

THESIS PROPOSAL

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Critical Decision Making Skills of
Postgraduate Respiratory Care Personnel

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Introduction

The researcher of the study became interested in critical decision making skills while working with Respiratory Care post graduates. The researcher of the study noticed through observation a deficiency in critical thinking skills, reasoning abilities and decision making skills of recent post graduate Respiratory personnel. These weaknesses impacted a deterioration in interdepartmental communications and most importantly a deterioration in the quality of patient care.

The problem of this study is to determine the effects of critical decision making skills in the College of West Virginia's 1995 Respiratory Care class as compared to the College of West Virginia's 1994 Respiratory Care class.

Statement of the Problem

The problem of this study is to determine the effects of critical decision making skills in the College of West Virginia's 1995 Respiratory Care class as compared to the College of West Virginia's 1994 Respiratory Care class.

Purpose of the Study

The purpose of the study is to compare the National Respiratory Care Registry Test results from the College of West Virginia's 1994 Respiratory Care class which had no participation in critical decision making skill activities with the National Respiratory Care Registry Test results of the College of West Virginia's 1995 Respiratory Care class which participated in structured critical decision making skill activities.

Hypothesis

The hypothesis of the study is that the relationship between the Respiratory Care National Board Examination scores for the 1994 College of West Virginia's Respiratory Care class and the Respiratory Care National Board Examination scores for the 1995 College of West Virginia's Respiratory Care class will show significant differences.

The null hypotheses are as follows:

1. There is no relationship between critical decision making skills and admission grade point average.
2. There is no relationship between critical decision making skills and ACT scores.
3. There is no relationship between critical decision making skills and gender.
4. There is no relationship between decision making skills and race.
5. There is no relationship between critical decision making skills and age.
6. There is no relationship between critical decision making skills and attendance.

7. There is no relationship between critical decision making skills and pre-graduation employment.

Significance of the Study

Some students and authorities have pointed out the inefficiencies of present, “traditional” methods of teaching. A review of the literature reveals findings which support an approach to the teaching of reasoning based on everyday usage as opposed to pure “traditional” instruction. Since the importance of improved methods of instruction needed in this field have been recognized, increased efforts need to be directed toward identification of means for improving mastery of the critical thinking skills.

The premise of the new reasoning teaching method is that critical thinking should be functional. New critical thinking textbooks are just beginning to come into use in the elementary grades, which will supposedly improve methods of teaching decision making skills. These books, however, will still be subject to usual textbook limitations. The materials within the texts are not necessarily pertinent to the current activities of the students. The presence of textbooks in the hands of every student tends to encourage the use of the textbooks as the basis for lesson planning rather than use of them, as resource materials for lessons based on students’ content needs and purposes. In spite of the introduction of new and improved textbooks, it seems that the acquisition and improvement of critical thinking skills will still lie for the most part in the hands of the skillful teacher.

The writings of Feldhusen, professor of education at Purdue University, have served as a major impetus for this research. He states that, for students with the highest levels of potential, we expect careers that will result in high level creative productions, inventions, or solutions to major societal problems. One should not be content to wait for creativity and problem solving to occur “spontaneously” in teaching the gifted. If the teacher wants to emphasize goals that involve fostering these thinking processes, it will be necessary to take very direct, deliberate actions to see that it happens. Students should experience freedom of creative expression, which would build a strong foundation for later learning (Feldhusen & Treffinger, 7).

Supporting this viewpoint is Highet, who states, "We can never tell how great minds arise and it is very hard to tell how to encourage them when they do appear. But we do know two methods of feeding them as they grow. One is to give them constant challenge and stimulus. Put problems before them. They need to think. Produce things for them to think about and question their thinking at every stage" (Ehlers, 170).

The study becomes particularly significant in view of Feldhusen's regard for the importance of critical thinking in today's society. The study attempted to examine the effects of critical decision making skills in the College of West Virginia's 1995 Respiratory Care Registry Test results as compared to the College of West Virginia's 1994 Respiratory Care Registry Test results. The study is limited to two college's Respiratory Care classes. The research may well serve as motivation for similar studies in other disciplines. It is hoped that such studies will furnish important new learning for the field of Respiratory Care and other Health Sciences.

Delimitations of the Study

This study is delimited by the following factors:

1. The study only addressed the critical decision making activities identified in the College of West Virginia's 1995 Respiratory Care class.
2. The population of the study consisted of students who had been accepted into the Respiratory Care program at the College of West Virginia for the years 1994 and 1995. Purposeful sampling composed this study.
3. Admission criteria for acceptance into the Respiratory Care curriculum consisted of a minimum ACT ≥ 18 , a minimum GPA of 2.0, all first year courses with a grade of a C or better, the College of West Virginia attainment of >12 credit hours, successful completion of 6 essay questions, and previous healthcare experience. All categories are weighted. Based on evaluation of the admissions criteria, the students may or may not receive an interview. At this point, it is determined which students are or are not accepted into the Respiratory Therapy program, and which students will be put on an alternate list. The Admissions Criteria System used for this study is located in Appendix A.

Limitations of the Study

The findings and conclusions reached in this study are limited to the College of West Virginia's 1994 and 1995 Respiratory Care students. It is not possible to make any inferences concerning the comparison of the research method with various other methods except the one used for comparison in this study.

The study is concerned only with the comparison in Registry Test results of the College of West Virginia's 1994 Respiratory Care class and the College of West Virginia's 1995 Respiratory Care class. It is not concerned with any other aspects of teaching methods or forms of evaluation, testing or measurement.

In fact, according to Payne, "Developmental situations in which an individual can exhibit real-life behaviors will generally increase the relevance and accuracy of the assessment. In educational settings, one must consider practical limitations and the development of a simulation test therefore involves compromises" (Payne, 401).

The findings and conclusions reached in the study are also limited due to the following factors:

1. Time was a limiting factor of this study due to the college's curriculum schedule for Respiratory Care students. The students begin their schooling in June and graduate the following May. The students take their National Board Examination in December, following graduation.
2. History was a limiting factor of the study due to the researcher's inability to control for natural and social/historical events that occurred during the study. However, two students did have marital separations during this study.
3. Purposeful sampling was a limiting factor of this study due to the College's acceptance of the specific number of students into the Respiratory Care Curriculum.
4. Mortality is a limiting factor of the study due to the instance of one student not completing graduation due to illness, and due to the number of students who actually took the Registry Exam.
5. A change in Clinical Instructors is a limiting factor of the study due to a Clinical

Instructor leaving at the end of the 1994 term and a new Clinical Instructor starting at the beginning of the 1995 term.

Basic Assumptions

It is assumed in the study that:

- A. Since school policy intended that classroom curriculum for all Respiratory Care students be standard and that the goals of teaching be standard, the exposure of students during class time to other variables was the same for both groups.
- B. Since the subjects assigned to both groups were from the same curriculum, factors such as prior school background and prior ability to reason were comparable in the two groups.
- C. Since the subjects assigned to both groups were living within a fifty mile radius from the college, the geographical area was the same for both groups.
- D. Since the subjects assigned to both groups met the criteria for acceptance into the College of West Virginia's Respiratory Care program, and since the criteria for acceptance into the College of West Virginia's Respiratory Care program remained the same for the 1994 and 1995 classes, the criteria for acceptance was the same for both groups.

Definition of Terms

1. Critical thinking is to effectively solve problems through reasoning and decision making (Paul, 309).
2. Reasoning is solving problems based on assumptions (Paul, 309).
3. Registry Examination is a two-part examination for Advanced Respiratory Therapy Practitioners.

The first part of the examination is the Written Registry Examination consisting of 100 multiple choice questions covering the recall, application and analysis of clinical data, equipment and therapeutic procedures. The Written Registry Examination was developed to objectively measure essential knowledge, skills and abilities required of an advanced respiratory therapy practitioner and to set uniform standards for measuring such knowledge.

