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Submitted to: Dr A. Murdock UNCW Watson School Education- Instructional Technology MIT 520-Project Management for Instructional Design



Project Proposal for Cooperative Employee Training Program: New Hanover County Schools, Maxim Healthcare.

Re: Understanding the Roles and Responsibilities of both School and Medical Personnel relative to Students requiring In-School Nurses.

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I Executive Summary

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This proposal to the NHC Superintendent of Schools and the Maxim Healthcare Wilmington Branch Manger, spells out a proposed solution to the ongoing issue of complaints surfacing from many sources relating to conflicts in the roles and responsibilities of NHC School and Maxim personnel providing health care and education services to fragile students/clients while in the school setting.

Parents, teachers, and nurses have been complaining to various sources about situations resulting from a nurse or teachers actions or in actions, which have hampered the learning and/or health care of these fragile students. Furthermore nursing supervisors, and school administrators have been involved in attempting to resolve these issues on a one by one basis without success.

As the number of students attending schools with full time nursing care continues to grow exposing more and more nurses and teachers to these difficult situations, these problems will continue to be an increasing burden on all involved.

The Director of Nursing for Maxim along with the NHCS Assistant Supt. for Instruction have concluded that the <u>fundamental cause is the lack of understanding and/or knowledge</u> of the roles and responsibilities of nurses and teachers in relation to the patients/students medical care and learning while sharing a school/classroom environment.

Maxim Healthcare, as the contracted service provider to NHCS has requested that a proposal be developed aimed at eliminating or significantly reducing this problem both now and in the future.

Given that challenge, within is a proposal for a performance training solution that will address the primary cause by development of a training program for the nurses and teachers directly involved now and in the future. In order to maximize effectiveness while reducing costs, the training project will utilize school and Maxim personnel wherever possible. In addition the services of the UNCW WSE Instructional Technology dept. will be contracted. All of these efforts will be organized monitored and implemented under the control of a project manager who is ultimately responsible for producing a positive solution to this problem.

The expected maximum time to implement this project from approval to completed training and follow up is 75 working days. The direct costs to Maxim for non-NHCS or Maxim personnel is \$13000, with both maxim and NHCS absorbing approximately 42500 in indirect costs for their employees participation.

Given the cost involved with resolving these issues, the employee frustration on both sides, the satisfaction of parents, and most importantly the safety and education of a growing population of NHCS students and Maxim clients, this is an expense that has a high return on investment that can be implemented quickly and effectively.

II Project Scope

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Background / Overview:

Maxim Healthcare employees include approximately 20 full and part time nurses who provide one on one care for severely ill students attending public schools throughout New Hanover County. These students range from age 5 to 16, attend many different schools, and suffer from a wide variety of medical conditions. In addition to the 20 nurses approximately 35 teachers and teachers' aides have some level of direct responsibilities for these student/patients.

The goal of this program is to allow students with fragile medical conditions to participate in all reasonable educational opportunities as defined by federal and state law requiring least restrictive school environment for physically challenged students. The nurses are charged with providing all medical needs of patients (students) at all times while at school, both in and out of classroom(s).

The students qualify for such care by obtaining Physician orders and the school systems compensate Maxim Healthcare under an exclusive services supply contract which began 2 years ago and is renewed annually.

What's the problem?

During the past 2 years there have been in excess of 25 complaints by nurses, patient parents and teachers/school personnel to school administrators and/or maxim management concerning situations viewed as detrimental to the students' care or educational opportunities. These issues have created job dissatisfaction for personnel involved and in some cases required termination or reassignment. Furthermore, it consumes time and effort by school administrators and maxim management, as well as limiting educational opportunities for the students.

What should it be?

School and medical personnel should be working cooperatively and in unison towards providing the best possible medical care and educational opportunities for these medically fragile students/patients.

Why is it happening?

After several discussions between school personnel and Maxim employees at various organizational levels, a consensus emerged that the <u>fundamental cause is the lack of understanding and/or knowledge of the roles and responsibilities of nurses and teachers in relation to the patients/students medical care and learning while sharing a school/classroom environment.</u>

What's the solution?

Presented with this situation, the Superintendent of Schools and the Maxim Office Manager agreed to jointly participate in recommended solution. The solution involves a training program (intervention), which will be developed by a performance technology consultant hired by Maxim to manage the design, development, and implementation of this training project.

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PERFORMANCE IMPROVEMENT TRAINING!

III Training Project

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How will Information be obtained?

In order to produce an effective training solution much information will be needed from involved parties at various stages of the project. This information will be gathered via several methods.

