

# **Integration of Computers and Interactive Software at Lakeside School**

**Technology Change Proposal  
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Since the No Child Left Behind legislation was initiated by President Bush (01/08/02), state education systems throughout the country have responded to it differently. The act has two major goals. The first goal of the program is to have all students obtain, at minimum, proficiency level III or higher on state mandated testing. The second goal is to close the achievement gap between minority and non-minority students, and between disadvantaged students and those who are from more affluent families. Subordinate goals include increased motivation, improved attitude and behavior, improved organizational skills, increased parent involvement, and less absenteeism. Lakeside school was created with those goals in mind 3 years ago. Students who are unable to pass the 8<sup>th</sup> grade end of grade test, in either reading or math, are not allowed to proceed to traditional high school. Lakeside School was created as an alternative high school for these students as well as in response to the No Child Left Behind Legislation. The school was reserved for troubled youth or those who failed to pass the end of grade tests and were ruled out of traditional high school. Lakeside was designed to accommodate students for one transitional year preparing them to pass the competency test and rejoin the traditional school system. But in the last three years, the percentage of students at Lakeside who have been successful at passing the exam and moving onto traditional high schools has been very low. This year, the school was changed to a 9<sup>th</sup> grade alternative center. The idea is that the students are placed in Lakeside for one additional year while they continue to improve their skills in preparation for successful completion of the competency exam (repeat of the 8<sup>th</sup> grade EOG without a time limitation), which would allow them to return to traditional school.

In December 2005, the first group of 9<sup>th</sup> grade students retook the 8<sup>th</sup> grade end of grade exam. The pass rate was approximately 15%. Many of the students scored lower on this second attempt as 9<sup>th</sup> graders than the first attempt as 8<sup>th</sup> graders. With only a small minority of students actually passing the exams, the student population is rapidly growing above and beyond the original intention. A large percent of the student body comes from an underprivileged or low-income background. Motivation is low and the drop out rate is rising. Behavior is also a recurring problem as poor attitudes and attendance discourage a productive learning environment. In addition, the turnover rate of qualified teachers at Lakeside School is high as there is a perceived lack of support within the school as well as within the county system. Teachers are also faced with daily challenges such as behavioral issues and lack of student motivation. Also, experienced teachers have priority for positions at traditional schools leaving Lakeside with a high percentage of transfer teachers. Teachers lacking experience in this type of environment combined with troubled youth can create a difficult and frustrating learning environment for both parties. Karen Greene, MS, NBCT is the New Hanover County resource instructor for math and science. Through direct observation, she has learned that existing instruction continues through the traditional "sit and get" environment, with teachers lecturing to the entire group as opposed to focusing on individual needs. Much to her astonishment, the library and computer lab, valuable resources for both students and teachers, were seldom used during her two day visit to the school. Ms. Greene is directly involved in focus groups with teachers at the school in an attempt to improve student performance. She considers these problems as high priority issues in need of immediate resolve.

Our technology change plan is consistent with that of life cycle model, which focuses on individual development, the importance of human beings in that change process, and organizational growth through improvement in motivation. The Lakeside School students are the individuals in our life cycle model. As teenagers, they are at a difficult transitional stage in their lives. Predominately minority and low-income all arrived at Lakeside having failed the traditional system. Self esteem is low as the competency level is and has been below average in comparison to their traditional school peers. According Lakeside faculty, many of these students are reading within the 2<sup>nd</sup> to 5<sup>th</sup> grade level. These students identify with each other, rarely with authority figures, and are often resistant to change. As stated in the life cycle model, identity is often the reason people resist change. The life cycle model emphasizes learning and unlearning of old habits which would apply to both our teachers and students. In our technology change plan, teachers would learn new curriculum delivery methods while students would become more conducive and productive in a familiar environment. The model also acknowledges that management is key to growth through training and motivational improvement. It is here that our teachers and administrators will play an important roll.

In the functional aspect of the technology change plan, the “Unfreeze, Change, Refreeze” model will be incorporated. **Unfreeze** - prepare Lakeside for the incoming technology. Convince all participating entities that the addition of computers in conjunction with interactive reading and math software will improve student performance as well as enhance teaching methods. **Change** - plan for and implement the classroom computers and interactive software. **Refreeze** - after implementation, encourage frequent, even daily use, of new hardware and software in the classroom to enhance traditional teaching methods. The hope is to make the program an integral part of each student’s individualized learning plan ([include anticipated time for this complete sustainability](#)).

