The problem for docents and teachers alike is that they are often not as visually literate as they need to be in order to develop such literacy in their students.
The Museum's potential for developing visual intelligence is perhaps greater than any other single institution or technological feature in our environment because it contains so many visuals that are rich in opportunities for inquiry. The visual thinking abilities developed in the museum can be naturally applied to the omnipresent visual stimuli offered by the camera (still, motion, or video) in school and home. The museum has the power to educate in ways that are typically not explored in many classrooms.

Education for the development of visual literacy is an emerging role of the museum. Some museums of art, in particular, are preparing their docents to teach toward this special educational purpose. The Institute of Texan Cultures is exploring approaches to docent training for developing children's visual literacy through exhibits of historical and cultural content. The issues of quality education in this area define important directions for research and program development.

The Issues.

Many of the issues in museum education parallel the concerns expressed by the docents whose questionnaire responses are reported in this paper. They are reviewed here as indicative of directions for needed research and program development.

The definition of unique goals. The skills of visual literacy remain poorly understood and essentially undefined. Although most museum educators have concepts of visual literacy, the communication of their meanings is often unclear. In art museums, visual literacy is concerned with examination of artistic expression. In science
museums. It is concerned primarily with phenomena and inventions. Artifacts and demonstrations are the focus of social science museums such as the Institute of Texan Cultures. Each focus presents unique types of content for visual "reading." We need to determine what skills are common to the exploration of all these visual forms and which are unique to each. How to define and articulate the skills of visual literacy is an important research question. How to develop them is another.

Development stages and the development of visual literacy

The issue of how to meet the needs of learning in museum education cannot be resolved without clarification of whether and how developmental stages figure in the ability of people of different ages to acquire proficiency in their use. The present tendency to apply stages of cognitive development to museum docents' work with children may be misleading and may contribute to the docents' identification of concerns about working with different grade levels. If visual literacy is primarily a right hemisphere function, as presently conjectured, principles governing the development of left hemisphere abilities can be retarding for museum learning. Careful descriptive research remains to be done.

What types of instructional processes best develop visual literacy is an allied question which cannot be answered without clear definition of the component skills. The various teaching methods and techniques that are taught to docents may only be effective for nonlinear learning. The negative response of the Institute docents to the teaching methods they have been offered does indeed
characterize those methods as wanting. It seems that the difficulties docents are having with museum teaching may stem from the confusion of linear and nonlinear learning by their trainers.

**Instructional group size, space and activity.** The logistics of teaching for the development of visual literacy are different from those that are appropriate to traditional schooling. This seems a rather obvious reality and yet, the tendency persists to work with children in the museum in the same class group arrangements that are organized for school learning. Even our limited understanding of the processes of nonlinear inquiry clearly indicates that large group activity is inappropriate. Alternative uses of space, time, activity, and group size for museum education must be designed and tested. Careful analysis of how each of these variables affects what students and docents can and cannot accomplish during museum visits is long overdue.

**Teacher expectations and perceptions.** Skills require time and continuing use for development if mastery is desired. Those associated with museum learning cannot be reserved for the occasional museum visit. Even under the best circumstances, the museum docent can have a very limited input into their development. The classroom teacher must offer students the necessary preparation, practice, reinforcement and refinement sessions. Teachers' limited awareness and lack of personal skill in nonlinear learning contributes to poorly defined purposes and low expectations for their students' museum experiences. Museum learning and teaching are neglected areas of teacher preparation programs arising from the paucity of communication between museums and academic institutions with teacher prepara-
tion programs. If this continues, museums may find it increasingly necessary to take over teacher education functions that are presently the province of academic education units.

Schools are no longer at liberty to attend to all aspects of education. Public pressure for basic skills development has dictated the focus of the school curriculum. Other dimensions of human development are moving or returning to nonschool settings. Courses are being offered in community centers, department stores, and shopping malls. Television and the computer are returning education to the home. Institutions other than the school are gaining recognition for the educational services they can render. The museum is especially prominent in this regard because it is an institution with relatively few constraints on what it teachers. Public acceptance of the museum's autonomy, social significance, and dignity is far greater than that presently enjoyed by the schools. No longer having a monopoly on education, although still mandatory, schools are distrustfully held accountable for student achievement; museums are not.

Museum curriculum and teaching should be a field of growing importance to liberal educators as it is concerned with types of learning that are consistent with their as yet unpracticed educational theories. Opportunities for research and development are extensive in nonlinear learning and in docentry. The retraining of nonworking and retired persons for a new educational role in society is unencumbered by certification issues. Developing the educational potential of the museum deserves the collaboration of museum and education professionals.
IMPLICATIONS FOR TEACHER EDUCATION

There are many possible ways in which teacher educators and institutions of higher education can provide expertise and services which will enhance the quality of museum education.

Research

As indicated earlier in this paper, research into the nature and development of visual literacy can give valuable direction to theoretical and programmatic concerns in museum education. Such research is clearly a collaborative responsibility of the museum and education professions.

Collaborative Training Programs

Collaboration between institutions of higher education, particularly those responsible for teacher education, school districts, and museums is essential if teachers and docents are to be trained effectively. Such collaboration can take a variety of directions:

a. Teacher educators may participate on a regular basis in conducting docent training programs, as in the program described above.

b. Training courses for museum education staff may be provided by a college or division of education. These could be provided as part of the regular graduate program, as an intensive summer program, or as a continuing education program.

c. Teacher educators may be employed by the museum as part of the museum education staff, to take responsibility for training of staff and docents. This might be a
permanent position, or might be for a shorter period (e.g. a year) during which time the teacher educator is granted leave of absence from the institution of higher education.

d. Preservice teacher education programs may include a component related specifically to museum education and the development of visual literacy. At this time, funding is being sought for such a program which would be a collaborative venture between The University of Texas at San Antonio and The Institute of Texan Cultures.

e. Museum services to schools may include teacher inservice related to outreach programs for students. At this time, such inservice is usually limited to teacher’s handbooks and other printed material. More extensive inservice would require that museum outreach staff be not only skilled teachers but also effective teacher educators; appropriate training programs for outreach staff would therefore include a teacher education component.

f. Collaborative programs may be established between a university, a museum, and one or more school districts to provide intensive on-the-job training for teachers in museum education. Funding is currently being sought for such a program in the San Antonio area, and such programs are already in operation, e.g. The Mid-South Humanities Project.

g. Teachers' centers may provide opportunities for interested
teachers to gain knowledge and skills in museum education. Many teacher centers are already providing a wide variety of community-based inservice programs, and would welcome a program of this type.

There is evidence in the literature that many of these ideas are already being implemented, and are meeting local needs, but they are not yet widespread. There is room for much development in this area.

The attainment of quality in museum education requires clarification and reclarification of the roles and responsibilities of the institutions and individuals involved in the enterprise.

Mutual respect among the institutions for what each can offer cannot be achieved if attitudes of defensiveness or possessiveness obtain.

Museum education has much to offer not only in helping students to understand and appreciate their cultural heritage, but also in attaining the visual literacy necessary for successful living in our complex modern society. The museum is coming of age as an educating institution.
REFERENCES