Primarily these will involve interviews with school and Maxim personnel, patients/students parents, along with Maxim managers and school administrators in other locals who have dealt with similar issues. Also the current nurses and teachers directly involved will be anonymously surveyed to identify knowledge, attitudes, and skills. Finally observations of actual in class situations will be observed on a random basis.

What possible constraints do we face?

Successful completion of this training program could be constrained by either a lack of funding and/or the inability to access the informational needs according to project deadlines. This a significant problem which if not addressed could develop into a major issue with far reaching ramification, however resolution can be constrained as resources and funding must come from local budgets and are therefore significantly limited. In the context of both the school and maxim overall operations, funding must bring a cost-effective solution. This proposed solution maintains cost effectiveness as a primary goal with return on resources and expense funding maximized.

What are other options?

Alternatives to this analysis would include retaining the status quo or using in house personnel to develop a solution. Clearly administrators on both sides want to address this problem and school administrators lack the skills, resources, and independence to bring about a cost-effective solution in a timely manner.

How will we know if successful?

The ultimate goal is to create a permanent change in the performance of individuals involved and those who may be involved at a later date via a training project aimed at respective skills, knowledge and attitudes.

The project will produce a training program, which when implemented will significantly reduce or eliminate the issues of complaints by parents, teachers, and nurses, relative to in school situations resulting from conflicting views of roles and responsibilities by nurses and school personnel.

PERFORMANCE IMPROVEMENT GOALS

75% REDUCTION IN COMPLAINTS WITHIN 30 DAYS FROM COMPLETION OF TRAINING.

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90% REDUCTION IN COMPLAINTS WITHIN 90 DAYS OF COMPLETION OF TRAINING.

- All complaints will be reported to the Project Manager and summary reports issued monthly in order to measure the program's success and possible need for training revision or follow up.
- We will also gauge success based on meeting budget and schedule targets, which will be monitored throughout and reported upon completion.
 Budgeted time from start to completion is 75 days. Costs are outlined below.

What resources do we need?

The full time performance technology consultant (project manager) will oversee the management of this project from beginning to completion of performance goals. Specifically he will manage the overall project by:

- 1. Leading overall project management team monitoring project quality costs and schedules.
- 2. Establishing, monitoring, and facilitating milestones teams
- 3. Insuring effective Communications as needed on timely basis
- 4. Implement the actual training program.
- 5. Lead the front-end situational analysis and information gathering stage along with establishment of specific learning objectives. Estimated time is 100 –200 hours and his cost will be a flat fee of \$5000.

The project manager will also will retain, manage, and provide guidance for the services of personnel from UNCW graduate program in Instructional Technology.

- A graduate student intern will be primary source for development of Assessment instruments, Instructional strategy, and Instructional materials. Direct cost to project: \$2000 flat services fee.
- The Depart. Chair of UNCW Instructional Technology will serve as mentor for graduate intern, and team leader for development of Assessment instruments, Instructional strategy, and Instructional materials. Direct cost to project \$3000 honorarium.

In addition the project teams will be comprised of the following specialists on a part time, as needed basis.

• NH County Assistant Superintendent for Instruction- Will serve as member of overall project management team, a subject matter expert, and provide support and guidance for involved school participants. Indirect costs to school system; (\$250/day including wages and benefits)

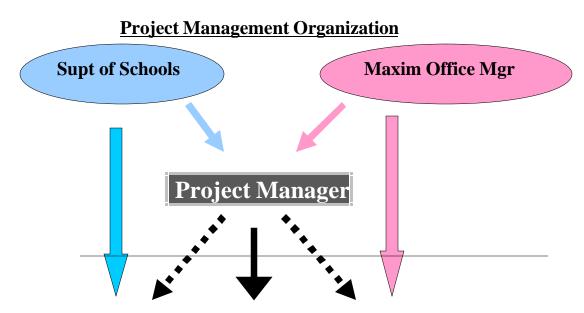
- Maxim Healthcare Director of Nursing Services- Will serve as member of overall project management team, a subject matter expert, and provide support and guidance to involved Maxim personnel. Indirect costs to Maxim (\$250/day including wages and benefits).
- Content development specialists –Will be utilized as needed for potential use of audiovisual and/or web based or other extraordinary content requirements. Will come from UNCW faculty or graduate students, with labor and expenses not to exceed \$2500.
- Selected Maxim nurses and NHC teachers- will participate on teams involved in development of Assessment instruments, Instructional strategy, and Instructional materials. Indirect costs will be \$100/day including wages and benefits.
- Maxim Accountant-Will provides accounting and report on all project expenses and financial matters as needed- Indirect costs to Maxim (\$150/day. including wages and benefits).
- Maxim Lawyer- Will serve as legal advisor to project teams. Indirect costs to Maxim (\$300/day. including wages and benefits)
- Individual School Principals- Will arrange for informational gathering needs (facilities and teachers). Indirect cost to schools (\$200/day including wages and benefits).
- Other resources needs include facilities to conduct interviews and hold project team meetings as well as facility and equipment to deliver the training.

