

AN ABSTRACT OF THE THESIS OF

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In this study I explored the variety of educational opportunities available in museums. Next, I examined the museum education programs in the Portland, Oregon area and described what types of opportunities are available to teachers. Finally, I made suggestions for teachers on how to best access museum programs and for museum educators on how to best reach teachers.

Interactions between schools and museums exist on a variety of levels. From limited interactions to collaborative programming, schools and museums have found ways to work together to accomplish their joint goal of education. Museums offer self-guided or guided tours, curriculum packets, teacher education programs, access to collections or informational programs related to special exhibits. Some museums and schools have developed deeper relationships in which each give and receive help carrying out their missions.

I interviewed museum educators at nine museums in Portland and the surrounding areas. I asked questions regarding the types of programs

available, especially focusing on programs suitable for school groups or those that might be helpful to teachers. The programs available in the Portland area vary by institution. Each museum, historic home or zoo offers unique programs on a variety of topics. While history predominates, science, math, social studies and art are readily available. Teachers should be able to supplement nearly any classroom topic.

Teachers should take the time to get to know the educators in the institutions. Overall, the key for an individual teacher seeking museum education for students is to ask what is available. The programming at most institutions is flexible, especially when there are traveling or temporary exhibitions. Teachers should get onto mailing lists so they will be notified when special or new programs are available. Also, teachers need to keep in contact with the museum educators. Developing a personal relationship will prove invaluable for a teacher who is trying to fill a gap in a unit or supplement his or her curriculum. Museum educators will benefit from time spent analyzing where their current programs meet state guidelines or focusing planning on meeting specific state common curriculum goals (CCGs) when designing new programs. Schools are reorganizing their curriculum to meet state standards and museum personnel would be wise to do the same.

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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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Leigh Anne Whitney Scherer, Author

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Museum Education Programs: Portland, Oregon

Chapter 1: Introduction

Schools in Oregon are under pressure to provide more results and have been given fewer funds to work with. It is necessary for public school teachers and administrators to utilize resources in the community in order to provide the best possible education for their students. Teachers are searching for innovative ways to make learning come alive for their students, and museums could provide solutions. The question remains, however, do museums in the Portland, Oregon area have resources for teachers to use with their classes, and if so, what are they?

With the common goal of education for both schools and museums, partnerships seem to be a natural conclusion. The partnership between an educator or school and an institution should work to the benefit of both, as well as for the benefit of the target population, i.e. the schoolchildren (Sheppard, 1993). Neither should have to sacrifice professionalism, and as long as both remain clear on what each can, and will, contribute, their partnership should develop fairly smoothly. As Sheppard (1993, p. 2) writes, "The aim of the museum - school partnership ... is to bring the classroom teacher and the museum educator together - not just physically, but intellectually as

well." Museums are unique in that they offer information directly from material artifacts (Sheppard, 1993, Chamberlain, 1987, Lydecker, 1987, Chakalis, 1987), not through a filter. Schools can use this direct transmission of information to their benefit. Museums and related institutions are valuable resources for educators. Museums will also benefit from closer relationships with educators. Teachers and school personnel are experts on child development, acquisition of information, learning and teaching strategies. Museum personnel could develop closer relationships with educators and use their expertise for their benefit when designing programs or deciding on appropriate materials for different student groups. In addition, schools have large groups of students and teachers who could give programs or activities a "trial run" to work out the kinks before presenting them to the general public. With this in mind I developed a project to explore the major museums in the Portland, Oregon area and learn about the resources available to educators as well as provide pertinent information to facilitate access.

The Literature Review chapter discusses recent studies that address the use of museums in education, including topics such as outreach, collaboration, special education collections, teacher training, and museum schools. Programs from around the country are discussed and compared to provide a baseline for looking at museums in the Portland area. The Methods chapter describes how this study was carried

out. In the Results chapter I describe the information discovered while doing my research. Finally, in the Discussion chapter I explore the data I gathered and make recommendations for museum professionals and educators in the Portland area on how to best work together.

Chapter 2: Literature Review

In 1992, the American Association of Museums (AAM), the “governing body” for museums in the United States, published a landmark report which called for a nationwide re-evaluation of the mission and role of museums. Excellence and Equity: Education and the Public Dimension of Museums revoked the old notion of museums as storehouses for art or artifacts. Instead, the committee writing the report concluded that museums have a vital role to play in lifelong education and affirmed the role of museums in the education of our nation. Museums are accountable to the public; they hold objects in trust for all to enjoy. Their responsibility, however, goes deeper. “A great institution must provide intellectual access to its holdings...” (Lydecker, 1987, p. 9). Part of the responsibility that museums have lies in interpreting the works for the public. In order for the public to truly have access to items that a museum contains, the museum must interpret, explain, and educate.

In many museums, educating the public has been secondary to collecting artifacts or works of art. Objects are accessioned into the collection only if they meet the requirements set forth in the museum’s mission statement. If a mission statement does not explicitly direct the museum to educate the public, many make no attempt to do so (Hirzy,

1992). So, with the call to arms from the American Association of Museums for more education for the public, new problems arose. To meet the responsibility, mission statements have to be re-written; new staff has to be hired, or existing staff re-trained; funds to support educational programs, which are very expensive for the most part and take away from operations and appropriations, must be re-allocated or new funds must be found. Along with this, forward thinking staff have to contend with old beliefs and old ways of doing things (Sheppard, 1993). Altogether this is not an easy task and when practices are very ingrained it becomes difficult, if not impossible, to make changes. One part of the change in emphasis could result in developing stronger ties with local schools.

Recently, education has become the primary focus for many museums (Hirzy, 1992), and despite the AAM's 1992 report, there is historical precedent for museum education. In the early history, American museums focused on education due to sparse collections. As the country matured, and more wealth was available, the focus moved toward gathering large, intellectually and artistically significant collections.

Unlike European museums, which were originally royal collections, often dating back many centuries, housed in palaces, and with the coming of democratic regimes becoming public museums; American museums often began with sparse collections - often of the

wunderkammerer type; what they had to display they used to educate children and adults; after that began the important collecting in the prosperous late 19th and early 20th century. (Hornung, 1987, p. 3)

Education has always been a component of museum programming, but most museum professionals predict it will become even more important than ever in the future. For example, in 1916 the Cleveland Museum of Art established an extension division that enlarged their Department of Education. Although this division exists today, the museum has found it more difficult than ever to fund. The extension division has been attempting to tie itself closer to local schools in an attempt to increase its visibility with the public (Chakalis, 1987).

As funding is cut in museums and schools, partnering becomes increasingly vital. Each is able to fill a need for the other. Museums help to diversify school education and schools help to professionalize museum education and give museums an outlet and a focus for their programming. "Holding in mind the Founding Fathers' emphasis on education as a primary function of a museum, the future effectiveness of museums as educational institutions is becoming increasingly important" (Hornung, 1987, p. 5). Museums need to show their supporters that programming they have developed is actually doing some good. Increased visitation (through increased use of the museum by schools) is one way to show that educational programming is

valuable (Hirzy, 1992). On the other side, educators are always looking for new, valuable ways to reach their students. Visits to local museums, or participating in outreach programs of one type or another, give students the hands on experiences that are harder to achieve in traditional classrooms. In addition, the emergence of Howard Gardner's Theory of Multiple Intelligences (Gardner, 1993; Willis, 1994; Jones, 1996) has made educators realize the necessity of teaching in different ways to reach different children. Research into the development of the human mind tells us that children (or adults) learn best by immersing themselves in a topic of study (Kovalik and Olsen, 1994). If it is not possible to actually be there, handling, seeing, or otherwise using objects related to the field of study will make the experience more real. The information being transmitted will more quickly and completely become part of the child's schema (Kovalik & Olsen, 1994). Museums have huge collections of "things" that would make a history lesson (for example) extremely powerful when compared to a more traditional lecture or text (Neu, 1985).

In Building Museum and School Partnerships, editor Beverly Sheppard (1993) notes that museums and schools are natural partners. "They offer complementary experiences, combining two languages of learning - the words of the classroom and the objects of the museum" (p. 2). Although schools and museums are both in the "business" of

education, they have different ways of presenting information. The teaching in schools tends to be traditional and based on a set curriculum with a group of pre-determined achievement goals (Cuban, 1993). The teaching in museums tends to be less traditional, derived from the museums' mission statement, and is object based (Sheppard, 1993). In addition, while schools tend to separate children by age and teach relatively homogeneous populations, museums must reach extremely diverse populations with varying backgrounds and beliefs. Schools and museums have different missions, but the ways they are fulfilling their missions to educate populations have resulted in complementary methodologies (Sheppard, 1993). When museums and schools become partners, the levels of learning increase dramatically because they are able to reach a higher percentage of the population at a deeper level (Sheppard, 1993).

Schools are moving towards more interactive education that involves more than simply teaching to verbal-linguistic and mathematical-logical intelligences (Gardner, 1993, Kovalik & Olsen, 1994). Professional educators have realized the importance of teaching to the different intelligences, and museums are one resource for this. "Museums remain one of the few environments where encounter is the basis for learning" (Sheppard 1992). The museum environment allows for student interaction with objects which, when supported by

meaningful activities, fosters higher level learning (Kovalik & Olsen, 1994) and makes the learning experience "more real."

There are many ways museums and schools can work together to increase student learning. These partnerships can be very subtle and short term, or they can be overt and extend over a long period of time. More short-term projects such as field trips, teacher training sessions and group presentations can occur, and often do, with little interaction between museum staff and schools. In fact, many of the museum education programs across the country rely upon interactions such as these (Sheppard, 1993). There are, however, a great many highly interactive programs, which can greatly increase student learning and can supplement the standard school curriculum.

Beverly Sheppard describes a variety of programs in which museum professionals work directly with teachers to design activities that supplement traditional school curriculum. School outreach programs (Sheppard 1992, Chakalis 1987, Lydecker 1987) allow the museum to come to the school and may be a solution for areas with very poor school funding. Instead of a single trip to the museum, objects could be brought to the schools many times. Judy Dacus and Nora Hutto (1989) describe a collaborative program between natural history museums and rural schools. Groups of teachers and museum curators or educators discussed both the needs of the schools (curricular) and

how the museum could supplement this. Sample kits of educational materials and activities were developed by this group and the participating elementary teachers tried them out in their classrooms. After rounds of trouble-shooting, the final kits were created and dispersed to teachers in rural communities who were unable to attend the museum itself but whose students were able to benefit from the information. The teachers using the kits were able to attend daylong training workshops where they discussed the ways to best implement the materials.

Traditionally, museums have a hard time using their collections for educational programs, because of the wear and tear on the objects. They also cannot accept everything that is offered them into their collections because once it is accepted and accessioned (entered into the official records) it is nearly impossible to de-accession it (for example if it is harmed from handling). One solution is to have a specific part of the collection accessioned for educational use. For example, the Cleveland Museum of Art has a specific collection (the Extensions Division) they use for educational programming (Chakalis, 1987). The objects in this collection are accessioned specifically for the various educational programs, so handling is not a problem. In addition, museums often have a problem accepting an item into their collections because it may not fit the parameters of their mission statement. By establishing a

specific collection for education, the curators may expand the parameters for that portion of the collection. If an object fills a need in the educational programming it can be accessioned into the special collection. Andrew Chakalis (1987) describes how the Extensions Division staff coordinates with school staff to supplement the teaching. The school staff members are given lists describing the types of objects available along with suggestions for information they can provide, but objects are gathered specifically for each unit of study. No pre-fabricated educational units are handed out. Each teacher is involved in choosing his or her own group of objects depending upon what he or she is teaching and how the objects can best supplement that. Teachers also attend training sessions on how to use the objects in their classrooms, but a lot of the actual design depends on them. In this case the museum has the resources and provides the direction for the classroom teachers who actually carry out the program at their schools. This type of interaction between a school and a museum uses the best that both schools and museums offer education.