The second part of the examination is the Clinical Simulation Examination which consists of ten separate patient management problems. The clinical setting and patient situation for each problem are designed to simulate reality and be relevant to the clinical practice of Respiratory Therapy. The Clinical Simulation Examination consists of the following categories:

- A. Information gathering
- B. Decision making

The Registry Examinations have been validated on a criterion-related and content-related basis and were found to be predictive of job performance. Validation of both examinations, conducted by independent testing and measurement experts was accomplished in accordance with standards put forth by the American Psychological Association and in compliance with the Uniform Guidelines on Employee Selection Procedures.

The Registry Examination System consists of a written portion and a clinical simulation portion administered on the same day. The Certification Examination for Entry Level Respiratory Therapy Practitioners credentials is a prerequisite for admission to the Registry Examination.

Candidates may choose to attempt one or both parts of Registry Examination on the same day. The testing time to take both parts of the examination is approximately six hours, excluding the lunch break between examinations. Individuals who attempt both parts of the examination and achieve passing scores will be awarded the Registered Respiratory Therapist (RRT) credential (NBRC, 6).

4. Program standards are explicit descriptions of measurable expectations as related to the applicable program goal. Upon completion of the program, all students will demonstrate the ability to comprehend, apply, evaluate information, demonstrate technical proficiency in all skills necessary, demonstrate personal behaviors consistent with professional and employer expectations for a Respiratory Therapist (The Blue Book, 1).
5. Program goals are general statements of program purpose or intent. To prepare students as competent Respiratory Therapists, to fulfill the need for Respiratory Therapists in the local and regional communities and to prepare graduates to assume leadership roles in the profession of Respiratory Care (Respiratory Care, The Blue Book, 1).

6. Decision making is an orderly, rational process that possesses an inherent logic, and that the steps in the process follow one another in an orderly, logical, sequential flow. The following are steps in decision making:
 1. Define the problem.
 2. Analyze the problem.
 3. Develop alternative solutions.
 4. Decide on the best solution.
 5. Convert decisions into effective actions (Owens, 269).
7. Respiratory Therapy Assistant is an employee who is hired prior to graduation.

The general statements of basic job requirements are as follows:

- A) Transports patients for Cardiopulmonary Services procedures.
- B) Performs EKG and Holter monitor procedures on out patients.
- C) Performs oxygen rounds on patients and notified therapist assigned to nursing unit of any discrepancies found.
- D) Maintains supplies of medical gas cylinders.
- E) Assists in stocking of supplies for all CPS areas.
- F) Performs procedures for disinfection and sterilizing.
- G) Under medical supervision delivers respiratory care services to patients in medical surgical areas.
- H) Initiates and conducts CPR in emergency settings. (Raleigh General Hospital, Cardiopulmonary Services Department, The Policy and Procedure Manual, F-14).

Organization of the Study

All notes on this study were obtained prior to writing the proposal and some references were identified which no longer seemed sufficiently related to the study.

Critical decision making activities were developed and implemented for the 1995 students along with content material in each class setting for thirty minute increments. The study began at

the beginning of the students' school year in June of 1994 and continued throughout the students' entire school year ending in August of 1995. The 1994 students did not incorporate structured critical decision making skills activities. In attempting to eliminate subject attitude bias, students were not told specifics of the study.

The critical decision making techniques were utilized through verbal communication, application, and writing skills.

The researcher attempted to follow the suggestions of Richard W. Paul, Ph.D. which were:

1. Provide an assignment that has a purpose.
2. Provide an assignment that has a question to answer.
3. Provide an assignment that has some information but not too much so that the student can actively figure out the solution.
4. Provide an assignment that incorporates concepts and ideas.
5. Provide an assignment that lets the student make assumptions or inferences.
6. Provide an assignment that has implications to allow the students to be responsible for their decisions (Paul, 309).

The researcher concentrated on teaching critical decision making activities along with the content of the course. A list of materials used for the lesson plans for both groups is located in the Appendix B and C.

In summary, the 1994 group used only content material without structured critical decision making activities, and the 1995 group used content material along with structured critical decision making activities.

Review of Related Literature

Studies involving the critical thinking process are abundant. Such studies have been concerned primarily with measurement of the learning process, frequency of utilization of creative activities, evaluation of reasoning abilities, and occurrences of decision making practices.

An example of an investigation of the learning process is that of Lindgren (Lindgren, 14). The "learning process" means whatever people do when they learn. What they "do" includes whatsoever that is not directly observable, such as perceiving, thinking, remembering, and

identifying, as well as behavior that can be directly observed, such as writing, computing, attending, and talking. Learning is an on-going process. Teachers who are aware of the intimate relationship between the learning process and the learning situation are in a position to use that awareness to develop situations that promote involvement and explorations whereas, those who are preoccupied with subject matter content may inadvertently create situations that are inhibiting and discouraging.

Rosenberg (44) described a survival project that critiques middle school students' imaginations as it tests their problem solving and critical thinking skills in a survival setting. This particular approach fostered skills in communication, cooperation and group decision making.

Studies in Critical thinking have been somewhat vague in nature. This may be due to underlying circumstances such as lack of consensus and inconsistent definitions of critical thinking. For example, Kataoka and Saylor studied critical thinking models for nursing judgment and found that although critical thinking is an essential component of nursing, no clear definition of concept validation of critical thinking for nursing judgment has existed. Lack of consensus and overlapping definitions may well diminish the profession's ability to articulate this concept and facilitate its development. The model used in the study had three levels of critical thinking: basic, complex, and commitment. The model provides a first step for development of further research and educational strategies to promote critical thinking as an essential part of nursing practice (Kataoka, 351).

Scott and Markert examined the relationship between critical thinking skills as measured by the Watson-Glaser Critical Thinking Appraisal (WGCTA) and success during the first two years of medical school. The WGCTA was administered to 92 students participating in orientation for the class of 1994. Total scores from the Medical College Admission Test subsets and undergraduate grade point averages were calculated for each student. Measures of student success in medical school included the final numerical scores of pre-clinical courses, pre-clinical GPA, and the United States Medical Licensing Examination. Pearson correlation and the t-test were used in the analysis of data. WGCTA scores correlated best with MCAT scores for reading skills ($r=.40$). Significant correlations were found between WGCTA scores and final scores for nearly all pre-clinical courses. The conclusion of the study indicates that critical thinking skills as measured by the

WGCTA are moderately predictive of academic success during the pre-clinical years of medical education (Scott, 920).

Ouellete encouraged critical thinking in the health care practices and found through his study that nurse educators should review the traditional teaching methods and replace them with practices that humanize nursing care and encourage critical thinking (Ouellete, 41).

Owens states that scientific thought, with its strong emphasis on logical rationality, has become virtually ingrained in the institutions of our culture. Thus, in seeking explanations of our experiences, we are accustomed to respect the rationality of logical positivism. We have strongly tended to see the solution to all sorts of problems as requiring the application of "engineering" approaches (Owens, 269).

An early and very major contributor in national decision-making models was Herbert Simon. Simon analyzed three major phases in the process of making decisions. First, there is intelligence activity. Second, there is design activity. Third, there is choice activity. Assumptions acquired from his work include: that decision making is an orderly, rational process that possess an inherent logic; and that the steps in process follow one another in an orderly, logical, sequential flow (Owens, 269).

Peter F. Drucker listed the following steps in decision making:

1. Define the problem.
2. Analyze the problem.
3. Develop alternative solutions.
4. Decide on the best solution.
5. Convert decisions into effective actions.

It is noted, however, that decision making usually does not terminate with either a decision or the action to implement a decision. In the "real world", decision making is an ongoing process whereby results of one decision provide new information on which to base yet another decision (Owens, 269).