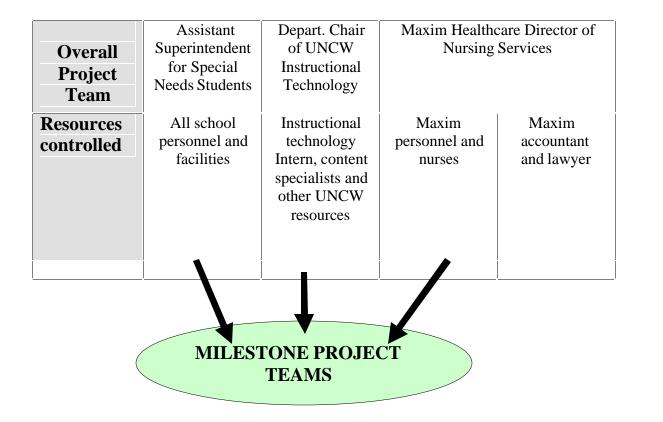
What will project cost?

Personnel	Cost/day	Total	Days	Direct cost -	Indirect costs		Notes
	(loaded)	Hours		Maxim			
					Maxim	NHCS	
Project Manager		280	35	\$5000			Flat fee
Assist Supt	\$250	32	4			\$1000	
Director Nursing	\$250	36	4.5		\$1000		
UNCW Dept Chair		104	13	\$3000			Flat fee
UNCW intern		214	27	\$2000			Flat fee
Content		108	14	\$2500			TBA,
Development Spec.							\$2500
							max
Maxim nurse	\$100	84	10.5		\$1050		
NHC teacher	\$100	84	10.5			\$1050	
Maxim Accountant	\$150	12	1.5		\$225		
Maxim lawyer	\$300	8	1		\$300		
School Principles	\$200	12	1.5			\$300	
Other expenses				\$500			
1							
Total		ĺ	<u> </u>	\$13000	\$2575	\$2350	

How will the project be organized?

The project manager along with the Assistant Superintendent for Instruction, The Depart. Chair of UNCW Instructional Technology and the Maxim Healthcare Director of Nursing Services will serve as the overall project team. All of the primary project members will have direct reporting responsibilities to someone in this group. The project manager reports jointly to the Supt of Schools for NH County and the Maxim office manager.



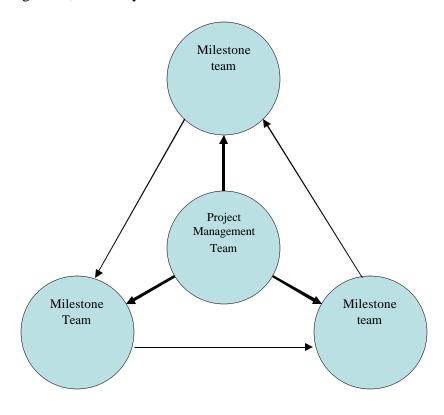


How will communications take place during the project?

In person meetings involving all who need to be involved will take place at the onset of the entire project as well as each milestone team. These will serve to create a shared understanding of the specific task responsibilities, schedule requirements and budget constraints for each team's functions. The project manager will attend each milestone team meeting.

At completion of each milestone, a report including the required documents or instruments will be presented by milestone teams either in person or via email to the Project Management Team for evaluation, feedback, and/or approval.

The teams will share information and work in process documents as needed to all involved using email, on a daily basis.



How will project be monitored and controlled?

The project manager will be responsible for monitoring the quality of work, along with compliance with schedule and budgets. This will be accomplished primarily by evaluation of each team's work via personnel involvement and by requiring each of the project teams to report to the Project Management Team on a scheduled milestone date. Also each team will have a team leader who will be someone from the Project Management Team.

III Risk Analysis and Management

What are the major risks to success and how will we deal with them?