Ann Chamberlain (1987) describes a type of training program for teachers at The Exploratorium in San Francisco. The Exploratorium is an art and science museum with many highly interactive exhibits. Teachers attend three day workshops which introduce them to topics in science and art, as well as how they can use the exhibits in The

Exploratorium to supplement their curriculum. The SITE (School in the Exploratorium) program is staffed by artists, teachers and scientists as well as museum staff, which provides a very interesting blend of information and viewpoints. Through the workshops, the teachers are trained on specific subjects as well as introduced to the resources available at the museum. The teachers "learn to use the museum as an extension of the classroom." This type of interaction will most likely result in increased visitation and a better use of the museum facilities by teachers.

Interactions between schools and museums exist on a variety of levels. From limited interactions to collaborative programming, schools and museums have found ways to work together to accomplish their joint goal of education. Few, however, have gone so far as the New York City Museum School. Susannah Cassedy O'Donnell (1995) describes the partnership between the city's public school system and museums in the city. A group of students in one of sixteen "New Visions" schools uses the resources of various museums on a daily basis to teach. Students are in a variety of museums for three days a week and in a traditional classroom the remaining two days. Students use the exhibits and collections to explore the topics they are studying. This program has required a huge level of commitment from the museum community, but they have been more than repaid in the positive word of mouth and

press, as well as their ability to plan grade specific activities and try them on a familiar audience. This type of partnership, where children actually become researchers in the museum, is very rare, but it is the most useful and fulfilling for both parties, schools and museums.

Chapter 3: Methods

Museums and schools have very similar goals and responsibilities. Both are in the “business” of educating. Schools tend to employ more traditional methods (Cuban, 1993) while museums practice informal ways of conveying information. Schools teach fairly homogenous (age, geographic location and, to a certain extent, socio-economic status) groups of children and museums have diverse populations spanning all ages, races and socio-economic status. In the past, museums have placed education on the bottom of their list of priorities for funding or allocations of staff time, behind adding to, researching and maintaining collections (Hirzy, 1992). However, recent publications and recommendations by the American Association of Museums (Hirzy 1992; Sheppard, 1993) have suggested that educating the public should be at the very top of museum priorities, and museums have been changing to meet these challenges.

Have the museums in the Portland established educational programming for teachers or their classes? What types of programs are there? Are there in-house programs, outreach, curriculum development, hands-on, teacher training? What subjects could these programs help with? What topics do they cover? Are these museums focusing on education as suggested by the American Association of

Museums? How are the institutions in the Portland area doing compared to comparable institutions across the country? To answer these questions, I interviewed museum staff in the Portland area and made observations at museums included in the sample. I also looked at their mission statements, staffing, and funding for education programs to see how much each institution put towards education.

In the spring of 1998 I interviewed museum educators at the following institutions: Clackamas County Historical Society (211 Tumwater Dr., Oregon City), The End of the Oregon Trail Interpretive Center (1726 Washington St., Oregon City), Fort Vancouver (612 E Reserve, Vancouver, WA), McLoughlin House (7th & Center, Oregon City), The Oregon Historical Society (1200 SW Park Ave., Portland), The Oregon Museum of Science and Industry (1945 SE Water St., Portland), The Oregon Zoo (4001 SW Canyon Rd., Portland), The Portland Art Museum (1219 SW Park Ave., Portland), and The World Forestry Center (4003 SW Canton Rd., Portland). I chose these because they are within a 1/2-hour drive from the downtown Portland area, are open during regular school hours, and are considered to be common destinations for school groups. The interviews followed a similar pattern. I started by asking a standard set of questions (see appendix for list of questions) and then followed up with more specific questions about the programs each

institution had to offer. I also used published information about each institution to get data about missions, staffing, and funding.

Museums in the Portland area offer a wide range of opportunities for schools or teachers. Every institution interviewed has set aside part of its budget and staff to develop appropriate educational programming. Options range from self guided tours to in-house educational programs to curriculum guides or outreach programs. Several of the institutions offer special training or meetings for teachers to experience the exhibits being offered and learn how to integrate them into the classroom. Overall the museums in the Portland area are doing a good job, some better than others, of emphasizing education over collecting and/or research.

The museums involved in this study are fairly new when compared to museums throughout the United States. This is a "newer" area which does not have the history of public exhibition compared, for example, to New York, Boston, or Chicago. The museums and other institutions in Portland do not have to contend with a long, distinguished history of collecting and are freer to focus energy on education. In addition, many of the institutions are educational in nature. Collecting is only a small part (if any) of their missions. Many of the Portland institutions were created with the purpose of educating the public and did not have to re-write their missions to meet the current

nation-wide education trends and programming suggestions from the American Association of Museums.

After completing the interviews I took the data I had gathered and put it into a format that could be more easily used by educators. The information gathered from each institution was divided into seven different sections: cost, amenities, topics, special events, outreach programming, teacher education and other resources. There are other museums in the Portland area to which the same survey could be performed, and my hope is that the same methodology could be used effectively in other areas besides Portland.

Chapter 4: Results

I discovered there are many educational museum programs available in the Portland area. The survey of nine institutions resulted in a huge variety of in-house programs, outreach programs and resources, teacher education opportunities and partnership opportunities. The appendix contains a complete listing of resources available from each institution, and this chapter discusses some special features of each museum, focusing on those of interest to teachers.

Clackamas County Historical Society

The Clackamas County Historical Society in Oregon City is a small institution devoted to preserving the history of Clackamas County and educating the public about that history. In addition to a museum the society has a genealogical research library for people interested in tracing the background of people from Clackamas County. Connected with the Historical Society is a resource library where adults are welcome to do research. The library includes a photo archives, Clackamas County records, and historic documents.

The society offers guided tours of the museum as well as limited outreach programs. The guided tour lasts approximately one hour and includes: a geological survey of the area, information on natural disasters, Native Americans, the Oregon Trail (including a full-size replica of a loaded wagon), early pioneers, the industry of the Willamette Falls, the history of the Willamette Falls Locks, a hands on electricity display, a reproduction of an early pharmacy, exhibits on health care, ecology and history of the Willamette River, and the history of Oregon City. In addition, the museum operates the Stevens-Crawford House, a 1908 house restored with period furniture. Paid entry to the museum also includes a guided tour of the home. The historical society has put together "Discovery Kits" containing artifacts, display panels, student activities and background information. These "Discovery Kits" are available only for schools in Clackamas County.

When I visited, the society had one paid staff member who split duties between development and education. It operates on a limited budget and, for its size and budget, seems to do a good job of providing educational opportunities for students. It has extended beyond the traditional tour to include outreach programs and research facilities for teachers or high school students. The museum is still in the process of developing some of its permanent exhibits but has tried to include aspects of Oregon history not found in other institutions. While many

small, local museums in Oregon seem fixated with the Oregon Trail, Native Americans or the important early settlers, the Clackamas Country Historical Society does not. It offers exhibits related to more modern history, ecology and industry. This institution could provide a model for institutions operating under similar size and financial constraints.

The End of the Oregon Trail Interpretive Center

The End of the Oregon Trail Interpretive Center in Oregon City is a newer institution related specifically to the culture and history of the Oregon Trail. It is one of several facilities from Missouri to Oregon that sprang from the recent increase in interest of the Oregon Trail due to the celebration its 150-year anniversary. The mission statement of the Oregon Trail Foundation, which created the interpretive center, is to preserve the culture and educate the public about the people at the end of the Oregon Trail. They do not collect artifacts and, in fact, use reproductions in their exhibits and performances.

The End of the Oregon Trail Interpretive Center offers two different age appropriate guided tours as well as hands on activities in their "Trades Building." This living history center offers interpreters

and volunteers in period clothes and a multi-media presentation of the history of the Oregon Trail. The "Trades Building" has rotating displays on a variety of crafts, sewing, food, and work related presentations. Students are able to handle replication items and see how "pioneers" lived. The hall offers changing exhibits including "The Pioneer Family of the Month" and "This Month on the Trail." Outside, the Heritage Gardens include information on early medicinal plants, vegetables, flowers and herbs. Display boards describe the contents of this typical pioneer garden.

The Oregon Trail Foundation has focused all of their time and energy on education. The staff contains several full-time educators (called interpreters) who lead tours and answer questions related to topics of the Oregon Trail. In addition they have a lead educator who sets the tone for the programs and designs distinctive presentations for different age levels. The foundation has recruited a large number of volunteers who offer living history presentations and activities for school children. The website maintained by the foundation included biographical information on early settlers, photos, excerpts from diaries and general information on the Oregon Trail. The presentations at the interpretive center are entertaining and informative. Children (and adults) learn a lot when they are entertained. Because it does not maintain a permanent collection of artifacts the foundation's budget for

education goes further. It has more than the usual number of paid staff members with duties specifically to educate. Its mission is different from that of a research facility, the staff and foundation board spread information about a specific topic and time period. The downside is that other than their website the education must take place at the interpretive center. They do not have outreach programs or special educational opportunities for teachers. Perhaps in the future the foundation will broaden its reach to include groups who may not be able to afford a trip to the center.

Fort Vancouver

The Forest Service operates Fort Vancouver with additional support from the Fort Vancouver Historical Society. The society was originally formed for the purpose of restoring the fort. The site has a small collection of historic artifacts which it maintains, but uses mainly reproductions for its programs. Volunteers who also participate in living history demonstrations lead the tours. Although the fort has a limited budget, its resources go primarily towards educational programming.

Fort Vancouver in Vancouver, Washington offers free guided tours of this reproduction of the fort. Living history interpreters lead school groups through various buildings on the property and explain about the history and society of the fort and the early Pacific Northwest. Students also watch a fifteen-minute video on the history of the fort. Students are able to participate in chores in the Bake House, feel pelts in the Fur Warehouse and see the "White House of the Northwest," the Chief Factors House. Classes can arrange for a volunteer to visit in period clothing and give a presentation on the fort, or borrow one of the traveling chests with replication artifacts and real pelts. Teachers can get a copy of "Fur to Felt," the free curriculum guide put together by Fort Vancouver staff to supplement (or take the place of) a trip to the fort.

Fort Vancouver does an excellent job in educating school groups. The employees are dedicated to maintaining the site and interpreting the history of the area. The curriculum guide put together in 1997-1998 is very thorough and includes information on early migrations, commerce, military actions and native peoples. The employees are well educated and professional, and a corps of equally dedicated volunteers supports them. Their funds have been put to good use in creating interesting, informative programs. In addition, the fort has tried to reach groups that are unable to visit the fort through the curriculum guide,

traveling chests or volunteer visits. The fort has a lot to offer schools in the area.