The idea that learning should proceed deductively from the application of theory to practice is one that comes to us from our European origins. Opposed to it is the American idea that theory should grow out of practical experience. Perhaps an even more useful ideas is the thought that

experience should precede the development of theory, but that both theory and practice should be used to improve each other. Research with these concepts shows mixed results along with the premise that although traditional beliefs have little scientific support, they are difficult to unlearn (Lindgren, 14).

This is not a comprehensive survey of all the literature available which is pertinent to the present study. It is, however, representative of the thinking by persons well-versed in the field of critical thinking and/or decision making skills. No project was found which attempted to ascertain the critical decision making skills of Respiratory Care students; however, it is hoped that this initial attempt at this specific approach will lend further credence to its acceptability.

Procedures and Design of Research

Population

The population of this study is the 1994 and 1995 Respiratory Care students enrolled in the College of West Virginia. The classes were composed of thirty-five students.

The 1994 class consisted of nineteen students. One student was African-American and eighteen students were white. There were seven males and eleven females. One male student in this class did not complete graduation and was deleted from the study. Therefore the number of males in this class dropped to six.

The 1995 class consisted of seventeen students. One student was African-American and sixteen students were white. There were three males and fourteen females. All students from this class completed graduation and were included in this study.

The population for this study consists of thirty five students. There were nine males and twenty-five females. There were two African-American students and thirty-three white students.

The students' ages ranged from twenty to forty-five. The students' education level consisted of all second year students.

Nineteen students gained employment during their senior year of school. Employment consisted of the student being hired as a Respiratory Therapist in a hospital setting.

The College has self-contained classrooms where laboratories are conducted. This study did not necessitate any manipulation of students' time or clinical scheduling.

One instructor taught all students their laboratory and clinical instruction. Another instructor taught all students theory instruction.

The laboratory and clinical instructor used the same approaches for each student. The planning and organizing of procedures used in the development of critical thinking and decision making skills are as follows:

1. Classroom, laboratory, and clinical time designed to allow for questions and thought processing.
2. Lecture time designed to allow for thought processes.
3. Utilization of open-ended questions.
4. Classroom, laboratory, and clinical time designed to allow for student application.
5. Case studies, patient case management critique, and weekly log journals designed for reasoning abilities and decision making.

Examples of content material for lessons are located in Appendix B.

Examples of critical thinking questions are located in Appendix C.

Examples of clinical journals, case studies, procedural and behavioral competencies are located in Appendices D-F.

Collection of Data

Six months post graduation, the students will take the Written Registry National Board Examination and the Clinical Simulation National Board Examination for Respiratory Care. The results of the tests are included in the study due to their specificity of testing critical decision making skills while also incorporating content information. The results will be reported upon completion of the National Board Examination. The College of West Virginia's 1995 Respiratory Care students took their examinations in December of 1995. Each of the tests are scored by Applied Measurement Professionals, Inc.

The Written Registry Examination and the Clinical Simulation Examination will be given to these students in Harris Hall at Marshall University in December. The Written Registry Examination is given over a two hour period and the Clinical Simulation Examination is given over a four hour period. Each examination is conducted in the same room with at least one proctor.

The population of the study had a choice as to when they took their Written Registry and Clinical Simulation Examination. Thirteen students took their examinations six months post graduation. Ten students took their examination twelve months post graduation. One student took their examination twenty-four months post graduation. The entire population of the study were first time test takers.

A t-test for independent samples will be used to test the significance of differences between the means.

A Pearson's r will be used to determine the correlation coefficients used in testing the relationships between two interval variables.

A Spearman rho will be used when ranks are available on each of two variables.

Eta will be used when the variables are not categorized within the same interval, rank, or nominal groups.

Design of the Research

The design of the study is a comparative post test-only clinical group design. The subjects were assigned via purposeful sampling to the Respiratory Care class, exposed to the independent variable and post-tested. The posttest scores will then be compared to determine the effectiveness of the treatment.

The combination of purposeful sampling assignment and the presence of a control group helps to control for sources of internal validity. The group size should remain constant throughout this study. This design was chosen due to the short duration of the study and through the assumption that neither group has any knowledge related to the independent variable.

Data Analysis

The analysis of data used for this particular study involved descriptive statistics. The descriptive statistics will include measures of central tendencies, range, t test to show any significant differences between the means of the two groups, Eta to measure relationships between variables of different categories, Spearman Rho to measure variables that can be ranked, and Pearson's r to measure relationships of interval data. Furthermore, the Pearson r seems to be the

most reliable estimate of correlation. Value labels for each variable are located in scenario eight. The value for approximate significance for the study is .01.

SCENARIO ONE

In scenario one, the null hypothesis in regards to the relationship between the Respiratory Care National Board Examination scores for the 1994 College of West Virginia's Respiratory Care class and the Respiratory Care National Board Examination scores for the 1995 College of West Virginia's Respiratory Care class is accepted due to the t-test showing no significant relationship between the two variables. This is defended in the following tables.

The first t-test produced results in which there was no significant relationship between the 1994 and 1995 Respiratory Care classes as compared to their clinical decision making scores.

The second t-test produced results in which there was no significant relationship between the 1994 and 1995 Respiratory Care classes as compared to their clinical information gathering scores.

The third t-test produced results that were more closely related in relationship as compared to the other test results, however there was no real significant relationship between the 1994 and 1995 Respiratory Care class as compared to their Written Registry Examination scores.

T-TEST / GROUPS GRADYEAR (94, 95) / VARIABLE CLINDECI.
Independent samples of GRADYEAR YEAR OF GRADUATION

Group 1: GRADYEAR EQ 94		Group 2: GRAD YEAR EQ 95					
t-test for: CLINDECI CLINICAL DECISION MAKING							
	Number of Case	Mean	Standard Deviation	Standard Error			
Group 1	18	63.7778	10.502	2.475			
Group 2	7	60.5714	8.904	3.365			
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees of Freedom	of 2-Tail Prob	t Value	Degrees of Freedom	of 2-Tail Prob
1.39	.720	.71	23.	0.484	.77	12.91	.457

T-TEST / GROUPS GRADYEAR (94, 95) / VARIABLE CLININFO.
Independent samples of GRADYEAR YEAR OF GRADUATION

Group 1: GRADYEAR EQ 94		Group 2: GRAD YEAR EQ 95					
t-test for: CLINDECI CLINICAL INFO GATHERING							
		Number of Case	Mean	Standard Deviation	Standard Error		
Group 1		18	83.9444	4.869	1.148		
Group 2		7	81.8571	5.398	2.040		
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
1.23	.679	.93	23.	0.360	.89	10.04	.393

T-TEST / GROUPS GRADYEAR (94, 95) / VARIABLE WRITOVER.
Independent samples of GRADYEAR YEAR OF GRADUATION

Group 1: GRADYEAR EQ 94		Group 2: GRAD YEAR EQ 95					
t-test for: WRITOVER WRITTEN REG OVERALL							
		Number of Case	Mean	Standard Deviation	Standard Error		
Group 1		18	70.1111	6.296	1.484		
Group 2		7	76.2857	6.701	2.533		
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
1.13	.771	-2.16	23.	0.041	-2.10	10.39	.061

SCENARIO TWO

In scenario two, the null hypothesis in regards to the relationship between decision making skills and race is accepted due to the t-tests showing no significant relationship between the two variables.

As data became available to the researcher it was also noted that there was a significant relationship between race and information gathering, however due to the small number of population it is determined that the t-test in this case is not fully accurate. It was found that there was no significant relationship between the variables of race and the Written Registry Examination scores. This is defended in the following tables.