- The instructional design and development will be the primary responsibly of UNCW graduate student(s). Properly designed and developed instructional content is a crucial factor in meeting the high quality standards needed for maximum effectiveness of the training. To prevent any related issues from occurring of the Dept Chair of UNCW Instructional Technology will oversee the student's process and products with weekly reviews and in process and post completion evaluations by piers prior to implementation.
- Most of the project participants have no reporting relationship to the project manager and have varying attitudes and motivations towards a successful solution. The potential unavailability for participation of school and/or Maxim personnel in the development process is a high probability with potentially severe consequences. In order to avoid this and insure complete cooperation, the Superintendent of Schools will designate the Assistant Supt as part of the project team and will also directly communicate with all involved school personnel regarding the importance and high priority of this project. Similarly, The Maxim Director of Nursing services will also be on the project management team and will serve to insure maximum cooperation of maxim personnel. Both the nurses and teachers will provided substitutes or fill ins for their normal duties when project participation is required.
- Cost overruns are possible given the uncertainty of effort required. To minimize this, a maxim accountant will record and report expenses on a weekly basis vs. a projected budget to project manager. Furthermore many of the expenses will be agreed to on a flat fee project basis as opposed to actual hourly or daily basis.
- Schedule delays are possible due to unforeseen circumstances. To minimize this, the
 project manager will monitor progress towards completion of in process project
 milestones.

Risk Analysis

	High					
Probability of Occurrence	Med		Lack of participation			
	Low	Late implementation Low	Cost overruns Med	Poor quality design of training High		
	Severity of Potential Impact					

IV Project Work

What will the final product be?

The project team(s) will deliver within 75 working days at a cost not to exceed \$13,000 a training program to approximately 50 employees of Maxim and NH county schools which will serve to educate and motivate all involved employees as to their respective roles and responsibilities in relation to the medical care and education of students requiring in school nurses.

Also, in order to be implemented, as needed the program will:

- Be deliverable to involved individuals using current available technology without further technology training or equipment.
- Be available on demand or easily distributed to learners.
- Easily updated to reflect changing conditions relative to laws and specific situations
- Meet budgeted time and expense goals, unless authorizations approved in advance by Maxim office manager.

What are the major in process milestones?

- 1. Project Kickoff- all major participants will understand the overall project goals, milestones, budget, schedules, and their respective responsibilities. Specific task teams are established. *Target time to complete: 4 days from approval.*
- 2. Complete Instructional Analysis-Team will produce a documentation of skills, knowledge and attitudes that will be required for nurses and teachers (LEARNERS) to perform their respective responsibilities. Will be presented in a detailed hierarchy of learning goals and prerequisite sub goals identifying each skill, knowledge, or attitude required for performance.
 - Target time to complete: 8 days from kick off meeting
- 3. Complete Analysis of Learners and Context of performing required tasks Team will produce a documented summary of learners <u>pre-training</u> characteristics relative to the specific training topic including;
 - o Behaviors and prior knowledge.
 - o Attitudes and motivation towards training and work performance.
 - o Learning abilities and preferences

Target time to complete: 11 days from completion of Instructional analysis

4. Complete Establishment of Performance Objectives- Team will produce a documentation of behavioral performance objectives and the conditions under which they are to be performed.

Will include both high-level terminal objectives as well as performance goals for Each skill, knowledge or attitude listed in Instructional Analysis Hierarchy (Milestone 2)

Target time to complete: 3 days from completion of learner analysis

- 5. Development of Assessment Instruments- Team will produce all assessments instruments needed for the training program, including:
 - Entry behavior tests
 - Pre tests
 - Practice tests
 - Posttests

Each instrument will clearly define the desired behavioral performance and the conditions under which the desired performance should take place.

Target time to complete: 6 days from establishment of performance objectives

- 6. Development of Instructional Strategy- Team will select and document all needed elements of instructional strategy including;
 - Selection of an instructional delivery system(s) for all activities
 - Developing learning components
 - Clustering of content

Target time to complete: 5 days from development of Assessment instruments

- 7. Development of Instructional Materials- Team will produce the actual content materials to be used for all activities. Will include:
 - All instructional content
 - Instructor/facilitator materials package

Target time to complete: 15 days from development of instructional strategy

- 8. Design and Conduct Evaluations- Team will conduct all in process and pre-Implementation evaluations of the training program. Will include;
 - Formative and summative evaluations
 - Feedback report to instructional design and development teams for revision.

Target time to complete: 10 days from development of instructional materials

9. Implementation of Training- Project manager will implement the actual training program to all designated participants. If necessary other facilitators will be selected and equipped as needed.

Target time to complete: 10 days after completion of evaluations and revisions

- 10. Post Training Follow up- Project manager will insure success via,
 - Recognition of project participants
 - Solicitation of learner feedback
 - Establishment of post training monitoring system of complaints
 - Revision of training as needed

Target time to complete: 2 days after completion of training

How will work be accomplished?