McLoughlin House

The McLoughlin House in Oregon City is a very small institution run by two women, one full-time and one part-time. It is a part of the National Park Foundation and is a National Historic Site. The mission of the National Park Foundation is to conserve and enhance the National Parks for the benefit of the public and to support educational and outreach programs. The McLoughlin House has a small group of dedicated volunteers and a miniscule budget. Money is so tight that the institution recently had to run a "major" fundraising campaign to replace the moss covered roof which was leaking and damaging the home's interior. Thankfully they were able to raise the necessary funds to replace the roof. This museum's goal is to preserve the home built and lived in by Dr. John McLoughlin and to educate the public about his life and early Pacific Northwest history.

McLoughlin House offers one hour guided tours of Dr. John McLoughlin's home as well as the Barclay House next door. The interpreter leading the tour touches on early Oregon History, the fur

trade, the Hudson's Bay Company, and John McLoughlin. In addition, teachers can request a presentation from museum staff on topics related to early Oregon History or Native Americans.

McLoughlin House does very little other than lead tours of the home itself. However, given the small staff and lack of finances this, in itself, is a lot. The women who run the house are typical of the many older women who manage most of Oregon's small museums and historic homes. They know a lot about the history of their particular area. They are dedicated to preserving the past and put in time and effort beyond the call of duty. Unfortunately their lack of training and knowledge of proper museum practices has resulted in a non-existent education program. In the future, if the institution is able to hire someone with more education and training, and makes more money available, the programs might change. For now, guided tours will be the extent of the offerings.

The Oregon Historical Society

The Oregon Historical Society in Portland is dedicated to preserving and interpreting the history of Oregon. It publishes two journals, maintains a historical research library, photo archives, and

operates a history museum. The society programs draw on historical topics across the state. There are several full-time employees working in the education department. They are all fully trained professionals who try to design programs to meet the needs of people who live near to the history museum or across the state. They have a fairly large budget, but were recently forced to lay off several employees due to a change in finances. The future of the education programs seems assured, however, because they are so well established and are the only way many people in the state can access the society's research.

The society offers self guided tours of their historical museum. It primarily includes changing exhibits on Oregon History, but there is a permanent installation on the history of Portland. The historical society offers an extensive number of traveling exhibits, videos, slide presentations and curriculum guides which teachers can use to enhance their own classroom curriculum. The historical society holds teacher information nights for most of the exhibits where teachers can get more specific information on the themes and issues surrounding exhibits. Historical Society staff members meet with groups of teachers, lead a tour of the exhibit, highlighting important information, and join in discussions on how to effectively use the available resources in teachers' classrooms. Also, the society has an extensive, non-circulating research library and photo archives. Teachers can order copies of historic photos

(or get them off the net; the society is in the process of scanning them onto their website) or documents, or research topics they plan to cover with their students. The library offers periodic training sessions for teachers on how to use the library resources.

The Oregon Historical Society has an excellent educational program. The variety of topics and themes available in outreach programs is astounding. They have videos, traveling exhibits, discovery kits, slide presentations, and curriculum guides on many topics of Oregon History. The staff is supportive of teachers and the educators are willing to meet individually or with groups to answer questions or offer advise on using their resources. I hope that the budget crisis they are currently experiencing will not severely affect what the society is able to offer.

The Oregon Museum of Science and Industry (OMSI)

The Oregon Museum of Science and Industry (OMSI) in Portland is a fairly new institution (the original site opened in 1957) dedicated to creating an interactive environment in which people can learn about science. The museum has grown a lot over the few years it has been around and recently moved to a new facility on the Willamette River. It

has a massive education program, including outreach programs that go throughout Oregon, Washington, Idaho and even into Alaska. Every aspect of OMSI is related to education. All of the staff members are primarily educators dedicated to teaching science. The museum has a very large budget and also applies for grants to support its unique educational programs. The museum has undergone budget concerns that have threatened its future, but in 1999 seems to be financially stable. The museum offers self guided tours that touch on many aspects of science, including physical science, life science, information science, and earth science. Teachers who plan trips to OMSI can schedule time in one of the learning labs with museum scientists, or they can get information on lessons that will enhance the museum experience. OMSI also offers films in their OMNIMAX Theater. The Murdock Sky Theater includes a range of shows on astronomy. The museum is home to a submarine and offers guided tours of it. The museum has a huge outreach program with classroom presentations, assemblies, and science "equipment" rentals. OMSI also offers many different teacher education programs. It has recently begun a series of partnerships with schools in the area. The Science Learning Network has been developing to train teachers in how to use technology to enhance inquiry-based science. Other schools have partnerships with OMSI to develop comprehensive school-wide science programs.

OMSI is an excellent example of what an institution can do when it is dedicated entirely to education. It is a popular site for school groups and families. Many Oregon students visit often throughout their educational careers and learn something new each time. OMSI staff is flexible, supportive, and knowledgeable. The education department is well developed and innovative. OMSI programs are renowned for their thoroughness, interest and availability. In addition, grants have allowed the museum to offer discounts or scholarships to needy schools or families so that they may participate in their programs.

The Oregon Zoo

The Oregon Zoo has a dual mission, to care for and preserve the diversity of animal life and to educate the public on issues of conservation, ecology and bio-diversity. The zoo has a large budget and a part of that goes towards their educational programs. Maintaining the grounds and animals takes up a large portion of the budget, and there is really no way around it. Most of the educational programs are aimed towards families or groups of children at the zoo. Fewer are designed for schools or classroom teachers. There are resources available for teachers, but for the most part they are on their own when taking a class on a

tour. The zoo has also established relationships with high school and university groups and is currently beginning a partnership with a local school (see chapter 6). Zoo staff members are well-educated professionals who are experts in their fields.

The recently renamed Oregon Zoo in Portland offers self-guided tours with the opportunity for students to participate in inquiry based science projects at the zoo. Teachers are sent a set of guides when they book a tour that will get students ready to participate in research projects under way at the zoo. Students have the opportunity to gather data on animal behavior, which is then compiled by zoo staff and can be accessed via the Internet. Classes can compare the information they gathered with information gathered by other classes at different times of the day or year. The zoo has several "Discovery Boxes" that teachers can borrow and also does classroom shows or programs for school assemblies. Teachers can participate in summer educational programs at the zoo, or they can attend training workshops on how to effectively use the zoo resources.

The Oregon Zoo has taken significant steps towards supporting teachers in the classroom. The zoo offers summer institutes and sometimes participates in district in-service opportunities. The discovery kits, school and classroom presentations are welcome additions to classrooms. The zoo could do more towards supporting

groups visiting the zoo. It is a popular destination for school groups from across the state. If staff members were available to lead tours or run programs in specific areas students would benefit greatly. There is a large group of volunteers at the zoo who are often on hand to answer questions or do presentations, but not consistently. The zoo should work on putting more of its resources towards supporting individual teachers or groups of students.

The Portland Art Museum

The Portland Art Museum is taking the advice of the AAM to heart. Their mission statement has been revised to reflect the current emphasis on education. Originally the museum was established to gather a collection, maintain a building and support the study of art. The current mission statement is to provide access to art and to educate a diverse public through its collections. The museum has two full-time educators and a large group of volunteers who support the educational programs.

The Portland Art Museum in Portland was undergoing a massive remodeling during the period of my research, so most of the regular exhibits were not on display. The museum is offering large traveling

exhibits until the reinstallation is complete (2000). The museum educators have created curriculum guides for the temporary exhibits, and offer "Evenings For Educators" where teachers from the area present their ideas for integrating the exhibit theme into the classroom. Docents from the museum are able to travel to the classrooms and give 1-hour presentations on special exhibits or aspects of the permanent collection. The museum also has a non-circulating library where teachers can do research.

The Portland Art Museum attempts to make art accessible to children and their teachers through tours, curriculum guides and special events for educators. Expert teachers are invited to share with others how they integrate art into the curriculum. The museum educators use their advice to create curriculum packets for teachers interested in using the museum resources in their classrooms. Teaching art theory or history is rare in the elementary schools across the state. The Portland Art Museum is trying to make the study of art accessible for teachers so that they will make it accessible for their students.

The World Forestry Center

The mission of the World Forestry Center is to promote the establishment and management of forests throughout the world. One way it does this is through education. This organization has directors from around the world. Locally there is an education director at the museum as well as staff at the Magness Memorial Tree Farm who lead tours and answer students' or teachers' questions while they visit the sites. A large portion of their small budget goes towards providing educational programming. There is also a small group of volunteers who assist with the education programs.

The World Forestry Center in Portland offers a variety of guided or self guided tours of their museum. Teachers can choose a general tour or one that focuses on a specific theme. Teacher's guides are available upon booking a tour. Teachers can borrow one of the "Teaching Kits" which include samples, videos, lessons and games on three different themes. The World Forestry Center also offers a "Project Learning Tree" workshop for K-8 educators. This environmental education program training is free and includes a 400-page activity guide with 96 lessons.

The World Forestry Center educational programs for teachers and students are exemplary. The "Project Learning Tree" workshop is a high quality program to teach teachers how to implement forestry and related

themes into the classroom. The staff are well educated, but overworked. There is a small group of volunteers who assist with leading the tours, but they are only available on limited occasions. It is necessary to make appointments in advance and only on specific days in order to benefit from the guided tours. In addition the center attempts to reach the groups who are unable to visit through their teaching kits. This is an important addition to their programming. For the number of staff available, the World Forestry Center offers a good variety of educational programs.

Chapter 5: Discussion

Museums in the Portland area have, for the most part, embraced the current cross-country trend towards more emphasis on education. Each of the institutions offers a thought-out program of on-site education. Most also have extension programs, traveling exhibits, teacher's guides, or kits that are useful for the classroom.

Museums in this area are much newer, for the most part, than those in other parts of the country. Their focus has been, with few exceptions, on education from the beginning. Each institution has its own unique mission, but unlike museums established a century ago they do not have to fight with their past missions in order to justify educational expenditures. In fact, several of the museums do not maintain collections at all. Reproductions are used because their focus is on educating rather than on collecting, exhibiting, or research. Many museums in other parts of the country have had to contend with established practices, belief systems and missions and have had a difficult time beginning or increasing their educational programs. Newer museums are coming of age in a time when educating the public is the primary focus for the field. The museums in the Portland area represent what organizations can do when they place their resources into educational programs.

The programs available in the Portland area vary by institution. Each museum, historic home or zoo offers unique programs on a variety of topics. While history predominates, science, math, social studies and art are readily available. Teachers should be able to supplement nearly any classroom topic. Unfortunately there is a cost for many of these programs. However, there are many institutions that offer "grants" or "scholarships" for schools with low budgets or low-income populations.

One of the largest issues facing Oregon schools today is meeting statewide common curriculum goals (CCGs). These goals are available from the state on websites or from the Department of Education. Museums in the Portland area should take these CCGs into consideration when designing their programs. The Oregon Zoo sends out a teacher's guide when teachers schedule a visit for their class. Inside the teacher's guide are lessons and suggestions for activities before, during and after the zoo visit. The zoo has researched the CCGs that will be met during these activities and lessons and included them in the teacher's guide. OMSI also bases its institution lessons and presentations on the CCGs. If a teacher is focusing on a particular CCG he or she can quickly see if participation in a museum program will supplement the regular classroom instruction. These were the only two institutions I interviewed that specifically mentioned using the CCGs when planning

programs. As the state moves towards more standardization it will become increasingly important for museums to focus on where they are meeting the goals set by the state. Museum educators will benefit from time spent analyzing where their current programs meet state guides or focusing planning on specific CCGs when designing new programs. Schools are reorganizing their curriculum to meet state standards and museum personnel would be wise to do the same.