T-TEST / GROUPS RACE (1, 2) / VARIABLES CLINDECI.
Independent samples of RACE

Group 1: RACEEQ 94		Group 2: RACE EQ 95					
t-test for: CLINDECI CLINICAL DECISION MAKING							
	Number of Case	Mean	Standard Deviation	Standard Error			
Group 1	23	63.4783	9.936	2.072			
Group 2	2	56.0000	11.314	8.000			
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
1.30	.534	1.01	23.	0.321	.90	1.14	.516

T-TEST / GROUPS RACE (1, 2) / VARIABLES CLININFO.
Independent samples of RACE

Group 1: RACE EQ 94		Group 2: RACE EQ 95					
t-test for: CLINDECI CLINICAL INFO GATHERING							
		Number of Case	Mean	Standard Deviation		Standard Error	
Group 1		23	84.2609	4.036		.842	
Group 2		2	73.0000	2.828		2.000	
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
2.04	1.000	3.83	23.	0.001	5.19	1.38	.072

T-TEST / GROUPS RACE (1, 2) / VARIABLES WRITOVER.
Independent samples of RACE

Group 1: RACE EQ 94		Group 2: RACE EQ 95					
t-test for: WRITOVER WRITTEN REG OVERALL							
		Number of Case	Mean	Standard Deviation		Standard Error	
Group 1		23	71.7826	7.179		1.497	
Group 2		2	72.5000	.707		.500	
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
103.08	.155	-.14	23.	.891	-.45	21.34	.654

SCENARIO THREE

In scenario three, the null hypothesis in regards to the relationship between decision making skills and gender is accepted due to the t-test showing no significant relationship between the two variables. This is defended in the following tables.

T-TEST / GROUPS GENDER (1, 2) / VARIABLES CLINDECI.
Independent samples of GENDER

Group 1: GENDER EQ 1		Group 2: GENDER YEAR EQ 2					
t-test for: CLINDECI CLINICAL DECISION MAKING							
		Number of Case	Mean	Standard Deviation		Standard Error	
Group 1		8	62.0000	14.092		4.982	
Group 2		17	63.2941	7.920		1.921	
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
3.17	.053	-.30	23.	.770	-.24	9.15	.814

T-TEST / GROUPS GENDER (1, 2) / VARIABLES CLININFO.
Independent samples of GENDER

Group 1: GENDER EQ 1		Group 2: GENDER EQ 2					
t-test for: CLINDECI CLINICAL INFO GATHERING							
		Number of Case	Mean	Standard Deviation		Standard Error	
Group 1		8	82.6250	6.501		2.299	
Group 2		17	83.7059	4.312		1.046	
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
2.27	.165	-.50	23.	.624	-.43	10.01	.678

T-TEST / GROUPS GENDER (1, 2) / VARIABLES WRITOVER.
Independent samples of GENDER

Group 1: GENDER EQ 1		Group 2: GENDER EQ 2					
t-test for: WRITOVER WRITTEN REG OVERALL							
		Number of Case	Mean	Standard Deviation	Standard Error		
Group 1		8	72.6250	7.981	2.822		
Group 2		17	71.4706	6.530	1.584		
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
1.49	.477	.38	23.	.704	.36	11.60	.728

SCENARIO FOUR

In scenario four, the null hypothesis in regards to the relationship between decision making skills and employment prior to graduation is accepted due to the t-test showing no significant relationship between the two variables. This is defended in the following tables.

T-TEST / GROUPS RTTECH (1, 2) / VARIABLES CLINDECI.

Independent samples of RTTECH RT TECH EXPERIENCE

Group 1: RTTECH EQ 1		Group 2: RT TECH YEAR EQ 2					
t-test for: CLINDECI CLINICAL DECISION MAKING							
	Number of Case	Mean	Standard Deviation	Standard Error			
Group 1	13	58.8462	11.539	3.200			
Group 2	12	67.2500	5.754	1.661			
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
4.02	.028	-2.27	23.	.033	-2.33	17.92	.032

T-TEST / GROUPS RTTECH (1, 2) / VARIABLES CLININFO.

Independent samples of RTTECH RT TECH EXPERIENCE

Group 1: RTTECH EQ 1		Group 2: RT TECH YEAR EQ 2					
t-test for: CLINDECI CLINICAL INFO GATHERING							
	Number of Case	Mean	Standard Deviation	Standard Error			
Group 1	13	83.4615	5.666	1.571			
Group 2	12	83.2500	4.413	1.274			
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
1.65	.416	.10	23.	.918	.10	22.40	.918

T-TEST / GROUPS RTTECH (1, 2) / VARIABLES WRITOVER.

Independent samples of RTTECH RT TECH EXPERIENCE

Group 1: RTTECH EQ 1		Group 2: RT TECH YEAR EQ 2					
t-test for: WRITOVER WRITTEN REG OVERALL							
	Number of Case	Mean	Standard Deviation	Standard Error			
Group 1	13	70.1538	6.681	1.853			
Group 2	12	73.6667	6.893	1.990			
		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob	t Value	Degrees Freedom	of 2-Tail Prob
1.06	.911	-1.29	23.	.209	-1.29	22.70	.209

SCENARIO FIVE

In scenario five, the null hypothesis in regards to the relationship between admission grade point average and clinical decision making skills is rejected due to the Pearson's r and Spearman rho tests showing a significant relationship between the two variables. This is defended in the following table.

CROSSTABS GPA BY CLINDECI/STATISTICS = CORR ETA.

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Pearson's R	.57111	.10234	3.33660	.00287
Spearman Correlation	.58598	.12741	3.46810	.00208
Eta: with GPA dependent	.85224			
Eta: CLINIDECI dependent	.67260			
Number of Missing Observations: 10				

SCENARIO SIX

In scenario six, the null hypothesis in regards to the relationship between gender and clinical decision making skills is neither rejected or accepted due to the small number of males in the study. This is defended in the following table.

CROSSTABS GENDER BY CLINDECI/STATISTICS = ETA.

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Eta:with GENDER dependent	.90342			
Eta:with CLINIDECI dependent	.06158			
Number of Missing Observations: 10				

SCENARIO SEVEN

In scenario seven, the null hypothesis in regards to the relationship between race and clinical decision making skills is neither rejected or accepted due to the small number of African-Americans in the study. This is defended in the following table.

CROSSTABS RACE BY CLINDECI/STATISTICS = ETA.

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Eta:with RACE dependent	.85338			
Eta:with CLINIDECI dependent	.20695			
Number of Missing Observations: 10				

SCENARIO EIGHT

In scenario eight, the null hypothesis in regards to the relationship between ACT scores and clinical decision making skills is accepted due to the Pearson's r and Spearman rho tests showing no significant relationship between the two variables. This is defended in the following table.

CROSSTABS ACT BY CLINDECI/STATISTICS = CORR. ETA.
ACT ACT COMPOSITE by CLINICAL DECISION MAKING

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Pearson's R	.13804	.13024	.63867	.52994
Spearman Correlation	.21198	.16768	.99399	.33154
Eta: with ACT dependent	.80369			
Eta: CLINIDECI dependent	.49801			
Number of Missing Observations: 12				

SCENARIO NINE

In scenario nine, the null hypothesis in regards to the relationship between age and clinical decision making skills is accepted due to the Pearson's r and Spearman rho tests showing no significant relationship between the two variables. This is defended in the following table.

CROSSTABS AGE BY CLINDECI/STATISTICS = CORR. ETA.

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Pearson's R	-.40635	.18784	-2.13280	.04384
Spearman Correlation	-.33334	.21244	-1.69562	.10345
Eta: with AGE dependent	.92810			
Eta: CLINDECI dependent	.96127			
Number of Missing Observations: 10				

SCENARIO TEN

In scenario ten, the null hypothesis in regards to the relationship between lab attendance and clinical decision making skills is rejected due to the Pearson's r and Spearman rho tests showing a significant relationship between the two variables. This is defended in the following table.

CROSSTABS ATTLAB BY CLINDECI/STATISTICS = CORR. ETA.

