Helen Lipka
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Performance Analysis for Lakeside High School
Integration of Technology into the Math And Social Studies Curriculum

One of the main goals of the Technology Department and Lakeside High School is to integrate technology skills into each core subject area for student success. By integrating technology, the belief is to prepare students to be productive citizens in our global and technological society. The hope is to enable teachers to make use of various software and online programs, as well as using diverse teaching strategies to increase technology integration in accordance with North Carolina Standard Course of Study.

Teachers receive training from the schools computer resource teacher for the integration of technology into their core subject area. Currently, the Science and Language Arts teachers at Lakeside use a variety of software programs along with online resources in their lessons. The Math and Social Studies teachers, who receive the same training as the Science and Language Arts teachers, are reluctant to integrate technology into their lessons. They are unwilling to sign up for computer lab time and are hesitant to discuss ideas on how to integrate technology into their lessons.

The focus of the Human Performance Enhancement analysis at Lakeside High School is to reflect and uncover the reasons why the Social Studies and Math teachers do not integrate technology and use the available technology resources.

Analyses of the 4 environments affecting human performance at Lakeside High School describing the "What Is" and "What Should Be" are explained below..

The Organization Environmental Level
- The North Carolina Department of Instruction requirements and regulations surrounding technology integration
- The mission of New Hanover County Schools in the area of technology integration
- Technology requirements for teachers in the New hanover County Schools

Questions asked:
1. What is the name of the organization?
2. What is the mission statement regarding technology integration in the New Hanover County School system?
3. What are the technology requirements for teachers in the New Hanover County School system?

Data Collected:

Technology standards and requirements found on the North Carolina Department of Instruction web site.

The five year Technology Plan for New Hanover County Schools along with the requirements for teachers requiring technology competencies and standards..

The mission statement of the New Hanover County Schools Technology Plan.

What Is Happening	What Should Be Happening	The Gaps
The North Carolina Department of Instruction follows the ITSE Educational Technology Standards and Performance Indicators for all Teachers in the areas of: • TECHNOLOGY OPERATIONS AND CONCEPTS • PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES. • TEACHING, LEARNING, AND THE CURRICULUM. • ASSESSMENT AND EVALUATION. • PRODUCTIVITY AND PROFESSIONAL PRACTICE. • SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES. .	Technology standards are shared with the teachers at their individual schools. The importance of these standards needs to be stressed.	ITSE standards and performance indicators are not shared at all schools in New Hanover County with the same importance.
The Technology Department in the New Hanover County Schools offers various workshops throughout the county on a monthly basis. However, secondary school principal's philosophies vary on the importance of the integration of technology into specific	Principals at the secondary school level will require the integration of technology into each core subject area of Math, Science, Language Arts, and Social Studies in order for students to be successful in our global and technological society.	Secondary school principal's lack consistency in the importance of technology integration in the core subject areas of Math, Science, Language Arts, and Social Studies.

core subject areas.		
Technology competencies for teachers are required by the New Hanover County technology Department. Teachers are required to take a computer competency test. A monthly report from the technology department is sent to the individual schools documenting the teachers who have and have not completed the test.	Each school within the New Hanover County Schools System should require teachers to take and pass the computer competency test.	Inconsistency at individual schools requiring teachers to take the computer competency test.

<u>Work Environment</u>

- Administration expectations
- Computer Lab Schedule
- Media Advisory Team expectations for the integration of technology

<u>Questions asked:</u>
1. What are the expectations held by the administration at Lakeside High School requiring technology integration?
2. What events have happened over the past 4 years that have affected the administration at Lakeside High School?
3. How is the computer lab schedule determined?
4. What is the Media Advisory Team and its function at Lakeside?