Teachers should take the time to get to know the educators in the institutions. Often, their programming develops out of suggestions from teachers. If a teacher has a specific idea of how to use the institution resources, he or she should ask. It is likely that the institution will be delighted to be flexible and develop a program that works for the particular situation.

Overall, the key for an individual teacher seeking museum education for students is to ask what is available. The programming at most institutions is flexible, especially when there are traveling or temporary exhibitions. Teachers should get onto mailing lists so they will be notified when special or new programs are available. Also, teachers need to keep in contact with the museum educators. Developing a personal relationship will prove invaluable for a teacher who is trying to fill a gap in a unit or supplement his or her curriculum.

The goal of this study was primarily to determine the types of programs in the area designed for whole classes. The appendix includes descriptions of the programs available at each institution. I hope that these documents will prove useful for teachers who are looking for ways to supplement their curriculum.

A Case Study: Not long after I finished gathering information to write this report I was hired to teach for a small school in Beaverton, Oregon. My primary responsibility was teaching English as a Second Language (ESL) but I became involved with the "School to Work" partnership program at our school. This is a district-wide program promoting partnerships between schools and local businesses.

Our current partner was a local grocery store, but the Oregon Zoo had recently hired a new director whose children went to our school. The principal and I began to plan how to best approach the director to propose a partnership between our school and the zoo. Our relationship started with a phone call from our principal to the director inviting him to stop by the school for a conversation. She broached the subject gingerly by letting him know about the district program and how our

school (and his children) would benefit from a partnership with the zoo. The director told her he would think about it and the conversation moved on to more general topics.

A few weeks later the district held its annual "School to Work Partners" breakfast. The principal called the zoo director to invite him to attend. He promised to attend and said he would bring along his director of educational programs. He indicated at that point that he was interested in hearing more about our ideas for a partnership and would like the principal to meet with the educational programs director. The principal attended the meeting, but was discouraged when it became clear the education director was not at all interested in developing a relationship with our school and in fact was adamantly opposed to the idea. However, we still had plans to meet at the partnership breakfast.

We arrived at the district office for the breakfast meeting and, upon greeting the education director, were told that the zoo was in a partnership with a local high school and he was there to meet with them. The zoo director arrived before the conversation progressed any further and we all sat down together at a table. We began a conversation regarding the potential for a partnership; ideas were exchanged about the types of things we might be able to do for each other. The education director argued that the zoo could not possibly benefit from a partnership with an elementary school. He said that they had been

approached many times in the past and had rejected similar offers from other schools. He felt that a strong relationship with one particular school would be unfair to all the other schools in the area. Basically he reacted negatively to all of our suggestions. We left the meeting even more discouraged, but with an appointment the following week with the zoo director.

This meeting was more productive. We exchanged ideas about how to help each other. The children could provide input into zoo education programs, new facility design, or program content. Teachers could give feedback on appropriateness of material for certain age levels or help guide future teacher education programs. The museum could participate in our program of wetland reclamation and research and could offer technical assistance or advice on students' animal research. We all felt very positive after this meeting and decided to go ahead with a "formal" partnership. We agreed to take a group of teachers to the zoo the next month for a behind the scenes tour to get more ideas for our partnership. The principal and I were thrilled that our partnership would work after all and made plans for our tour.

The next month, when we arrived for the tour, we were worried when the education director greeted us. Maybe things were not going as smoothly as we thought. However, the education director was extremely friendly, went out of his way to give us information and assistance, and

even smiled! Obviously the word had been passed down that the zoo would be in a partnership with our school. The tour was fantastic, and teachers left inspired by what they saw. Theoretically we had a new partner.

The first year the zoo invited the group of teachers most involved with wetland work to a lunch meeting with local and national leaders in wetland reclamation, native plantings and wildlife. This meeting was for groups to network, exchange ideas, and meet to discuss items of common interest. Our teachers left with many ideas and contacts to continue their work on the wetland project underway at our school. This meeting was the extent of our partnership for the first school year. Both sides seemed to be unsure of what to do next.

In July a group from our school worked on a grant to provide more arts instruction for the students. A meeting between the principal and the zoo director provided a focus for that grant. The zoo was planning a new event for the following fall. It was called "A Multi-Cultural Celebration of Animals." The zoo director knew that we had students from a variety of ethnic backgrounds at our school and thought we might want to be involved in some way in the celebration. Out of this conversation our arts grant turned into a similar theme. We would kick off our program with an all school visit to the zoo during the time of the celebration, which would provide the inspiration for the art that

the children would create. The artists we brought in would represent various countries or groups and the children would be exposed to the ways animals have influenced the arts in many different cultures. In addition, the zoo would benefit by visits from the families of our ESL students who could help with translation of certain signs for animals on display.

The all school field trip was a resounding success. We took 325 students and 65 adults to visit the zoo on Friday and about 30 children and adults from our ESL program the following Saturday. Both groups benefited tremendously from the experience. The zoo trip affected many aspects of our school. Besides providing the emphasis and direction for the cut and torn paper installation recently completed, teachers were able to develop writing assessments from the experience to meet the statewide requirements. The school was able to give the children a common experience to work from, and we were able to build a closer relationship with many of the families we have had a hard time reaching. We planned that later in the year artists would be invited to meet with each of the classes to let them experience other forms of artistic expression, and the year would end with a cultural celebration.

None of this would have been possible without help from the zoo. But in addition to the benefits received by the school, the zoo benefited from our partnership by drawing people from a variety of

cultural backgrounds to visit its exhibits. Families who visited the zoo during the celebration were encouraged to add the names of certain animals to signs set up throughout the zoo in languages other than English. Students and adults from our group wrote on many of the sign, providing an example for others. Both groups felt that the experience was well worth the extra time spent planning together. We are not sure what the future may hold for our partnership, but at this point it looks positive that we will continue working together and will achieve new benefits for both parties.

Potentially this partnership could be used to create a model of use to other museums - in Portland and elsewhere. Although this project might not have developed were it not for the personal involvement of the museum director in this particular school, I believe that similar results could be achieved without the same level of personal involvement at the administrative level. Relationships between educators and museum personnel can be cultivated and could lead to similar levels of partnership. The relationship does not need to revolve around the personal lives of the parties involved. A professional relationship that has developed over time could lead to the partnership of two or more institutions dedicated to educating the public. This example shows that obstacles can be overcome, and that museum educators who do not see a role for schools in their programs can be

persuaded to change their minds. When this happens, an innovative program that meets the needs of the parties involved can be successful.

Bibliography

- Boyd, W. L. (1993). Museums as centers of learning. Teachers College Record, 94 (4), 761-768.
- Branen, K., & Congdon, K. (1994). An elementary school museum celebrates community diversity. Art Education, 47 (4), 8-12.
- Chakalis, A. T. (1987). The Cleveland Museum of Art: Its Extensions Division. Educational Perspectives, 24 (2), 22-32.
- Chamberlain, A. (1987). At the Exploratorium: Teaching art and science. Educational Perspectives, 24 (2), 11-16.
- Cuban, L. (1993). How teachers taught: Constancy and change in American classrooms 1880-1990 (2nd ed.). New York: Teachers College Press.
- Dacus, J. M., & Hutto, N. (1989). Improving science education in rural elementary schools: A collaborative approach for centers of rural education and museums of natural history. Journal of Rural and Small Schools, 4 (1), 13-17.
- Dell, R. A. (1987). The object is the message: Education at the Honolulu Academy of Arts. Educational Perspectives, 24 (2), 17-21.
- Gardner, H. (1993). Multiple Intelligences: The theory in practice. New York: HarperCollins Publishers, Inc.
- Hirzy, E. C. (Ed.). (1992). Excellence and equity: Education and the public dimension of museums. Washington, D.C.: American Association of Museums.
- Hornung, G. S. (1987). Making connections. Educational Perspectives, 24 (2), 2-5.
- James, V. S. (1987). Museum building by students in gifted education. Roeper Review, 9 (3), 152-155.
- Jones, D. F. (1996). More than one door to learning: The theory of multiple intelligences. Today's Catholic Teacher, 30 (3), 27-29.

- Jones, D.F. (1997). Learning and evaluation intertwined: Multiple intelligences and assessment. Today's Catholic Teacher, 30 (4), 50-53)
- Kinnett, D. A. (1993). Elementary art programs and school community relations. Art Education, 46 (4), 46-52.
- Kovalik, S., & Olsen, K. (1994). ITI: The Model Integrated Thematic Instruction (3rd. ed.). Kent, WA: Books for Educators.
- Linder, B. L. (1987). Museum-school partnerships: A resource for principals. National Association of Secondary School Principals Bulletin, 71 (503), 122-124.
- Lydecker, J. K. (1987). The Art Institute of Chicago: Its Museum Education Department. Educational Perspectives, 24 (2), 9-10.
- MacGregor, R. N. (1993). Editorial: Collaborative partnerships. Art Education, 46 (4), 4-6.
- Maiga, H. O. (1995). Bridging classroom, curriculum, and community: The Gao School Museum. Theory Into Practice, 34 (3), 209-215.
- McGavin, H. (1996, April 19). Maximize the museum trip. The Times Educational Supplement, p. 14.
- Neu, R. E. (1985). Can an art museum teach math and history? Art Education, 38 (3), 19-21.
- O'Donnell, S. C. (1995). The New York City Museum School: A learning process. Museum News, 73 (3), 38-41.
- Ripley, S. D. (1987). American Association of Museums: An address. Educational Perspectives, 24 (2), 6-8.
- Sheppard, B. (Ed.). (1993). Building museum & school partnerships. Washington, D.C.: American Association of Museums.
- Snider, A. B. (1993). The snowy day: The story of a collaboration (with apologies to Ezra Jack Keats). Art Education, 46 (4), 7-13.
- Soren, B. J. (1993). Nurturing mind, spirit, and a love of the arts and sciences: Schools and cultural organizations as educators. Studies in Art Education, 34 (3), 149-157.

- Willis, S. (1994). The well-rounded classroom: Applying the theory of multiple intelligences. ASCD Update, 36 (8), 4-6, 8.
- Wolins, I. S. (1985). Computers and museum education: Keeping up with the classroom in the information age. Art Education, 38 (3), 24-29.

Appendices

Questions For Museum Educators

- Is the tour of your facility guided?
- Is there a charge for a tour?
- What is the charge for students, teachers, and adult chaperones?
- What age groups is the tour appropriate for?
- How long does the tour last?
- Are there hands on activities with the tour?
- Are there eating facilities, restrooms, and drinking fountains available?
- Do you offer free preview tours for teachers who book a school group?
- Do you have curriculum guides or lesson plans that you have developed?
- ◇ Is there a cost?
- Do you have outreach programs?
- ◇ What are they?
- ◇ Is there a cost?
- Do you have teacher education programs?
- ◇ What are they?
- ◇ Is there a cost?

- Do you have information nights for teachers?
- ◊ What is involved?
- ◊ Is there a cost?
- Do you have a website?
- Do you have other parts to your institution besides the tour of the facility?

Other questions specific to the institution developed out of the interview.