The project management team will create specific milestone teams consisting of all the required resource expertise needed to complete the requirements of each milestone. Members may and will participate in more than one milestone team, and each team will have a designated team leader.

The teams are as follows:

M= TEAM MEMBER L= TEAM LEADER

	Project	NHCS	Director	UNCW	UNCW	Content	Maxim	NHCS
Personnel	Mgr.	Assist.	Nursing	Dept	Intern	Dev	Nurse	Teacher
		Supt		chair		Spec.		
Milestone Team								
Overall Project	L	M	M	M				
Management								
Instructional	L			M	M			
Analysis								
Learner/Context	L			M	M		M	M
Analysis								
Performance	L				M			
Objectives								
Assessment				L	M		M	M
Instruments								
T				-	3.5		3.5	3.5
Instructional				L	M		M	M
Strategy								
Instructional				L	M	M	M	M
				L	IVI	M	IVI	IVI
Materials								
Pre- use	M			L	M	M		
Evaluations	1V1			L	IVI	IVI		
Evaluations								
Implementation	L	M	M					
Implementation	L	141	171					
Post training	L	M	M					
Evaluation	L	141	141					
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V. Work Breakdown Structure

What are major steps for each milestone team?

Start Project-Project Management Team

Meet with project management team to establish roles, schedules and budgets Draft milestone schedules and overall responsibilities Project Kickoff meeting

Complete Instructional Analysis-Instructional Analysis Team

Team meeting-define resp. and schedules Complete goal analysis Complete task analysis Write report and Present report to project team Revise as needed

Complete Learner & Context analysis-Learner/Context Analysis Team

Team meeting- define resp. and schedules
Define info needs and methods
Design interview questions and surveys
Conduct interviews and surveys
Analyze and summarize results
Visit training sites and classrooms
Write report and present to management team
Revise

Develop Performance Objectives- Performance Objectives Team

Team meeting
Write performance objectives
Present to management team
Revise objectives

Develop Assessment Instruments- Assessment Team

Team meeting
Determine type of assessment
Develop instruments & Rubrics
Present assessments to management team
Revise assessments

Develop Instructional Strategy-Instructional Strategy Team

Team meeting

Select delivery system
Sequence and cluster content
Identify learning components
Present strategy to management team
Revise strategy

Develop Instructional Materials-Instructional Materials Team

Team meeting

Determine Content presentation needed for each objective based on strategy and learners analysis

Identify existing materials usable

Identify new materials needed

Produce Draft of new materials

Review revise new materials

Produce final draft new materials

Present materials to management team

Revise materials as needed

Conduct Pre-use Evaluations- Evaluations Team

Team meeting

Legal review of training

One on one with 3 learners

Revise instruction

Small group evaluations

Revise instruction

Summarize findings

Present findings to project management

Implement Training- Project Manager

Schedule training

Train teachers

Train nurses

Training Follow up- Project Manager

Design and implement learner survey Establish complaint-reporting system to project management team Final budget-expense report Recognition of project participants

V Network Planning and Scheduling

How long will project take?

From project approval to final post training follow up will take 75 working days (excluding holidays and weekends).

The attached project schedule (project –full schedule) indicates the sequence of milestones and subordinate steps required for successful completion targeted to established milestone dates for each to report completed work to project management team for evaluation and feedback. The project schedule detail is displayed on attachment "Full Schedule"

What if schedule delays develop?

The project does not have a critical completion date and meeting the quality and cost goals are more important. The project is scheduled in a tight sequence with no built in periods of non-working time. However if unexpected delays develop, sufficient slack time is available which will assure completion by targeted date if necessary. The project schedule of 75 days includes 13 days (18% of total days), which have been allocated for milestone teams to revise their work after presentation and feedback from project management team. It is most likely these will not all be necessary which provides some slack in the schedule which could be used to catch up should delays develop. In addition the schedule does not include Saturday work, which could be utilized if necessary. This adds another 14 days available if absolutely necessary.

What's the latest we could start and meet targeted completion date?

By using the slack days build in as discussed previously, the project could start 23 days later than scheduled and still meet completion date. The downside of this is it eliminates the schedule time allocated for teams to revise their work after feedback from project management team as well as the additional burden created by working Saturdays. Both of which may impact quality and cost. Attached is a schedule, which shows the milestone tasks schedule if Saturday work required. (Summary Tasks- Working Saturdays)

Are there specific tasks that are especially critical to meeting the schedule?

Due to the sequential nature of the instructional design process, no one task is more important than another in the scheduling scheme. The important dates to monitor are the milestone dates established for completion of each teams work. Thus the project schedule is also the critical path schedule.