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Pearson's R	-.64966	.08534	-4.09832	.00044
Spearman Correlation	-.71026	.07481	-4.83889	.00007
Eta: with ATTLAB dependent	.92015			
Eta: CLINDECI dependent	.71723			
Number of Missing Observations: 10				

SCENARIO ELEVEN

In scenario eleven, the null hypothesis in regards to the relationship between employment prior to graduation and clinical decision making skills is rejected due to the Eta demonstrating there is a difference in value. This is defended in the following table

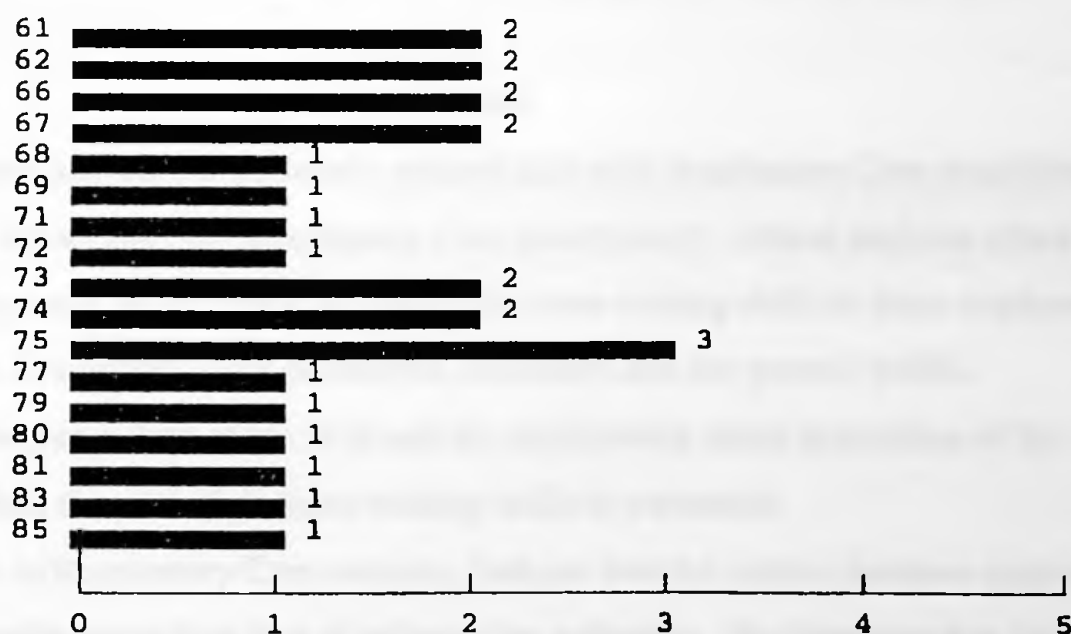
CROSSTABS RTTECH BY CLINDECI/STATISTICS = ETA.

<u>Statistic</u>	<u>Value</u>	<u>ASE1</u>	<u>T-Value</u>	<u>Approximate Significance</u>
Eta:with RTTECH dependent	.77418			
Eta:with CLINIDECI dependent	.42828			
Number of Missing Observations: 10				

VALUE LABEL

WRITOVER WRITTEN EXAM OVERALL TEST SCORE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	61	2	5.7	8.0	8.0
	62	2	5.7	8.0	16.0
	66	2	5.7	8.0	24.0
	67	2	5.7	8.0	32.0
	68	1	2.9	4.0	36.0
	69	1	2.9	4.0	40.0
	71	1	2.9	4.0	44.0
	72	1	2.9	4.0	48.0
	73	2	5.7	8.0	56.0
	74	2	5.7	8.0	64.0
	75	3	8.6	12.0	76.0
	77	1	2.9	4.0	80.0
	79	1	2.9	4.0	84.0
	80	1	2.9	4.0	88.0
	81	1	2.9	4.0	92.0
	83	1	2.9	4.0	96.0
	85	1	2.9	4.0	100.0
	.	10	28.6	Missing	
Total		35	100.0	100.0	



Mean	71.840	Std err	1.376	Median	73.000
Mode	75.000	Std dev	6.878	Variance	47.307
Kurtosis	-.767	S E Kurt	.902	Skewness	.062
S E Skew	.464	Range	24.000	Minimum	61.000
Maximum	85.000	Sum	1796.000		

Valid cases	25	Missing cases	10
-------------	----	---------------	----

Conclusions

Of the research hypothesis studied, it was determined via t-test, Pearson's r , Spearman ρ , and Eta to have no statistically significant results, the exception being lab attendance. There were no relationships found to exist between the student's scores and their measures of age, race, gender, employment, GPA and ACT scores. The assumption that students who received critical decision making activities throughout their Respiratory Care curriculum would achieve higher scores on their NBRC Written Registry and Clinical Simulation Examination contradicts the statistical findings of the study.

An SPSS/PC version computer program was used to determine the level of significance of the results. For the matched groups t-tests the mean differences showed relatively greater GPA achievements as compared to relative ACT scores.

After contemplating the results of this data, the researcher compiled the data and found still, no significant relationships existed between the variables.

While the instruments used allow a determination of the comparisons of the two groups, the population of this study is significantly small. This factor limits the results of the data.

Recommendations

Health care personnel and most importantly patients deal with Respiratory Care practitioners daily. Considering their knowledge, the Respiratory Care practitioners' critical decision effect us all. Determining the nature and development of critical decision making skills in these employees should be of value to the Respiratory Care profession, educators and the general public. Considering the encompassing nature of the field and the significantly small population of the study, additional research in the critical decision making skills is warranted.

This study, specific to Respiratory Care students, indicate that the critical decision making skills results are significantly lower than that of information gathering. To determine that this is the result of a specific curriculum pursued, it would be of value to construct a study that would evaluate a larger and more random selection of Respiratory Care students upon their acceptance into a Respiratory Care program. This would also take into consideration the standardization of Respiratory Care education throughout the nation.

Suggestions for Further Research

Based upon the findings, observations and subsequent conclusions of the study, the researcher submits the following suggestions for further research:

1. The study should be replicated in its present design in order to strengthen the theory which is presented by the research hypothesis.
2. The study should be replicated using representative samples from high school classes to determine if this teaching method is effective at other grade levels.
3. The study should be replicated in its present design to included a larger population to strengthen the data.
4. The study should be replicated to include different curriculum associated with critical decision making skills.
5. The study should be replicated to include more specifically pre examination employment. and its specific effect on clinical decision making skills.
6. The study should be conducted using representative samples from other health care classes to determine if the teaching method is effective with other class groups.
7. The study should be conducted to include other variables such as significant changes in motivation, attitude and interest.
8. The study should be extended to see if significant differences occur between critical decision making skills learned in academic curriculum and the transfer of learned skills as applied to the job.