Clackamas County Historical Society

Cost:

⇒ Guided tour: \$2.00/student, Adults \$2.50 (includes admission to Stevens-Crawford House)

Amenities:

⇒ Restroom and drinking fountain
⇒ Museum store

Topics:

⇒ Geology
⇒ Oregon Trail
⇒ History of Clackamas County
⇒ Oregon City
⇒ Willamette Falls
⇒ Locks: miniature reproduction of working locks
⇒ Willamette River: scale drawing of river on floor upper level, photos showing then and now, binoculars to look out at specific areas
⇒ Flooding

Special Events:

⇒ None at this time

Outreach Programming:

⇒ Discovery Kits: (free, but only available for schools in Clackamas County); interlocking display panels, include historical and contemporary artifacts or reproductions, student activities, background information, bibliography

- * "One Room Schoolhouse"
- * "Perfect in Her Place"
- * "Pioneer Women"

Teacher Education:

⇒ None at this time

Other Resources:

⇒ Stevens-Crawford House tour (1908 home and furnishings)

⇒ Resource Library with Clackamas County records, photo archives, historical documents, genealogy center

The End of the Oregon Trail Interpretive Center

Cost:

⇒ Guided tour: \$2.00/student, \$3.00/adult, teachers and paid staff free (minimum 12 people)

Amenities:

- ⇒ Outdoor eating area
- ⇒ Restrooms and drinking fountains
- ⇒ Museum Store
- ⇒ Website: www.teleport.com/~eotic/

Topics:

- ⇒ Oregon Trail
 - * Wagons Ho tour (1 hour, grades Pre K-2); includes a storyteller, children dressing in period clothing, information about moving, children's chores on the trail, question/answer with interpreter/guide, time in the trades building
 - * Regular tour (1 hour 15 minutes, grades 3-12); includes Provisioner Depot introduction to beginning the trail, then multi-media presentation with interpreter/guide, diary format vignettes from 3 "people," students do some chores (churn butter, grind coffee), question answer period, time in the trades building
- ⇒ Trades Building: changing living history exhibits (depending on volunteers) including medicine, schools, weaving, spinning, sewing, fur trade, logging, farming, tools, toys, basket making
- ⇒ Changing Exhibits in the hall
 - * Early Oregon history
 - * "Pioneer Family of the Month"
 - * "This Month on the Trail"
 - * Pioneer crafts
 - * Black pioneers
 - * Environment
 - * Women on the trail
- ⇒ Heritage Gardens: gardening, flowers, herbs, medicinal plants, vegetables

Special Events:

- ⇒ Pioneer Holidays: living history Christmas presentation

- ⇒ Day After Thanksgiving: St. Nikolas arrives on a covered wagon and gives rides around the lot
- ⇒ Oregon Trail Pageant: play about the Oregon Trail on site (not produced by the interpretive center)
- ⇒ NW Free Trappers: Mountain Men camps during the summer

Outreach Programming:

- ⇒ None at this time

Teacher Education:

- ⇒ None at this time

Other Resources:

- ⇒ None at this time

Fort Vancouver

Cost:

⇒ Guided tour: free

Amenities:

⇒ Restroom and drinking fountain facilities

⇒ Outdoor eating facilities

⇒ Museum store

⇒ website: www.teleport.com/~gcermak/clarkcohistory/

Topics:

⇒ Tour topics:

* daily life 1763-1898

* Archaeology

* History of the Hudson's Bay Company

* Fur trade

* Role Hudson's Bay Company played in settlement, exploration and development of the northwest

* Role of the military during 19th century

* Native Americans

⇒ Guided tour includes: Fur Warehouse (and archaeological exhibit), Indian Trade Shop (and Dispensary), Blacksmith Shop (year round living history), Bake House (some living history), Chief Factor's House (the White House of the Northwest), Carpenter Shop (open summer 1998)

⇒ Unguided (open areas) includes: Visitor Center, Wash House, Palisade, Bastion, The Village

⇒ Video: 15 minute summary of the fort's history

Special Events:

⇒ Queen Victoria's Birthday

⇒ Brigade Encampment

⇒ Founder's Day

⇒ Candlelight Tour

⇒ Christmas at Fort Vancouver

Outreach Programming:

⇒ School presentations from volunteers, includes artifacts (free)

- ⇒ Video, can be borrowed, fifteen minute summary of the fort's history (free)
- ⇒ Traveling Cassettes: trunks that include: pelts, trade ax, woven clothing, Chinook beaded clothing, trade beads, Hudson's Bay blanket, sea biscuit, tobacco, hat, bonnet, then & now pictures, powder horn, pipe, slate boards

Teacher Education:

- ⇒ None at this time

Other Resources:

- ⇒ Teacher's guide: Fur to Felt, aimed at grades 3-5, includes lessons in social studies, language arts, history, geography, math, environmental science; themes related to topics above

McLoughlin House

Cost:

⇒ Guided tour: \$1.50/student, \$3.50/adult, 1 teacher free (also includes tour of Barclay House)

Amenities:

⇒ Museum store

⇒ Website: www.nationalparks.org/guide/parks/mcloughlin-h-1897.htm

Topics:

⇒ John McLoughlin

⇒ Early Oregon History

⇒ Oregon Trail

⇒ Hudson's Bay Company

Special Events:

⇒ None at this time

Outreach Programming:

⇒ Classroom presentations (reimburse for mileage)

* Topics include the fur trade, Oregon Trail, John McLoughlin, Native Americans, legends, explorers, missionaries

* Done in first person, includes artifacts and slides of the house

Teacher Education:

⇒ None at this time

Other Resources:

⇒ Some worksheets on terms, missionary language, fur trade language

The Oregon Historical Society

Cost:

- ⇒ Guided or unguided tour: \$35.00/class, up to 30 students (adults free); also \$1.50/student (ages 6-12), \$3.00/student (ages 13-18), \$5.00/adult

Amenities:

- ⇒ Restrooms and drinking fountains
- ⇒ Museum store
- ⇒ Website: www.ohs.org/
- ⇒ Non-circulating Library
- ⇒ Photo Archives

Topics:

- ⇒ Portland history
- ⇒ Ongoing exhibits about Oregon History. Currently: wagons and clothing

Special Events:

- ⇒ Continuous, call for details

Outreach Programs:

- ⇒ Traveling Exhibits
- * Trails to Oregon: A History of Migration to the Oregon Country; (\$50/member \$80 non-member for one month, grades 7-12)
- * Northwest Black Heritage: The Pioneers; (\$50/member \$80 non-member for one month, grades 5-12)
- * Something to Consider: The Editorial Cartoons of Art Bimrose; (\$50/member \$80 non-member for one month, grades 7-12)
Cartoonist for the Oregonian
- * "All For Organization!": Inventing Government in Oregon, 1843 to 1848; (\$50/member \$80 non-member for one month, grades 9-12)
- * The Art Perfected; (\$50/member \$80 non-member for one month, grades 8-12) small town America 1800s to World War I
- * The Columbia: America's Great Highway - Past, Present & Future; (\$50/member \$80 non-member for one month, grades 6-12)
Columbia Gorge Highway
- * Adventure and Encounter; (\$100/member, \$150/non-member for one month, grades 7-12) Captain Gray

- * Differences & Discrimination: The Oregon Perspective; (\$50/member, \$80/non-member for one month, grades 8-12)
 - * Cycling Oregon: 125 Years of Bicycles in Oregon; (\$50/member, \$80/non-member for one month, grades 7-12)
 - * Oregon Main Street: A Re-photographic Survey; (\$500 for two months, grades 6-12) transformation of Oregon towns
 - * Celebrating Traditions, Strengthening Community: Hermiston's Hispanic Heritage; (\$100/member, \$150/non-member for one month, grades 6-12)
- ⇒ Slide Shows: (\$10.00 for two weeks, includes prepared script)
- * Northern Mystery: Spain's Maritime Exploration of the Northwest Coast of America (55 color slides)
 - * Captain Cook, R.N.: The Resolute Mariner (15 black & white slides)
 - * Frontiers of Trade: Oregon Country and the World, 1784-1984 (79 color slides)
 - * Paul Kane's Oregon Country (47 color slides) NW artist
 - * The Oregon Trail (98 mixed slides)
 - * Heritage Quilts (75 color slides)
 - * Here Comes the Steamboat (50 black & white slides)
 - * Portland's Historical Development (77 black & white slides)
 - * A Survey of Northwest Portland (129 black & white slides)
 - * A History of Portland Streetcars (98 black & white slides)
 - * Oregon's Art Heritage (62 mixed slides)
 - * 100 Years of Oregon Fashion: 1889-1989 (73 mixed slides)
 - * The Lewis & Clark Exposition (80 black & white slides)
 - * Portland: A Photographic Tour (80 color slides) modern Portland (1990s)
- ⇒ Videotapes: (\$15.00 for two weeks)
- * Black Families and the Railroad in Oregon & the Northwest: An Oral History (25 minutes, color, grades 7-12)
 - * Landmarks of the Old Oregon Country (120 minutes, color, grades 3-12)
 - * Logging in Southern Oregon (7 minutes, black & white, silent with subtitles, grades 3-12)
 - * Looking Backwards (29 minutes, mixed, grades 4-12) 1914-1930 film from a variety of events in Oregon
 - * Now and Forever (77 minutes, mixed, grades 6-12) early Oregon

- * The Old Oregon Trail: 1928 Classic (39 minutes, black & white, grades 4-12)
- * Oregon History for New Oregonians (60 minutes, color, grades 3-12)
- * The Oregon Trail/Pony Express (32 minutes Oregon Trail, 16 minutes Pony Express, color, grades 6-12)
- * Seasons of the Salish (28 minutes)/Mission to the Rockies (8 minutes)/The People Today (14 minutes) (color, grades 4-12)
- ⇒ Curriculum Guides: (individual packets \$3.00)
- * 100 Years of Oregon Fashion
- * Contributing Artist: The Oregon Art Community: 1839-1989
- * Something to Consider: The Cartoons of Art Blimrose, 1949-1983
- * The South Park Blocks' Public Art: A Walking Tour
- * Northern Mystery: Spain's Exploration of the Northwest Coast of America
- * Northwest Black Heritage: The Pioneers
- * Racial Stereotypes in America: Some Perceptions of Character and Culture
- * Trails to Oregon: A History of Migration to the Oregon Country
- * The Oregon Choice (presidential elections)
- * Remembering W.P.A.
- * By Paddle, Oar and Sail
- * Home Front: Oregon in World War II
- * PORTLAND! An Urban History
- * Sad Irons, Sifters and Spiders: 100 Years in Northwest Kitchens
- * Wagons West
- * World War II in Oregon: A Guide to Related Sites Throughout the State
- * Art Packet (4 guides for \$6)
- * Multicultural Studies Packet (4 guides for \$5)
- * Politics Packet (3 guides for \$5)
- * Social History Packet (11 guides for \$10)
- * All guides (16 guides for \$20)
- ⇒ Artifact Kits (\$10 per week or \$30 for four weeks)
- * Pioneer Artifact Kit (grades 3-12)
- * Native American Artifact Kit (grades 3-12)
- * Paiute Artifact Kit (grades 6-12)
- * Exploration By Sea Artifact Kit (grades 6-12)

- * Urban History Artifact Kit (grades 3-12)

Teacher Education:

⇒ Educational evenings are open to teachers (usually at the opening of a new exhibit), but there is no specific training for teachers

Other Resources:

- ⇒ Non-circulating Library
- ⇒ Photo Archives
- ⇒ Maps
- ⇒ Primary documents
- ⇒ Free curriculum guides when tour is booked

The Oregon Museum of Science and Industry

Cost: (The following prices are good for groups of 12 or more)

