Operating System Analysis

A. What is the operating system like now?

To get a better understanding of the operating system and its processes, key personnel directly involved with LSHS were interviewed. Interview data indicates that the Superintendent and the Board of Education are the forerunners in the decision making for each school within the county. It was also established that unless major occurrences are happening, they (the Superintendent and the Board of Education) rely heavily on each schools administration to make the day to day decisions, and in essence, manage the schools. To understand the operating system even further, an organizational chart was examined, outlining each position within New Hanover County Schools.

Further results of the interview revealed that Lakeside has one principal and one assistant principal. The current student population is 150 with a teacher to student ratio of approximately 1:10. The main focus of the school is on the ninth graders who have not passed the eighth grade EOG. It is hoped to be a school of recovery to retrain the students so that they will be able to go on to a traditional high school.

One document that we were referred to explore, was the New Hanover County School mission statement posted on the county's website. It states: "The mission of New Hanover County Schools is to provide a high QUALITY education that prepares all students to be productive and contributing citizens of a global society."

Another stated objective of the system is for Lakeside to be a ninth grade recovery center. When Lakeside students pass the eighth grade EOG they may return to a traditional high school as ninth graders. This is the first year that Lakeside has operated as a ninth grade recovery center. Lakeside was established 4 years ago and has been given a different mission by the New Hanover County School Board for each of those four years. For example, one year it was an alternative high school for 9-12 grades.

The present activities of Lakeside include a traditional seven period teaching environment teaching to the NC standard course of study. Interviews indicate that Lakeside teachers are currently teaching toward the 9th grade EOG and are subject matter experts in their areas. Students are assigned to one of three teaching teams which includes Language Arts, science, math and social studies. The other three daily periods include PE and two electives. Each class is 50 minute in length and students

change class to comply with the 7 period rotations. At the end of the school year, assuming successful completion of all classes, students will have earned seven credits towards graduation. Lakeside teachers instruct throughout the day which does not allow for a planning period during normal school hours.

All other high schools within New Hanover County are on the block schedule. In block scheduling, students take four subjects each semester. Classes are 90 minutes long and at the end of the semester, assuming successful completion, students will have earned four credits for graduation. The second semester of that same school year, another 4 courses are taken and upon completion another 4 credits are earned. At the end of the school year, a total of 8 credits can be achieved.

An important side effect of the present system is the high drop out rate of 50%. Assuming students began kindergarten at the age of 5 and have not repeated any grades, the average age of a Lakeside student should be approximately 14 years. The North Carolina law states that students must remain in school until age 16, however, New Hanover County does not have a required number of days that students can miss, unexcused, and still pass.

New Hanover County allocates funds based on student enrollment. LSHS has the lowest number of students in a county school, and therefore receives the least amount of funding. Historically Lakeside receives second hand equipment, donated by other county schools that have updated their equipment. As a result there is little consistency in hardware or software that is within the school facility. The system also has a Skills Tutor program which is outdated as it no longer aligns to the current competency test (A.K.A. 8th grade EOG without a time limitation). Two positive resources of LSHS include Lightspan, a computer program designed to assess the needs of students and allow teachers to focus on appropriate teaching methods. The Lakeside server has recently been upgraded and is able to meet current computer needs.

The system of Lakeside High School is managed by the New Hanover County Board of Education. See organizational chart above. Through interviews and surveys, many stakeholders within the Lakeside High School system reported a lack of emotional support from the county office as major problem that must be addressed.

B. What should the operating system be like?

Lakeside High School's desired objectives should be in line with the New Hanover County Mission statement which states, "The mission of New Hanover County Schools is to provide a high QUALITY education that prepares all students to be productive and contributing citizens of a global society."

The present activities of Lakeside High School should include a block schedule to match other New Hanover County Schools. Primarily, it would allow for students who are able to pass the EOG at Lakeside in December, to earn the 4 credits necessary to return to the traditional environment mid year. In addition, it would allow for one more class credits each year. (Instead of earning up to seven credits, students will be able to earn up to eight.) As the schedule is changed to allow for block scheduling, teacher planning periods could easily come into existence.

Individualized, innovative, and interactive learning must be included at Lakeside. All student skill levels should be pre-assessed upon entrance to Lakeside and teaching should be directed towards those assessed deficiencies. With the teacher student ratio only being 1:10, flexible groups can be designed based on pre-assessment scores. Individualized instruction will assist in reaching the ninth grade curriculum goals.

The important side effects of the system's proposed activities would be a reduction in the drop out rate. The implementation of alternative teaching styles and student pre-assessment are designed to improve the reading skills of students. A direct side effect of this activity should result in higher student motivation for attendance and improved class achievement.

In order to improve the funding of the Lakeside system, New Hanover County Schools should consider adopting a separate budget policy for the unique needs of an *alternative* school. As an alternative school, teaching needs to be directed toward improving student deficiencies, not necessarily the 9th grade curriculum. Increased funding would allow for new equipment, consistent throughout the facility, and compatible software, to align with what is available in a traditional school.

The ongoing success of any *alternative* school is heavily dependant upon the support and guidance of the county office to which it reports.

C. Probable Causes of the Problem

Through several interviews with Lakeside stakeholders, direct observation, and referencing documented materials, our group graphed the exact description of Lakeside High School. The differences between "what is" and "what should be" gave us our gaps, which helped determine the probable causes of the low score phenomenon at Lakeside.

The New Hanover County School Board has changed the mission objectives of Lakeside High School for each of the 4 years it has been in existence. This has resulted in a lack of consistency and the continuing need to rebuild and redesign, stifling program development.

Students have failed because their individual scholastic needs have not been met. Improvement in EOG scores must be directly linked to the improvement of reading skills. Lakeside students are being pulled out of the traditional system for an *alternative* year and therefore teaching must be directed to the improvement of the measured deficiencies. Another cause is a lack of alternative teaching styles, including individualized and differentiated instruction. Teachers continue to instruct in the traditional manner. Without the pre-assessment measurements, as is currently occurring within the system, individual needs cannot be met or improved. A major result of not addressing current skill levels is that individual needs cannot be addressed and students cannot be grouped according to those needs.

Other causes of the current system failure include: (1) Lakeside's 7 period schedule does not align with the tradition block schedule of all other county high schools, which results in a lack of credits required to re-enter the traditional system; (2) the lack of a teacher planning period does not allow teachers time to address individual needs during school hours, and (3) lack of funding results in "hand-me-down" equipment which is often not compatible with new reading enhanced software required to improve reading skills.