Appendix A

Table 1. Summary of the data sets used in the study

Dataset	Number of samples	Number of classes
Dataset 1	1000	10
Dataset 2	1000	10
Dataset 3	1000	10

Table 2. Summary of the data sets used in the study

Dataset	Number of samples	Number of classes	Number of features
Dataset 1	1000	10	1000
Dataset 2	1000	10	1000
Dataset 3	1000	10	1000
Dataset 4	1000	10	1000
Dataset 5	1000	10	1000
Dataset 6	1000	10	1000
Dataset 7	1000	10	1000
Dataset 8	1000	10	1000
Dataset 9	1000	10	1000
Dataset 10	1000	10	1000

THE COLLEGE OF WEST VIRGINIA
RESPIRATORY THERAPY
ADMISSIONS CRITERIA SYSTEM

First Criteria in the Admissions Process

- | | | |
|---|-----------|----------|
| 1. Minimum ACT \geq 18 | yes _____ | no _____ |
| 2. Minimum GPA = 2.0 | yes _____ | no _____ |
| 3. All 1st year courses
with a "C" or better | yes _____ | no _____ |

Second Criteria in the Admissions Process

<u>Criteria</u>	<u>Weight%</u>	<u>Responsibility of Awarding Score</u>
1. Overall GPA	30%	Student Services
2. GPA in Math 120; BIO 215, 215A; 216, 216A, 219, and 219A; and CHEM 101, 101A 102 & 102A; and REST 101, 102 and 200	45%	Student Services
3. CWV Student	10%	Student Services
4. Essay Questions	10%	Average Score of 3 readers from the Admissions Committee
5. Previous Healthcare	5%	Average Score of 3 readers from the Admissions Committee

**THE COLLEGE OF WEST VIRGINIA
RESPIRATORY THERAPY
ADMISSION SCORE SHEET**

Applicant # _____

Candidate's Name _____

Social Security # _____

Address: _____

Phone: _____

Minimum ACT 18 _____ score Minimum GPA 2.0 _____ GPA

APPLICATION

Points Max Category and Criteria

_____ 30 Overall GPA: Many aspects of Respiratory Therapy practice and training require academic preparation in communication, social science, computer skills as well as science and math. Overall GPA is useful indicator. Points are awarded on the following basis:

30	4.00
25	3.50 - 3.99
20	3.00 - 3.49
15	2.50 - 2.99
10	2.00 - 2.49
0	0.00 - 1.99

_____ 45 Science, Math & RT GPA: Respiratory Therapy is a health Science profession that is technically based as well patient care oriented. Competency in these areas evaluate the probability that an applicant will have the ability to complete the program. The GPA of these prerequisite courses maybe one useful indicator. Points are awarded on the following basis:

45	4.00
35	3.50 - 3.99
25	3.00 - 3.49
15	2.50 - 2.99
5	2.00 - 2.49
0	0.00 - 1.99

<u>Points</u>	<u>Max</u>	<u>Category and Criteria</u>						
<u> </u>	<u> 10 </u>	CWV attendance (> 12 credit hours)						
<u> </u>	<u> 10 </u>	<p>Essay Questions: Assess the following qualities when reviewing the narratives for Career Orientation, Maturity, Initiative, Flexibility, Interpersonal Skills and Interactions, Problem Solving and Tolerance to Ambiguity, and Organization and Planning. These criteria are directly related to affective behaviors identified important to a Respiratory Therapist by the Communities of Interest. Points are awarded on the following basis:</p> <table border="0"> <tr> <td>Outstanding</td> <td>Satisfactory</td> <td>Unsatisfactory</td> </tr> <tr> <td>2 pts.</td> <td>1pt</td> <td>0</td> </tr> </table>	Outstanding	Satisfactory	Unsatisfactory	2 pts.	1pt	0
Outstanding	Satisfactory	Unsatisfactory						
2 pts.	1pt	0						

Questions 1 and 2:

Assessing Career Orientation; applicants knowledge of duties performed by a RT and willingness to contribute to the profession.

Question 3:

Assessing Maturity, Initiative and Flexibility; applicant is capable of responding or conforming to changing or new situations, demonstrates common sense, tact and empathy, and motivated to pursue actions independently.

Question 4:

Assessing Interpersonal skills and Interactions; applicant contributes knowledge and opinions in an articulate manner, expresses self clearly in writing, ability to get along with others; maintains composure to continue functioning and demonstrates a positive approach.

Question 5:

Assessing Problem Solving and Tolerance of ambiguity; applicant is capable of directing activities, and able to analyze a problem and formulate a solution.

Question 6:

Assessing Organization and Planning; applicant can arrange duties by systematic planning for optional efficiency, follow through on assignments, complete tasks with minimal supervision, assured in one's ability and skills and delegates tasks appropriately.

Points

Max

Category and Criteria

41

5

Previous Healthcare Experience:
Applicants with experience in healthcare can better understand what the profession is all about and demonstrate a commitment to health care. This understanding and commitment evaluates the probability that an applicant will be able to complete the program. Points are awarded on the following basis:

- 5 pts Evidence of recent healthcare experience in the past 5 years with direct hands on patient care. (e.g. RN, EMT, PT)
- 4 pts Evidence of recent healthcare experience in the past 5 years in support services of patient care. (e.g. social service, counselor)
- 3 pts Evidences of recent healthcare experience in the past 5 years with indirect patient care (e.g. Transporter, Secretary, etc.) or cared for family members with a long term illness or disability.
- 2 pts Evidence of healthcare experience not within the past 5 years; or certified in CPR, First Aid, etc.
- 1 pts Evidence of volunteer work in healthcare
- 0 pts No evidence of any healthcare commitment.

_____ 100 Total Points

Applicant should be interviewed: yes _____ no _____

Comments:

Status: _____ not accepted

_____ alternate

_____ accepted provide successful completion of all 1st year requirements by the 1st day of summer school.

Appendix B

Lesson Plan Material for the 1993-1994 and 1994-1995 Respiratory Care Students

The items below are ranked in order of presentation to the student groups.

<u>Lesson</u>	<u>Source</u>	<u>Topic</u>
1	W, WL	Oxygen Administration
2	W, WL	Aerosol and Humidity
3	W, WL	Airway Care
4	W, WL	Bronchial Hygiene
5	W, WL	Invasive Monitoring
6	W, WL	Non-Invasive Monitoring
7	W, WL	Intermittent Positive Pressure
8	W, WL	BiPap
9	W, WL	Management of Adult Ventilators
10	W, WL	Management of Newborn Ventilators

W - White, Equipment for Respiratory Care

WL - White, Laboratories and Competencies in Respiratory Care

A Continuum of Realism for Practice Exercises

Degree of Realism	Type of Practice	Example
Abstract	1. Written Questions	1. Multiple choice question asking student to select best diagnosis for given patient data.
	2. Written Simulations	2. Patient management problem asking student to arrive at diagnosis by selecting questions from a list and receiving pre-determined responses via latent image process prior to deciding on diagnosis.
	3. Verbal Simulations	3. Teacher answers student questions as patient would.
	4. Models	4. Student examines radiography of lungs, receiving practice in recognizing a variety of disease problems.
	5. Actors	5. Students role playing various clinical conditions serve as subjects for interviews.
	6. Practicum	6. Student is given responsibility for procedures on actual patients in clinic setting.
Real		

Appendix C

Directions for Critical Thinking Activities

- Question 1: Describe the use of this equipment?
- Question 2: What things can be manipulated to construct this equipment?
- Question 3: How can you adapt this equipment for other uses?
- Question 4: What other theories relate to this concept?
- Question 5: Describe three similarities and differences between the equipment used in this lab and/or the theories involved.
- Question 6: State your own personal reasons for the conclusions to your answers.
- Question 7: Describe the relationship between theory and application as it pertains to your lab.

Appendix D
Example
Clinical journal and Case Study

WEEKLY CLINICAL LOG SHEET

NAME: _____ CLINIC: _____

DATE: _____ INSTRUCTOR: _____

ASSIGNMENT: _____

Procedures performed _____

Equipment Used _____

Observations _____

Physician Contact _____

COMMENTS: Describe briefly the most significant experience of the day

MED AND/OR SURG PROCEDURES PERFORMED PRIOR TO RESP CARE:

MED AND/OR SURG PROCEDURES PERFORMED AFTER START OF RESPIRATORY CARE:

THERAPY PERFORMED BY THE RESPIRATORY THERAPY DEPT/SERVICE:

DATE STARTED TERMINATED TYPE OF SERVICE COMMENTS

<u>DATE STARTED</u>	<u>TERMINATED</u>	<u>TYPE OF SERVICE</u>	<u>COMMENTS</u>

LABORATORY DATA (INCLUDE X-RAY, ABG, AND OTHER PERTINENT TEST RESULTS):

DRUG

ROUTE

DOSE

FREQUENCY

WHY WAS RESPIRATORY THERAPY INTEGRATED INTO THE GENERAL CARE OF THE PATIENT? DID THE PATIENT MEET CRITERIA FOR RESPIRATORY THERAPY CARE?