<u>Data Collected:</u>
Interview with the current administration
Computer lab schedules
Media Advisory Team minutes from meetings and interview

What Is Happening	What Should Be Happening	The Gaps
Lakeside High School, over the past 5 years, has had 4 principals with different philosophies and expectations of technology integration.	Consistency and stability of technology integration is supported and expected by the principal(s) at Lakeside High School.	Various principal's lack consistency in the importance of technology integration in the core subject areas of Math, Science, Language Arts, and Social Studies.
Based on computer lab schedule at Lakeside High	Technology is integrated into Math, Science,	Technology integration and expectations from the

School, provided by the Computer Resource Teacher, indicates that the Math And Social Studies teachers used the computer lab to integrate technology only 12 times throughout the 2003-2004 school year. Language Arts and Science teachers used the computer lab for integration approximately 90 % of the time.	Language Arts, and Social Studies on an equal basis.	various principals over the past 4 years at Lakeside lacks focus and direction.
Based on an interview with the Media Advisory team at Lakeside High School, the Social Studies and Math teachers are taking on the role of laggers in adopting technology integration into their curriculum and lesson plans.	Based on the goals of the Media Advisory team at Lakeside, Math and Social Studies teachers will utilize new technologies and software resources in their classrooms.	Math and Social Studies teachers are not utilizing new technologies and software resources to integrate technology into their lessons..

Work Issues

- Departmental planning/ Computer Resource teacher availability and guidance
- Media Advisory Team assistance
- Accessibility
- Accountability and consequences

Questions asked:
1. Have the computer competency standards been formulated and expressed to the teachers so that they know exactly what results are expected of them?
2. How well do the teachers understand, and agree with, the computer competency standards?
3. How attainable and realistic is it to integrate technology, in the opinion of the teachers?
4. How clear are the expectations for teacher to integrate technology into their subject area?
5. What are the consequences of teacher's not integrating technology into their subject area?

Data Collection:
Teacher written survey
Individual interviews

Computer Lab Schedule

What Is Happening	What Should Be Happening	The Gaps
The computer resource teacher meets with individual departments (math, science, social studies, and language arts) on a monthly basis to discuss technology integration and computer competency standards.	Technology integration should take place in each of the core subject areas.	Technology integration in the Social Studies and Math departments is lacking.
A teacher from each of the core subject areas of math, science, social studies, and language arts are members of the Media Advisory Team.	The Media Advisory Team members should be guiding and assisting other teachers in their departments on the integration of technology into their subject specific curriculum.	Guidance and assistance to help with technology integration at the departmental level is not happening especially in Math and Social Studies.
The computer lab schedule is designed for departments to sign up for the computer lab on a specific day.	The computer lab schedule should reflect integration of technology in math, science, social studies, and language arts.	Not all departments are taking advantage of the computer lab to integration technology on their assigned day.
Technology integration is implemented by the language arts and science teachers 90% of the computer lab time schedule. The social studies and math teachers sign up for the computer lab the other 10%.	All subject areas should be integrating technology.	No specific consequences are in place for teachers who do not integrate technology.

<u>Worker Issues</u>

- Training issues/effectiveness
- Follow up sessions to training
- Teacher skill level
- Attitude of teachers
- Motivation

<u>Questions asked:</u>

Is training offered during the school year with the focus on integrating technology into specific subject areas?
After training is held are there any follow up sessions for teachers to ask questions or express their concerns?
What is the attitude of teachers towards integrating technology into their lessons?
What would motivate teachers to integrate technology?
What is the skill level of each teacher?

Data Collection:
Written survey
Individual interviews
Workshop evaluation forms
Documentation from the Technology Department showing the teachers who have passed the computer competency test.

What Is Happening	What Should Be Happening	The Gaps
Training is held on a monthly basis by the Computer Resource teacher to demonstrate and model ways to integrate technology into the core subject areas of math, social studies, science and language arts.	Training should be motivating and relevant to the teachers.	Training is held but not all teachers are integrating technology into their lessons especially the Math and Social Studies teachers.
No follow up training is held after the initial workshop on technology integration.	Follow up training needs to be held to increase teacher knowledge and comfort level to increase technology integration.	Follow up training is not held at this time.
Computer skill level varies by teacher.	Training should separate for the beginner computer skill level, intermediate skill levels and higher skill levels of teachers.	Training is held without taking the skill level of the teacher into mind.
Teacher attitude towards technology integration is high in the science and language arts department and low in the math and social studies departments.	The teachers at Lakeside should reflect a positive attitude towards technology integration.	Attitudes of teachers in the math and social studies department is low when asked to integrate technology into their lessons