The technology request would include the placement of 5 computers in each classroom, loaded with interactive software for reading and math. The addition of data drops in the classroom would be essential in order to accommodate the new computers and the space they will require. These changes will require a training program that will assist teachers in developing lesson plans that incorporate the software to meet individual needs. Technology alone, however, cannot improve the scores at Lakeside School. According to Dr. Rod Paige, Secretary of Education, “The way we organize schools and provide instruction is essentially the same as it was when our Founding Fathers went to school.” (<http://www.nationaletechplan.org/background.asp>). In order to improve testing scores, new teaching methods and ideas are essential to motivate teachers to incorporate technology into everyday curriculum. It will also be necessary to motivate the teaching community at Lakeside, along with administrative support, in order to be successful in achieving the goal.

The first possible funding source will be New Hanover County. As the county currently holds many software licenses, we may be able to make use of an already existing program. Additional funding sources may come from the state and federal agencies, such as the Department of Education and the No Child Left Behind Program. Other

possibilities include creative ways to alter the existing budget and restructure and reallocate existing funds. The private sector may be an additional source of funding and in-kind donations. If our goal is to change the teaching style, is the traditional classroom and textbook still required? How can we make more efficient use of computer labs? It will be important to answer these and other questions as we attempt to achieve the goal of improving instruction and scores.

In order to achieve success, many different systems will need to come on board and provide support. These may include:

*1. New Hanover County Schools*

The central administrative office of New Hanover County Schools is a key to support, whether financial or technical at Lakeside School. New Hanover County Schools, as a super system, will provide not only initiation and development funds, related information resources, technical equipment but also policy leadership to assist in the development of Lakeside School. Lakeside is not a “high performing” school and as a result does not draw positive attention. For example, teachers planned a motivational retreat prior to the beginning of school, which was cancelled at the last minute by administration due to funding difficulties. All teachers need to know they have support from above, especially when working in a difficult environment like Lakeside.

*2. Lakeside School Administrators*

Administration will need to provide the teachers and students with encouragement and support for ongoing efforts of the change process. They must develop strategies and policies that assist in the teachers’ professional improvement and students’ learning needs. Individual teacher and student progress must be monitored constantly along with this change process, ultimately creating a quality instructional environment that attracts the teachers and students.

*3. Lakeside School Classrooms*

An interactive instructional environment plays an important role in sparking and maintaining student interests. The traditional classroom setting is not working for these students as evidenced by their arrival at Lakeside and the continued low passage exam rate. Teachers and administrators need to be open to “other ways of doing business”. This means that Lakeside needs a learning environment more appropriate for the special needs of the student body.

*4. Parents*

Lakeside School currently employs an individual devoted to be the liaison between the community and the school. This person is crucial in eliciting parental support.

### *5. Lakeside School Teachers*

Teachers, as a subsystem, are critical to the success of change. The goal is to promote the differentiation of teaching styles by changing instructional methods and delivering training to implement that change. If the teachers recognize success in the technology change, they will be more likely to utilize it in the future.

### *5. Lakeside School Students*

Students, as a subsystem of the Lakeside School system, will be most affected by the technology change, if successful. The students must find the new instructional method easy to navigate and understand. In addition, they must feel confident that the teachers are a support system as well as a resource.

### *6. Other important figures*

Lakeside computer resource instructors will be instrumental in facilitating training and providing ongoing support for Lakeside teachers and students. They will act as a resource for troubleshooting and alternative uses of the computers and the interactive software. The school librarian and media specialist would also be an important member of the team, providing support and additional training for teachers and students. In addition, as the student body population is largely minority and low income, one or more of the team members need to include either a social worker, local mentor, and/or a disability specialist.

## **Change Management Team**

Each entity listed below will have an integral role in ensuring the success of the technology change plan.

1. New Hanover County School Board – Funding Option, Support, & Approval
2. Lakeside Administration – Encouragement of training and change
3. Lakeside teachers – Support & implementation of Tutor Skills in classrooms
4. Lakeside students – Active participation in technology change
5. Lakeside parents – Act as a support mechanism for student development
6. Lakeside computer resource instructors – Facilitate training and support for Lakeside teachers and students. Act as a resource for troubleshooting and alternative uses for the Tutor Skills Program.