In the late 1950s, the Seattle School Board sought a solution to overcrowding at View Ridge and Wedgwood. They acquired the playground area of the Shearwater Housing Project from the federal government, who had declared the area surplus. Shearwater was built in the Wedgwood neighborhood as a housing unit primarily for United States Navy personnel stationed at the Sandpoint Naval Air Station and their families.

Shearwater Elementary School was proposed as the name for the new school. However, a protest arose among “some parents who do not live in the naval housing project and who feel that the name has no permanent significance as a permanent name for the school.” Because of its connection to the Navy, the school was named after Stephen Decatur, an American Naval officer and hero of the Tripoli War and the War of 1812. The name was thought “particularly appropriate” for a Seattle school because the name Decatur had figured prominently in Seattle’s early history. The U.S. Sloop-of-War Decatur provided protection for early inhabitants during a hostile Indian attack in January 1856.

Stephen Decatur Elementary School opened in September 1961 with a K–5 enrollment of 326 from the Shearwater Housing Project and the surrounding neighborhood. Enrollment rose to 367 the following year when the 6th grade was added. Enrollment dropped again to 251 in 1964–65 with the closing of the housing project. The former housing project office (at 4210 NE 77th Street) was preserved as an annex on the south side of the site.
A large parcel of federal surplus property, where the frame apartment houses had been situated, was added to the school site in 1966. That same year, although attendance had begun to decline, five classrooms were added to the south end of the main building. They were specifically designed to accommodate team teaching.

Enrollment increased to 477 in 1966-67 with the addition of an accelerated program and special education classes. The accelerated program served north end students of high academic potential. Four groups of 45 children were transported to Decatur for two half-days each week. A component of the program was a model laboratory where teachers from throughout the state could observe. Although state funding was withdrawn in June 1973, the program continued in 1973-74 with 52 north end children in the 5th and 6th grades attending on a full-time basis.

In July 1974, Decatur was placed on a district list of schools likely to be closed the following year. Although it was one of the newest schools in the district, it was running well under capacity with an enrollment of 339. It wasn’t closed, however, and as part of the district’s desegregation plan, Decatur operated as a K–3 facility from 1978 to 1988 in a triad with Wedgwood and Leschi.

In 1979-80, a “modified Montessori classroom” for 27 children in grades 1–3 was added. An innovative program called “The House System” began at Decatur in September 1983, patterned on a similar system in New Zealand. The purpose was to provide “an opportunity for children to mix and work with children from across grades, races, and social groups.” Each fall, the entire student body was divided into four
“houses,” each one signified by a different color (red, yellow, blue, green). Classrooms were further broken down with 6–8 children in each room being assigned to a different house. The houses came into play during rainy day recess, fundraising drives, and a field day.

When Decatur finally closed as a regular elementary school in June 1989, it became the home of Alternative Education School #2 that moved there following the closure of University Heights. AE #2 focuses on interactive learning and multicultural education. In its first year at Decatur, the K–5 pupils took nearly 200 field trips, exemplifying AE #2’s view that “the world is our classroom.” Parents and community members volunteer thousands of hours each year to help the students learn by doing. A salmon conservation project involves students in raising young fish and releasing them into the wild. In accordance with the school’s performing arts emphasis, teacher Jo Vos led her class in the creation and production of an opera during the 1999–2000 school year.