EVALUATE THE CARE GIVEN TO THE PATIENT BY YOURSELF AND/OR OTHERS COMMENT ON ITS EFFECTIVENESS. COULD IT HAVE BEEN BETTER?

COMMENT ON PATIENT'S EMOTIONAL STATUS, RECEPTIVENESS TO THERAPY, AND YOUR ABILITY TO COMMUNICATE:

WHAT DID YOU LEARN FROM THIS PATIENT AND HIS CARE? GIVE AN OVERVIEW.

WHAT DO YOU SUGGEST FOR PATIENT'S CONTINUED CARE IN THE HOSPITAL? AFTER DISCHARGE? PREPARE A PLAN IF HOME CARE IS ADVISED.

Appendix E

Examples of Lab and Clinical Procedural Competencies

STANDARD COMPETENCIES

These standards are intended to provide a common language and framework for describing and assessing the performance of individuals in the health care field. They are not intended to be used as a checklist or a list of requirements. They are intended to be used as a guide for developing and assessing the performance of individuals in the health care field.

COMPETENCIES

The following table lists examples of lab and clinical procedural competencies. The table is organized into three columns: Lab, Clinical, and Clinical/Lab. Each row represents a competency, and each column contains a checkbox for indicating proficiency.

Competency	Lab	Clinical	Clinical/Lab
1. Perform basic lab tests (e.g., hematology, chemistry, urinalysis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Perform clinical procedures (e.g., physical exam, patient history, patient education)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interpret lab results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform clinical procedures (e.g., patient assessment, patient care)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Interpret lab results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform clinical procedures (e.g., patient assessment, patient care)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Interpret lab results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform clinical procedures (e.g., patient assessment, patient care)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Interpret lab results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform clinical procedures (e.g., patient assessment, patient care)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PERFORMANCE EVALUATION: IPPB THERAPY

Date: Lab _____ Clinical _____ Agency _____ 52

Lab: Pass _____ Fail _____ Clinical: Pass _____ Fail _____

Student name _____ Instructor name _____

No. of times observed in clinical _____

No. of times practiced in clinical _____

PASSING CRITERIA:

Obtain 90% or better on the procedure. Tasks indicated by * must receive at least 1 point or the evaluation is terminated. Procedure must be performed within designated time or the performance receives a failing grade.

SCORING:

- 2 points—Task performed satisfactorily without prompting.
- 1 point —Task performed satisfactorily with self-initiated correction.
- 0 point —Task performed incorrectly or with prompting required.
- NA —Task not applicable to the patient care situation.

TASKS:

	PEER	LAB	CLINICAL
* 1. Verifies the physician's order	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Scans the chart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Gathers the equipment			
* a. Spirometer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* b. Ventilator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* c. Peak Flow Meter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* d. Breathing circuit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* e. Medication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 4. Assembles and tests the equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 5. Washes hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 6. Positions the patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Monitors the patient

- * a. Pulse and respirations
- * b. Breath sounds
- * c. Inspiratory capacity
- * d. Peak expiratory flow rate
- * e. Blood pressure

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Instructs the patient

- * a. Explains correct breathing pattern
- * b. Explains how to initiate a breath
- * c. Explains how expiration occurs
- * d. Explains warning signs and symptoms

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Administers therapy

- * a. Adjusts the ventilator as required
- * b. Monitors tidal volume
- * c. Monitors respiratory and heart rate
- * d. Monitors blood pressure

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Assists and encourages the patient to cough

11. Monitors therapy effectiveness

- * a. Inspiratory capacity
- * b. Peak expiratory flow rate

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Removes unneeded equipment

<input type="checkbox"/>	<input type="checkbox"/>	54 <input type="checkbox"/>
--------------------------	--------------------------	-----------------------------

* 13. Practices aseptic techniques

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

* 14. Records procedure on the patient's chart

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

SCORE:

Peer _____ points of possible 58; _____ %

Lab _____ points of possible 58; _____ %

Clinical _____ points of possible 58; _____ %

TIME: _____ out of possible 15 minutes.

STUDENT SIGNATURES

PEER: _____

STUDENT: _____

INSTRUCTOR SIGNATURES

LAB: _____

CLINICAL: _____

PERFORMANCE EVALUATION: ELECTROCARDIOGRAMS (ECGs)

Date: Lab _____ Clinical _____ Agency _____

Lab: Pass _____ Fail _____ Clinical: Pass _____ Fail _____

Student name _____ Instructor name _____

No. of times observed in clinical _____

No. of times practiced in clinical _____

PASSING CRITERIA:

Obtain 90% or better on the procedure. Tasks indicated by * must receive at least 1 point or the evaluation is terminated. Procedure must be performed within designated time or the performance receives a failing grade.

SCORING:

- 2 points—Task performed satisfactorily without prompting.
- 1 point —Task performed satisfactorily with self-initiated correction.
- 0 point —Task performed incorrectly or with prompting required.
- NA —Task not applicable to the patient care situation.

TASKS:

	PEER	LAB	CLINICAL
* 1. Verifies the physician's order	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 2. Washes hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 3. Obtains required equipment			
a. Electrocardiograph	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. All leads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Suction cups or disposable pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Isopropyl alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Clean towels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 4. Assembles and checks all equipment for function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Identifies the patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Explains the procedure to the patient

7. Positions patient

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8. Places leads correctly

9. Correctly operates the electrocardiograph

10. Identifies any life threatening arrhythmias

11. Recognizes and corrects artifact

12. Cleans patient and cleans up the area afterward

13. Ensure ECG is filed or that appropriate physicians receive it

14. Documents procedure in the patient's chart

SCORE:

Peer _____ points of possible 36; _____%

Lab _____ points of possible 36; _____%

Clinical _____ points of possible 36; _____%

TIME: _____ out of possible 30 minutes.

STUDENT SIGNATURES

PEER: _____

STUDENT: _____

INSTRUCTOR SIGNATURES

LAB: _____

CLINICAL: _____

PERFORMANCE EVALUATION: INITIATION OF CONTINUOUS MECHANICAL VENTILATION

Date: Lab _____ Clinical _____ Agency _____

Lab: Pass _____ Fail _____ Clinical: Pass _____ Fail _____

Student name _____ Instructor name _____

No. of times observed in clinical _____

No. of times practiced in clinical _____

PASSING CRITERIA:

Obtain 90% or better on the procedure. Tasks indicated by * must receive at least 1 point or the evaluation is terminated. Procedure must be performed within designated time or the performance receives a failing grade.

SCORING:

- 2 points—Task performed satisfactorily without prompting.
- 1 point —Task performed satisfactorily with self-initiated correction.
- 0 point —Task performed incorrectly or with prompting required.
- NA —Task not applicable to the patient care situation.

TASKS:

	PEER	LAB	CLINICAL
* 1. Verifies the physician's order	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Reviews the patient's chart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 3. Gathers the equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 4. Measures the mechanics of ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 5. Assesses oxygenation and cardiac status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 6. Tests the equipment for function			
a. Corrects circuit leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Measures circuit compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 7. Adjusts the ventilator to the ordered settings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 8. Connects the patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Monitors ventilator parameters

* a. Rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 58
* b. Tidal Volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* c. FiO ₂	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* d. Sensitivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* e. I:E ratio 1:2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* f. Pressure limit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* g. Circuit temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* h. Measures FiO ₂	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* i. Adjusts all alarms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 10. Draws blood gases or monitors oximetry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Cleans up the area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 12. Uses asptic technique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* 13. Records the procedure on the chart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SCORE:

Peer _____ points of possible 44; _____%

Lab _____ points of possible 44; _____%

Clinical _____ points of possible 44; _____%

TIME: _____ out of possible 30 minutes.