- ⇒ Regular tour: \$3.50 students, \$5.50 adults (includes Sky Theater presentation)
- ⇒ OMNIMAX: \$3.00 for students, \$4.50 for adults
- ⇒ Sky Theater only: \$2.00 students, \$2.00 adults
- ⇒ U.S.S. Blueback: \$2.50 students, \$2.50 adults
- ⇒ All Attractions: \$9.00 students, \$12.00 adults
- ⇒ Teachers always free with school identification

Amenities:

- ⇒ Indoor eating areas
- ⇒ Lab space and classroom space for special presentations
- ⇒ Auditorium for very large groups
- ⇒ Ample restroom and drinking fountain facilities
- ⇒ Museum store with science books, toys, paraphernalia
- ⇒ Website: www.oms.edu

Topics:

- ⇒ Life Science: Life Lab; presentations available by appointment
- ⇒ Information Science: Electronics Lab, Computer Lab; presentations available by appointment
- ⇒ Earth Science: Paleontology Lab; presentations available by appointment
- ⇒ Physical Science: Chemistry Lab, Holography Lab, Physics Lab; presentations available by appointment
- ⇒ Astronomy (Murdock Sky Theater):
 - * *The Cow Jumped Over the Moon*: (pre-K) moon phases, star patterns
 - * *Planet Places*: (K-6) wonders of our solar system
 - * *The Magic Sky*: (K-3) objects seen in the day and night sky
 - * *Steps to the Moon*: (4-6) phases of the moon, craters, Apollo missions
 - * *Starry, Starry Nights*: (4-6) current night sky, celestial events, planetary space probes
 - * *Legends of Lalooska*: (3-Adult) Native American myths and legends
 - * *Mars*: (4-Adult) compare climate & terrain of Earth and Mars, mission results

- * *Skywatch*: (7-Adult) sun to constellations, meteor showers, current sky events
- * *Universe in Motion*: (7-Adult) movement of planets and stars, seasons, planet's rotation and revolution
- ⇒ Changing Exhibits: Ongoing traveling exhibits or special productions on topics in science and industry
- ⇒ U.S.S. Blueback: 40 minute tour with lessons on ballast, buoyancy and sonar
- ⇒ OMNIMAX Films: (Minimum 50 paid admissions)
- * *Beavers*: growth, play, transformation of their environment
- * *Destiny in Space*: shuttle astronauts in space
- * *The Living Sea*: mysteries of the ocean, whales, animal life
- * *The Magic of Flight*: Blue Angels, learn how birds fly, Wright Brothers
- * *Special Effects*: human creativity, movie special effects
- * *To the Limit*: athletes
- * *Super Speedway*: Indianapolis 500
- * *Everest*: Mt. Everest
- * *Ring of Fire*: lava, volcanoes
- * *Thrill Ride: The Science of Fun*: physics of roller coasters

Special Events:

- ⇒ Thursdays the Labs are open from 3-7 PM and teachers can visit to get ideas and lesson plans
- ⇒ OMSI Camp-Ins:
 - * *Bridge History and Architecture*: includes a bridge building workshop, OMNIMAX movie, tour of the U.S.S. Blueback, catered dinner, evening snack and breakfast, overnight facilities, free general admission the next day. Cost: \$30/student (grades 3-6 or 7-12), \$15/adult (required 6/1 ratio).
 - * *Submarine*: includes all inclusive tour of U.S.S. Blueback, practice in the control room, sonar room, torpedo room, engine and maneuvering room, overnight accommodations onboard the submarine, OMNIMAX movie, science workshop, pizza dinner, midnight snack and continental breakfast, free general admission the next day. Cost: \$48/student (grades 3-12), \$38/adult (required 6/1 ratio, minimum 25 to a group)
- ⇒ Call if you have special topics you would like covered. OMSI is usually able to design a tour or program to fit your specific needs.

⇒ There are ongoing special events, keep posted to see if a special event at OMSI fits your needs. This year's programs included: The Signature Project, Oregon Society of Conchologists Shell Show, Holiday Junction: A Winter Wonderland of Trains, Cascade Stereoscopic Show, Soil, Seeds, Sprouts & Science: OMSI Garden Party, Astronomy Celebration

Outreach Programming:

- ⇒ Science Assemblies: \$330/program, \$230 for second assembly onsite (maximum 300 students per assembly); all assemblies are approximately one hour and are appropriate for grades K-12
- * Altered States: states of matter, physical and chemical changes, energy conversions
- * Light Speed: light, wave-lengths, colors, lasers, refraction, reflection
- * Motion Commotion: energy conversion, laws of motion, inertia, forces
- * React-O-Blast: physical versus chemical reactions, the nature of chemical reactions, safety
- * The Science of Magic: perception, physics, chemistry, illusion
- * The Dr. Wilderness Show: environmental magic, earth, air, water, trees, rainforests, threatened and endangered wildlife, recycling, energy conservation.
- ⇒ Classroom Programs: \$100 for one hour program, \$180 for two hour program (maximum 30 students per program)
- * Amazing Whales: (1 hour, grades K-6) whale ecology, anatomy and behavior
- * Animal Innards: (1 or 2 hour, grades 4-12) animal classification, anatomy, lab procedures, dissection (2 hour program includes dissection of shark by instructor)
- * Blast Off!: (1 hour, grades 4-8) bio-mechanics, aerodynamics, lift, thrust, rocketry
- * Blown Away: (1 hour, grades K-3) air pressure, extreme weather phenomena, wind
- * Body Building: (1 hour, grades K-3) human anatomy, organ systems, function, senses
- * Bug Me!: (1 hour, K-3) life cycle, insect anatomy, camouflage
- * Cowabunga Chemistry: (1 hour, grades K-8) solids, liquids, gases, polymers, chemical reactions, chemical safety
- * Crime Lab: (1 hour grades 1-6, 2 hour grades 4-6) forensic science, evidence analysis, analytical thinking

- * Dinosaur Field Station: (1 hour, grades 4-6) fossil formation, fossil evidence, paleontology, adaptations, geology
- * Fun-Tastic Physics: (1 hour, grades 4-12) force applications, motion, inertia, momentum, action/reaction
- * Imagineering: (1 or 2 hours, grades 4-12) engineering, designing, motorization
- * Inside Insects: (1 hour, grades 4-12) animal classification, anatomy, lab procedures, dissection
- * Investigating Chemistry: (1 or 2 hours, grades 4-8) chemical safety, changes in state, acids and bases, properties of compounds
- * Jolts & Volts: (1 hour, grades 4-8) generation and transmission of electricity, superconducting, safety
- * Kiddie Chemistry (1 hour, grades K-3) solids, liquids, gases, chemical reactions, handling chemicals safely
- * Lasers, Mirrors & More (1 hour, grades 4-12) lasers, properties of light, optical illusions, reflection, refraction
- * Let's Rock!: (1 hour, grades 4-8) rock cycle, rock classification, plate tectonics
- * Live Wire: (1 hour, grades 1-3) electricity generation, energy consumption, conservation
- * The Magic School Bus: (1 hour, grades K-5) human body systems, the solar system, layers of the earth, rocks and minerals, paleontology, marine biology
- * Math Attack: (1 hour, grades 4-8) logical reasoning, statistics, geometry, measurement
- * Micromania: (1 hour, grades K-3) microscopic versus macroscopic, magnification, lenses, scientific instruments
- * Microscopic Zoo: (1 hour, grades 4-12) aquatic ecology, animal adaptations. habitats, scientific equipment
- * Perception Deception: (1 hour, grades 4-12) anatomy, visual perception
- * Planet Panic: (1 hour, grades 4-8) acid rain, ozone depletion, water supply, recycling
- * Prehistoric Dinosaur Puzzle: (1 hour, K-3) fossil formation, fossil evidence, paleontology, adaptations
- * Radical Reactions: (1 hour, grades 4-8) chemical safety, properties of compounds, experiment design and analysis
- * Sharks!: (1 or 2 hour, grades 6-12) animal classification, anatomy, lab procedures, dissecting (2 hour program includes student dissection of sharks)

- * Simple Symmetry: (1 hour, grades 4-8) visual perception, illusions, synthesis, analysis
- * Skulls, Fangs & Claws: (1 hour, grades 1-6) structure-functions, predator/prey adaptations, natural history of species
- * Storm Front: (1 hour, grades 4-12) air pressure, extreme weather phenomena, topography, weather prediction
- * Tombs & Treasures: (1 hour, grades 1-6) archeology, paleontology, past cultures
- * Wee Wonders in Motion: (1 hour, grades Pre K-K) physics, magnets, movement, force
- * Wee Wonders in Nature: (1 hour, grades Pre K-K) geology, animal behavior, natural structures
- ⇒ Live Animal Assemblies: \$330/program, \$230 for second assembly onsite (maximum 300 students per assembly); all assemblies are 90 minutes and are appropriate for grades K-12; all programs allow "hands on" time with the animals, there is a \$.30 per mile charge for schools located over 60 miles from Corvallis
- * Creature Features: characteristics, adaptations, organization of animal groups
- * Snakes Alive: reptilian adaptations, predator-prey relationships, life-cycles, albinism, phobias
- * Rainforest Wonderland: biodiversity, adaptations, ecology, conservation
- ⇒ Live Animal Classroom Programs: \$100/program, maximum 30 students per program, all programs are 1 hour, require three hour minimum booking per school, there is a \$.30 per mile charge for schools located over 60 miles from Corvallis, Oregon
- * Critters & Climate: (grades 4-12) thermo-regulation, hibernation, migration, metabolism (designed as an advanced follow up to Run, Slide, Swim or Hide)
- * Run, Slide, Swim or Hide: (grades K-12) characteristics, adaptations, organization of animal groups
- * Snakes, Up Close and Personal: (grades K-12) reptilian adaptations, predator-prey relationships, life-cycles, phobias
- ⇒ Starlab Programs: \$250/half day, \$450/full day, grades K-12, 30 students per 20 minute to 1 hour session; portable planetarium, topics include: stellar evolution, earth's motion, constellations, multi-cultural perspectives
- ⇒ The World Game: \$350/session, 2 hour session, 50-70 students per session, grades 6-8; students are divided into teams and placed in

- countries around the 26'X12' map, teams engage in problem solving and using their resources in order to gain their objectives, also attempt to develop workable solutions for pressing problems
- ⇒ OMSI Science Festival: \$125/contract hour, 4 hour minimum, 70 students per session; science equipment to fill a gym or cafeteria, problem solving, microscopes, brain teasers, air pressure & principles of flight, finger print analysis, dinosaurs, physics gadgets
 - ⇒ Festival of Reptiles: \$150/contract hour, 4 hour minimum 70 students per session; students are able to handle reptiles and amphibians as well as learn about them
 - ⇒ Traveling Science School: \$30/student per day; minimum of 15 students per week, maximum 30 students per instructor, grades 1-8; week-long thematic science programs (includes instructors and program materials)
 - * Animals Inside and Out: dissection, microscopy and hands on investigations
 - * Chem-Mystery: chemical reactions, states of matter, experimentation
 - * Imagineering: basics of simple machines, electric currents, physics of moving objects
 - * Out of This World: astronomy, rocketry, constellations (portable planetarium), science of space objects, principles of space travel

Teacher Education:

\$350 per hour (includes all materials and curriculum guide for maximum 25 teachers)

