

Tracey Pawloski
Pittsburgh Voyager Teacher Training Workshop
Environmental Science Sessions: February 26 and March 5, 2005
Act 48 Requirement: Field Trip Proposal

Allegheny Valley School District: Student Activity Request

Date of Request: March 7, 2005

Group/Sponsor: The seventh grade teaching staff at Springdale Jr./Sr. High School and the Allegheny Valley School District Parent Teacher Association (PTA)

Description of Activity: Half-day three hour voyages on either the Pittsburgh Voyager or the Discovery and a half-day visit to the Carnegie Science Learning Center

Location of Activity: Pittsburgh Voyager, Discovery, and the Carnegie Science Center

Contact Addresses: Pittsburgh Voyager
1501 Reedsdale Street
Suite 2001
Pittsburgh, PA 15233
412.231.2712
www.pittsburghvoyager.org

Carnegie Science Center
1 Allegheny Avenue
Pittsburgh, PA 15233
412.237.3400
www.csc.cipgh.org

Date of Activity: May 2005

Number of Students: 115 - The entire seventh grade

Number of Sponsors: 15 - One adult sponsor for every group of ten students including: autistic aide, learning support aide, 7th grade learning support teacher, 7th grade science teacher, two (2) 7th grade language arts teachers, 7th grade math teacher, 7th grade geography teacher, assistant principal, gifted coordinator, technology director and four (4) parents

Estimated Expenses

- Substitute Teachers:** No cost to the district. All seventh grade students will be attending the Voyager and Carnegie Science Center, and all seventh grade teachers and seventh grade support personnel will also attend, thus eliminating the need to hire substitute teachers. Parent volunteers who will act as additional chaperones from the PTA will also attend at no cost to the district
- Transportation:** Cost of \$750 dollars to be paid by the district. Three 56 adult passenger school busses at \$250 per bus contracted from W.L. Roenigk, Inc. Funds will be taken from the seventh grade team's annual field trip budget.
- W.L.Roenigk Bus Transportation
690 Gulf Lab Road
Cheswick, PA 15024
724.275.1232
- Meals:** No cost to the district other than the cafeteria providing bag lunches to those students who qualify for the free and reduced lunch program. All other students and chaperones will pack a lunch. Lunch will last 30 minutes.
- Snack:** No cost to the district. The seventh grade teachers have generously agreed to pitch in to provide a bottle of water, an apple and a cookie per student
- Parking:** No cost to the district. Free parking for all buses at the Carnegie Science Center and Voyager docking area
- Voyager and Discovery:** No cost to the district. Cost to be paid by the school district's PTA
- \$2,600 maximum, excluding discounts, state aide, and scholarships.
- ***\$1,300 for two 3 hour voyages on the Voyager for the "Environmental Science on the Three Rivers" program for 33 passengers per voyage for a total of 66 passengers
- ***\$1,300 for two 3 hour voyages on the Discovery for the "Boats, Bridges and Water" program for 33 passengers per voyage for a total of 66 passengers

***NOTE: All 130 students and sponsors will be able to participate in both programs. The day's agenda will allow for half of the students and chaperones to be on the boats, while the other half of the students and chaperones will be in the Carnegie Science Center, and then the two groups will switch after a combined lunch.

Carnegie Science Center: The total cost of \$780 to be paid by the school district using previously budgeted money by the seventh grade teaching team. The cost is \$6.00 per student and grants entrance to all exhibits throughout the center. The team decided not to include the visit to the Rangos Theater which would cost an additional \$3.00 per person pushing the cost of the Carnegie Science Center visit to \$1170. However, the cost was not the real issue. The team agreed time availability would be a greater factor since students have only three hours to tour the exhibits before boarding the Voyager and Discovery. There would not be sufficient time to watch the animated film "The Robots" and enjoy all of the exhibits.

Time Frame: 7:45 A.M. - 4:00 P.M.

Students will leave the high school at 7:45 A.M. and arrive at the Voyager, Discovery and Carnegie Science Center by 8:30. Group 1 will immediately board the Voyager for a three hour "Environmental Science Program." Group 2 will immediately board the Discovery for the three hour "Boats, Bridges and Water Program." Groups 3 and 4 will tour the Carnegie Science Center for three hours. At 11:30 all four groups will meet for lunch using the outdoor picnic area at the Carnegie Center. In the event of rain, students will eat inside the Carnegie Science Center in the student dining area. After lunch (approximately 12:00 P.M) Groups 1 and 2 will tour the Carnegie Science Center. Group 3 will board the Voyager for the three hour "Environmental Science Program," and Group 4 will board the Discovery for the three hour "Boats, Bridges and Water Program." All students and chaperones will meet at the buses at 3:15 P.M. Snacks will be provided for the bus ride home. Buses should arrive at the high school by 4:00 P.M. An activity bus will be available to transport students home. Students who generally walk to school will walk home, and parents have the option to pick up their children if they choose to do so.

Rationale:

Annually, the seventh grade students complete an interdisciplinary unit about the Allegheny River, since it is within walking distance to all three school buildings in the district. The unit covers three weeks of classroom river-related activities in all subject areas and culminates with a trip on the Voyager and Discovery and a display of projects, reports and a video presentation about the unit's activities at the school district's annual Education Celebration Night in May.

The experiences on the Voyager and Discovery boats are invaluable since students have the opportunity to participate in hands-on activities and experience what was learned in the classroom during the three week river unit. The three hour "Environmental Science on the Three Rivers Program" is designed for students in grades 5 through 12 and focuses on biology, chemistry, ecology, and watershed. Students will analyze the quality of the rivers' waters and study the macro and micro invertebrates and birds and native fish species. All lessons and activities are based on the Pennsylvania State Standards for Environment and Ecology and Science and Technology and are delivered by a very knowledgeable, personable, energetic and highly qualified staff.

The three hour "Boats, Bridges and Water Program" is designed for students in grades 6 through 8 and focuses on physical science and math. Students will work independently and in small groups and study boat operations, bridge engineering, hydrology, geology and meteorology. Students also will have the opportunity to work with river charts as well as equipment to measure river current and depth and weather conditions. The highlight of this program is passing through the Emsworth Lock and Dam. All lessons are based on the Pennsylvania State Standards in math and science and are delivered by a very knowledgeable, personable, energetic and highly qualified staff.

The activities and exhibits at the Carnegie Science Center are also of exceptionally high quality and relate to the school's science curriculum in general. It also provides an activity while the groups are waiting to board the Voyager and Discovery, since each boat only holds 33 passengers a trip. So while 66 passengers are sailing, the other 66 remaining students and chaperones must have an educational opportunity provided while waiting to board.