- ⇒ Kids Engineering: (grades K-12) design process, techniques for thematic integration, classroom organization of topic work and reflective assessment
- ⇒ Reasons For the Seasons: The Earth, Moon, & Stars: (grades K-12) inquiry focused on celestial events, orbital motion, dimensions of celestial objects, the sun as a compass and clock, tools of the astronomer, celestial patterns
- ⇒ How to Grow Science in Kids: (grades K-8) focus areas may include physics, chemistry, engineering, earth and biological sciences, course may be taught as a curriculum development class organized around concept/process teaching
- ⇒ Applying Technology to Scientific Inquiry: An Exploration: (grades 6-8; maximum enrollment 15 teachers) explore new technologies and software applications for scientific inquiry through project based learning, using the internet as a tool to facilitate scientific inquiry,

developing multi-media projects, using technology as a tool for assessment

\$200 per hour (includes all materials and curriculum guide for maximum 25 teachers)

- ⇒ A Tangled Web: animals in the classroom and ecosystems in the wild, design experiments, journals as a method of assessment
- ⇒ Far Out and Away: solar system, motions of celestial bodies, construct tools of astronomers, use direct observation and dynamic modeling
- ⇒ Liquid Magic: properties of liquids, chemistry concepts, environmental studies, developing critical thinking skills
- ⇒ Seismic Sleuths: (grades 7-12) science of earthquakes, physics, earthquake waves, Mercalli and Richter scales, liquification, building techniques in earthquake prone areas
- ⇒ Tremor Troops: (grades K-6) earthquake legends, structure of the earth, plate tectonic theory, earthquake hazards, earthquake waves, common classroom hazards, emergency planning

Other Resources:

- ⇒ Curriculum guides for the chemistry lab are available upon request (soon will be available over the internet)
- ⇒ Lessons from each of the labs are available upon request
- ⇒ OMSI can arrange special programming to fit your needs, call the education office or individual labs if you have specific topics in mind

The Oregon Zoo

Cost: (The following prices are good with 2 weeks advance reservation)

- ⇒ Self-guided tour: \$2.50 students, chaperones free (1/5 ratio)
- ⇒ Teachers can get a free pass if they book a trip

Amenities:

- ⇒ Outdoor eating areas
- ⇒ Storage cupboards for lunches
- ⇒ Can order lunches with the tour
- ⇒ Restrooms and drinking fountains throughout the zoo
- ⇒ Zoo store with animal related items, fairly expensive
- ⇒ Website: www.zooregon.org

Topics:

- ⇒ Conservation
- ⇒ Asian Animals
- ⇒ African Animals
- ⇒ Pacific Northwest plants and animals
- ⇒ Insects
- ⇒ Mammals
- ⇒ Reptiles
- ⇒ Amphibians
- ⇒ Birds
- ⇒ Inquiry based science

Special Events:

- ⇒ ZooSnooze: 6:30 p.m. to 9:00 a.m.; \$25 each student and chaperone, required 1/5 ratio. Includes: guided nighttime safari, reptile/insect presentation, Cascades exhibit guided tour, snacks and breakfast, Birds of Prey show, souvenir button and poster, free entry in zoo remainder of second day
- ⇒ Specialized programs could be created with a month advance notice for groups with special interests
- ⇒ Birds of Prey shows
- ⇒ Reptile shows

Outreach Programming:

- ⇒ Discovery Boxes: \$10 for two weeks use, grades 1-4
- * Insects: includes mounted specimens, magnifying glasses, picture cards, activity ideas; separate boxes for arachnids, insects in general, butterflies, beneficial insects
- * Suitcase For Survival: revolves around trade in wildlife animal parts, includes informational packets, replicas of items, posters, lesson suggestions
- ⇒ Shows: \$250 for one show/\$175 each additional (travel fee if school is over 100 miles from the zoo)
- * Things That Fly: hawks, owls, vultures, their adaptations to flight
- * Dr. Phineas Phangs Reptile Review: myths about reptiles, theater format with supervised handling of some species
- ⇒ Classroom Presentations: \$75 for 40 minute visit, \$125 for two visits (travel fee if school is over 100 miles from the zoo)
- * Birds of Prey
- * Reptiles
- * Insects

Teacher Education:

- ⇒ Free teacher training workshops on using the zoo's resources

Other Resources:

- ⇒ Zoo Science curriculum guide free: practicing inquiry based science at the zoo, prepares students to participate in ongoing research projects at the zoo
- ⇒ Curriculum Packets: can be purchased through the mail or by stopping by the zoo's education office
- * ZooFun Safari Activity Book (Pre K-3) \$4.00
- * K-2 At the Zoo (K-2) \$9.00
- * A Home For Asian Elephants (1-9) \$4.00
- * China (1-9) \$4.00
- * The Great Northwest (1-9) \$9.00
- * Kongo Ranger Station (2-6) \$4.00
- * Threatened & Endangered Species (3-6) \$9.00
- * Africa! (3-12) \$13.00
- * Tropical Animals (6-9) \$9.00
- * Threatened & Endangered Species (7-12) \$9.00
- ⇒ Cards: can be purchased through the mail or by stopping by the zoo's education office

- * Animal Flashcards (3-9) \$15.00
- * Animal Talk Cards with Binder (9-12) \$20.00
- ⇒ Videos: can be purchased through the mail or by stopping by the zoo's education office
- * Threatened & Endangered Species (3-6) \$50.00
- * Zoo Careers (4-12) \$65.00
- * Environmental Enrichment (4-12) \$25.00
- * Threatened & Endangered Species (7-12) \$50.00

The Portland Art Museum

Cost: (The following prices are good for groups of fifteen or more with reservation)

- ⇒ Guided tour: \$2.50/student, 3 adults free (other adults are charged the regular adult price \$7.50-\$13.00)
- ⇒ No free passes for teachers

Amenities:

- ⇒ Coat check
- ⇒ Restroom and drinking fountain
- ⇒ Museum store
- ⇒ Website: www.pam.org/pam/

Topics:

- ⇒ Major traveling exhibits on topics related to art history, periods of artistic expression or art from specific culture groups
- ⇒ Asian Art
- ⇒ Native American Basketry
- ⇒ Impressionism
- ⇒ Permanent collection of a variety of artistic styles/periods
- ⇒ Sculpture

Special Events:

- ⇒ None at this time

Outreach Programming:

- ⇒ CD ROM: *Taking Art Apart*, free upon request; interactive guide to art concepts using works of art from the permanent collection
- ⇒ Docent Presentations: \$20.00; suitcase with hands-on activities related to ongoing exhibitions
 - * Egypt
 - * Faces of Many Cultures
 - * Native Americans
 - * Asian Art

Teacher Education:

⇒ Evenings For Educators: free presentations on how to integrate the museum's exhibition themes into classrooms; reduced fee tours of special exhibits

Other Resources:

- ⇒ Curriculum guides for special exhibits (\$10.00 for Egypt, but typically under \$5.00)
- ⇒ Curriculum guide for Asian art collection (free)
- ⇒ Library services, non-circulating
- ⇒ Slides available for a small fee

World Forestry Center

Cost:

- ⇒ Self guided tour: 1 hour, \$2.50/student, adults free
- ⇒ Guided tour: 1 hour, \$3.00/student, adults free
- ⇒ Museum Exploration: 90 minutes to 2 hours, \$3.50/student, adults free (includes hands on learning experience)
- ⇒ Forest Rangers: \$6.00/student, adults free (\$75.00 minimum)
- ⇒ Monday and Tuesday, November 1-February 1, self guided tours \$1.00

Amenities:

- ⇒ Limited restroom facilities
- ⇒ Outdoor eating area
- ⇒ Forest Store

Topics:

- ⇒ Museum Exploration Programs:
 - * Forests of the World (3-5, 6-8, 9-12) comparative conditions of forests, boreal, arid, temperate and tropical rainforest
 - * Secrets of the Rainforest (K-2, 3-5, 6-8) plants, animals and people of the tropics
 - * Ancient Forests Forever? (3-5, 6-8, 9-12) spotted owl, nurse log, old growth forests
 - * Habitat Central (K-2, 3-5, 6-8) forest homes for plants, animals, and people
 - * Inside Trees (K-2, 3-5) how trees "work"
 - * Woods Words (3-5) poetry, storytelling, riddles and word games related to the language of the forest
 - * Trees of the Northwest (K-2, 3-5) leaves, cones, bark to compare and contrast common trees
- ⇒ Forest Rangers: includes two field trips to Forestry Center and Magness Tree Farm, five hours of instructional time with staff, free use of teaching kits, students receive World Forestry Center Forest Ranger patch and certificate
- ⇒ Tours:
 - * Old growth forests: forest ecology, conservation, samples of trees, indigenous animals
 - * Tropical Rainforest: tropical plants and animals, lifestyles of families, includes 15 minute multi-media presentation

- * Talking Tree: 70 foot replica of a Douglas Fir
- * Forests of Stone: petrified wood samples
- * Forests of the World: multi-media tour of global forests
- * Tillamook Burn: fire-fighting equipment, replica look out cabin
- * Armed Willow: fly-fishing equipment and models of Northwest trout species

Special Events:

- ⇒ Wooden Toy Show
- ⇒ Woodcarvers Show
- ⇒ International Christmas Tree Festival
- ⇒ Annual Children's Tree Trail
- ⇒ Smokey Day!
- ⇒ National Arbor Day Poster Contest
- ⇒ Science in the Forest: career day for grades 7-10

Outreach Programming:

- ⇒ Teaching Kits: \$25.00 for 4 weeks (fee waived with request from school administrator on letterhead)
- * The Tree Town Kit: (K-2, 3-5) includes leaf samples from common northwest trees, wildlife posters, tree identification guides, tree ring "cookies," wood samples, hand lenses, story books and tapes, tree planting tips, lesson plans, *It's Arbor Day*, *Charlie Brown* video
- * The Tropical Rainforest Kit (K-8) includes *Rainforest Rap* video, *IMAX* video, National Geographic *Rainforest* video, spices, tropical product samples, role playing games, Ranger Rick's *NatureScope*, current information about deforestation and biodiversity, maps, country profiles
- * The Forestry Kit: (3-5, 6-8, 9-12) includes increment bore and clinometer with instructions, videos about careers in the forest, wildlife, logging, tree farms, ecosystem management, lesson plans, posters, samples of native woods

Teacher Education:

- ⇒ Project Learning Tree (K-8 teachers), free workshop for training in this environmental education program; includes 400 page activity guide with 96 lessons based on diversity, interrelationships, systems, structure, scale, patterns of change

Other Resources:

⇒ Free curriculum guide available upon request

Special Programs/Opportunities

Clackamas County Historical Society

- Scale drawing of the Willamette River
- Miniature working "Locks"
- Genealogy Center

End of the Oregon Trail Interpretive Center

- Heritage Gardens

Fort Vancouver

- "Fur to Felt" curriculum guide
- Free admission

McLoughlin House

- First person "living history" presentations on early pioneers or other Oregon History topics

Oregon Historical Society

- Historic films and slide shows
- Very large library and photo archives

Oregon Museum of Science and Industry

- Private group lessons in the labs
- OMNIMAX theater and Murdock Sky Theater

Oregon Zoo

- Great teacher training sessions
- Many curriculum guides
- Inquiry Based Science at the Zoo

Portland Art Museum

- First rate traveling exhibits
- Free art CD ROM

World Forestry Center

- Project Learning Tree (Free)

Web Sites

End of the Oregon Trail Interpretive Center

- www.teleport.com/~eotic/

McLoughlin House

- www.nationalparks.org/guide/parks/mcloughlin-h-1897.htm

Oregon Historical Society

- www.ohs.org

Oregon Museum of Science and Industry

- www.oms.edu

Oregon Zoo

- www.zooregon.org

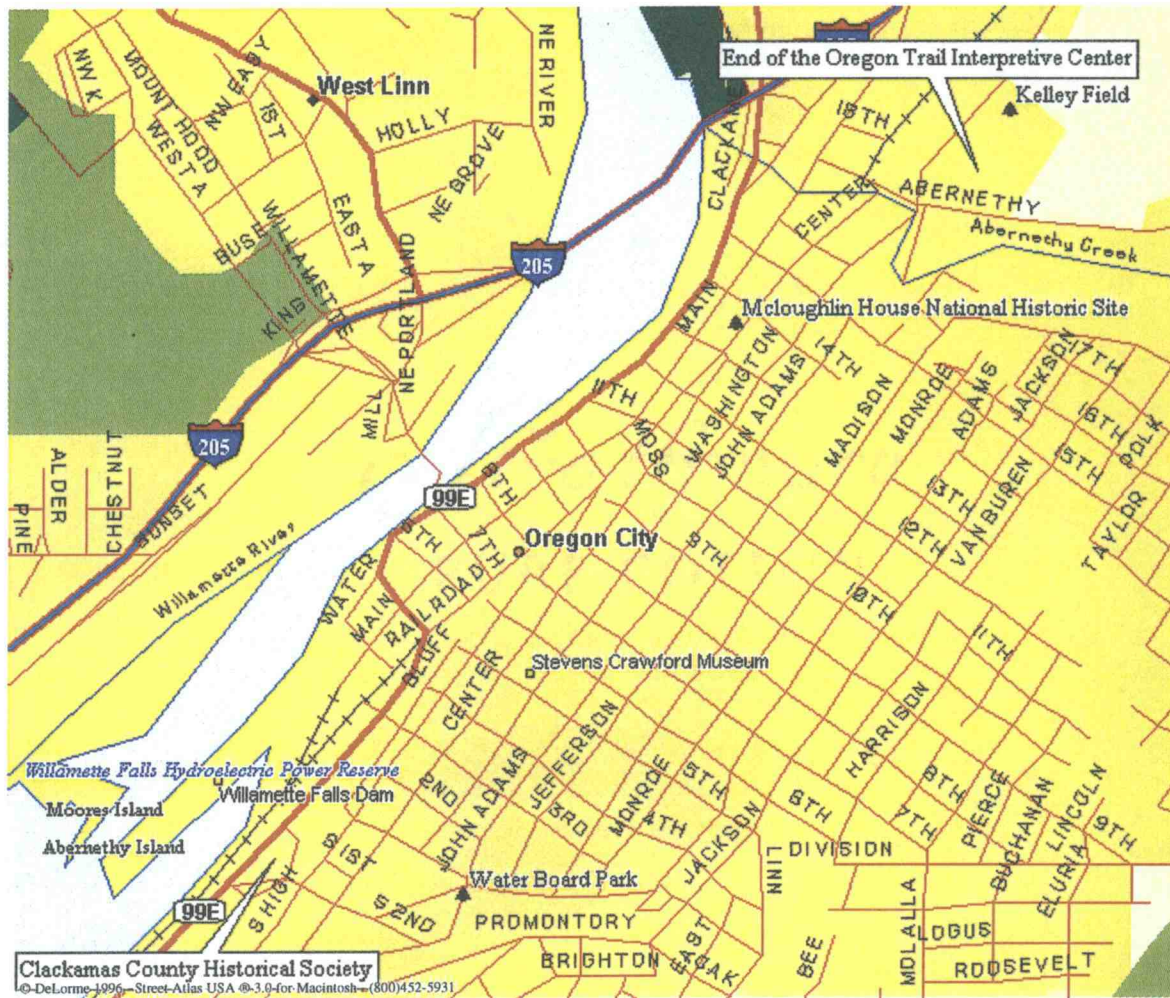
Portland Art Museum

- www.pam.org/pam/

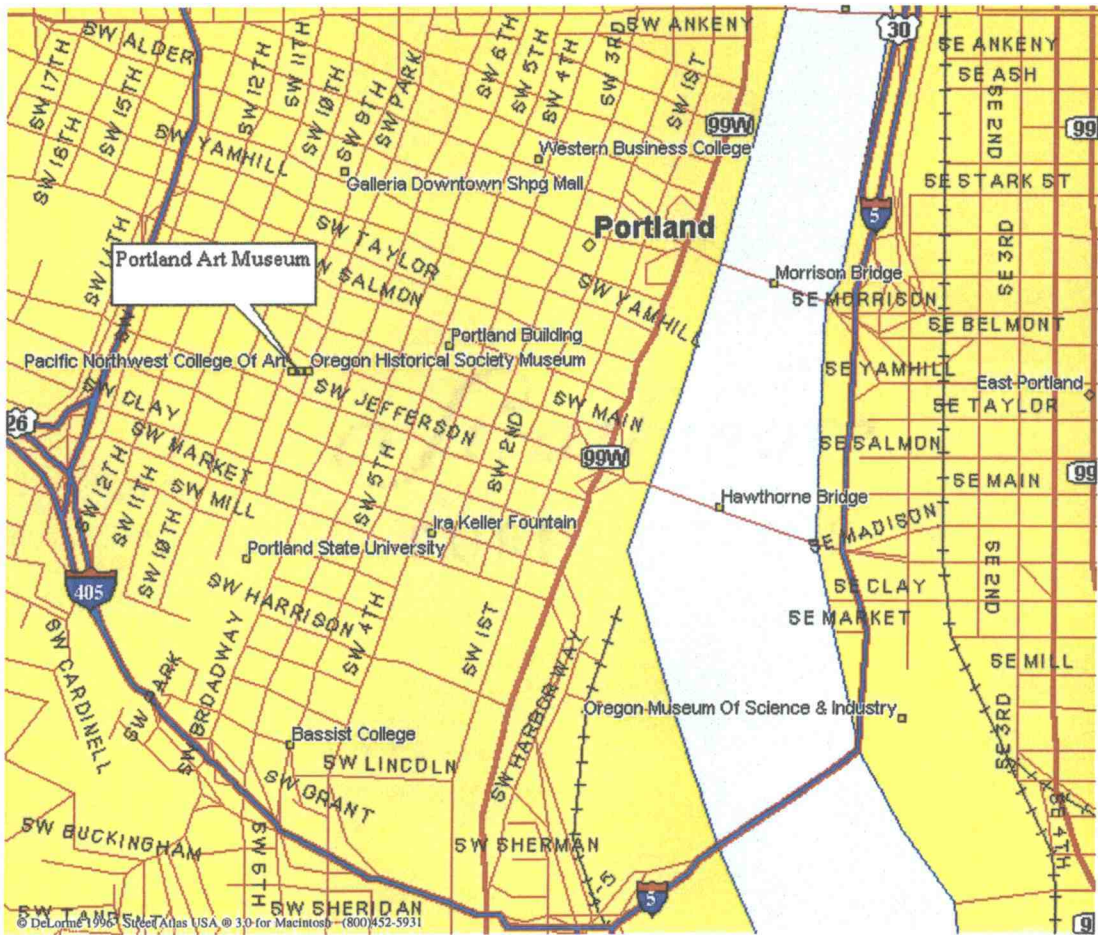
World Forestry Center

- www.worldforest.org

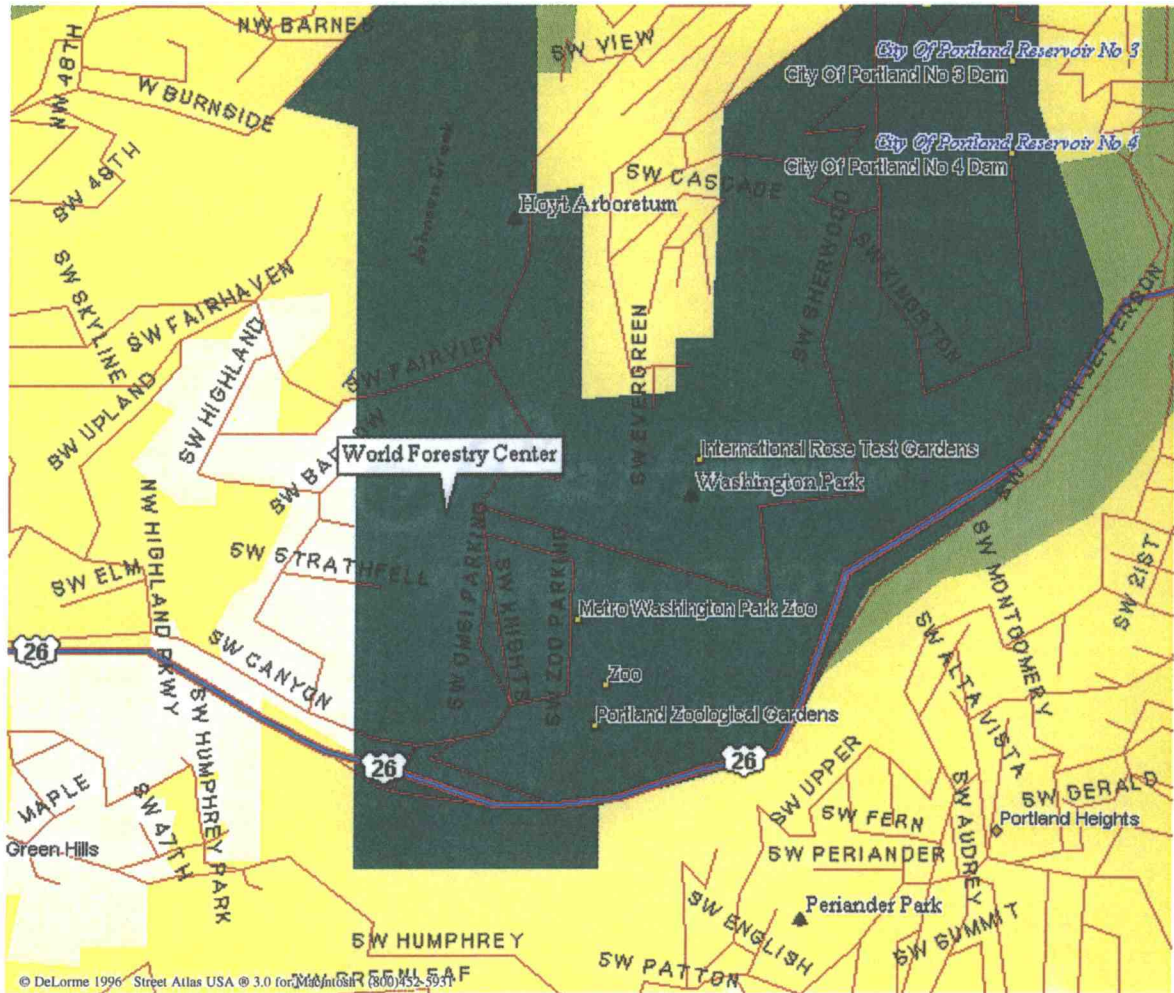
Map of Oregon City



Map of Central Portland



Map of West Portland



Map of Vancouver