STUDENT SIGNATURES

PEER: _____

STUDENT: _____

INSTRUCTOR SIGNATURES

LAB: _____

CLINICAL: _____

Appendix F

Examples of Behavioral Competencies

Behavioral Competency	1	2	3	4	5
1. Demonstrates a strong understanding of the organization's mission, vision, and values.	1	2	3	4	5
2. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
3. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
4. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
5. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
6. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
7. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
8. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
9. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
10. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
11. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
12. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
13. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
14. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
15. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
16. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
17. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
18. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
19. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
20. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
21. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
22. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
23. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
24. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
25. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
26. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
27. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5
28. Demonstrates a strong understanding of the organization's culture and norms.	1	2	3	4	5
29. Actively seeks out and listens to diverse perspectives and opinions.	1	2	3	4	5
30. Communicates clearly and effectively, both verbally and in writing.	1	2	3	4	5

BEHAVIORAL RATING SCALE (SHORT FORM)

STUDENT

HOSPITAL/ROTATION

COURSE/UNIT

DATE(S)

INSTRUCTIONS: Please be frank and honest in reacting to the following statements regarding your opinion of the student's clinical performance. Circle the appropriate response. SA means you strongly agree; A means you agree; U means you are undecided; D means you disagree; and NA means not applicable or not observed.

<u>THE STUDENT</u>	<u>RATING</u>					
1. Initiates unambiguous and goal-directed communication	SA	A	U	D	SD	NA
2. Establishes priorities and efficiently plans activities/assignments	SA	A	U	D	SD	NA
3. Displays adequate knowledge of essential concepts	SA	A	U	D	SD	NA
4. Exhibits courteous and pleasant demeanor	SA	A	U	D	SD	NA
5. Demonstrates thoroughness and attention to safety requirements	SA	A	U	D	SD	NA
6. Reports on patient's status/needs by observation and assessment	SA	A	U	D	SD	NA
7. Exhibits self-direction and responsibility for actions	SA	A	U	D	SD	NA
8. Displays cooperativeness and receptivity to suggestions and ideas	SA	A	U	D	SD	NA
9. Maintains concise and accurate records	SA	A	U	D	SD	NA
10. Presents a well-groomed and tidy personal appearance	SA	A	U	D	SD	NA
11. Grasps new experiences and readily adjusts to changing conditions	SA	A	U	D	SD	NA
12. Provides for adequate care and maintenance of equipment and supplies	SA	A	U	D	SD	NA
13. Displays forthrightness and integrity in dealings with patients and peers	SA	A	U	D	SD	NA
14. Accepts and applies supervisory guidance and constructive criticism	SA	A	U	D	SD	NA
15. Demonstrates the relationship(s) between theory and clinical practice	SA	A	U	D	SD	NA
16. Completes delegated tasks and assignments on schedule	SA	A	U	D	SD	NA
17. Seeks out new or additional activities on own initiative	SA	A	U	D	SD	NA
18. Demonstrates consideration and respect for patient's needs/rights	SA	A	U	D	SD	NA
19. Follows directions and exhibits sound judgment	SA	A	U	D	SD	NA
20. Displays punctuality and dependable adherence to time schedules	SA	A	U	D	SD	NA

OBSERVATIONS AND RECOMMENDATIONS

APPLICABLE STATEMENT

CRITICAL INCIDENT DESCRIPTIONS: Include (where applicable) the events leading up to the incident (antecedents), the behavior itself, and any observed consequences of the behavior. Be as specific and objective as possible.

DATE

RECOMMENDATIONS

COMMENTS AND IMPRESSIONS

STUDENT

FACULTY

EVALUATOR

OBSERVATIONS

DATE	<u>CRITICAL INCIDENT DESCRIPTIONS:</u> Include (where applicable) the events leading up to the incident (antecedents), the behavior itself, and any observed consequences of the behavior. Be as specific and objective as possible.	APPLICABLE SCALE(S)

BEHAVIORAL RATING SCALE (LONG FORM)

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STUDENT		HOSPITAL/AFFILIATE	
ROTATION		DATES	
PARTICIPATING EVALUATORS			
OVERALL RATING			
REASONING ABILITY		INTERPERSONAL SKILLS	
WORK PERFORMANCE		PERSONAL CHARACTERISTICS	
COMMENTS AND IMPRESSIONS			
RECOMMENDATIONS			
STUDENT	EVALUATOR(S)	FACULTY	

BEHAVIORAL RATING SCALE (LONG FORM)

KNOWLEDGE AND COMPREHENSION <u>1</u>	
4	DEMONSTRATES SUPERIOR COMPREHENSION AND KNOWLEDGE BEYOND THE REQUIREMENTS OF THE JOB.
3	DEMONSTRATES ABOVE AVERAGE KNOWLEDGE AND COMPREHENSION BEYOND THAT ESSENTIAL.
2	DISPLAYS ADEQUATE KNOWLEDGE OF ESSENTIAL CONCEPTS.
1	HAS LIMITED UNDERSTANDING OF BASIC CONCEPTS; IS UNSURE OF ESSENTIALS.
0	DISPLAYS INADEQUATE COMPREHENSION OF EVEN BASIC KNOWLEDGE.
AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).	
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

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BEHAVIORAL RATING SCALE (LONG FORM)

COMPREHENSION AND JUDGMENT <u>2</u>	
4	GRASPS DIRECTIONS QUICKLY AND ACCURATELY; DISPLAYS OUTSTANDING USE OF JUDGMENT.
3	READILY USES INSTRUCTIONS AND MAKES DECISIONS BASED UPON SOUND JUDGMENT.
2	RARELY REQUIRES REPETITION OF EXPLANATIONS OR REFERRAL TO INSTRUCTIONS; DEMONSTRATES GOOD JUDGMENT IN MOST SITUATIONS.
1	REQUIRES NEEDLESS RE-EXPLANATIONS; HAS DIFFICULTY IN MAKING RATIONAL JUDGMENTS.
0	IS UNABLE TO FOLLOW EVEN SIMPLE DIRECTIONS; CANNOT BE DEPENDED UPON TO MAKE SOUND JUDGMENTS.
AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).	
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

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THEORY INTEGRATION 3	
4	READILY TRANSFERS THEORETICAL KNOWLEDGE TO ALL CLINICAL SITUATIONS.
3	APPLIES AND RELATES THEORY TO MOST CLINICAL ACTIVITIES.
2	CAN USUALLY DEMONSTRATE HOW ESSENTIAL ASPECTS OF THEORY RELATE TO SPECIFIC CLINICAL SITUATIONS.
1	EXHIBITS A SUPERFICIAL UNDERSTANDING OF THE APPLICATION OF THEORY IN MOST CLINICAL ACTIVITIES.
0	IS UNAWARE OF AND CANNOT INTEGRATE THEORETICAL CONCEPTS WITH THEIR PRACTICAL APPLICATION.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

LEARNING ADAPTABILITY 4	
4	LEARNS AND APPLIES NEW EXPERIENCES EXCEPTIONALLY QUICKLY; ADJUSTS RAPIDLY TO NEW CONDITIONS OR ALTERED SITUATIONS.
3	IS RATHER QUICK TO LEARN FROM NEW EXPERIENCES; READILY ACCOMMODATES CHANGED CONDITIONS OR SITUATIONS.
2	GRASPS NEW EXPERIENCES AND ADJUSTS TO CHANGES WHEN GIVEN A SATISFACTORY TIME INTERVAL.
1	IS RATHER SLOW IN LEARNING NEW TASKS AND HAS SOME DIFFICULTY ACCOMMODATING TO CHANGING CONDITIONS.
0	SEEMS UNABLE TO LEARN FROM OR APPLY NEW EXPERIENCES AND CANNOT ADJUST TO CHANGES.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

ORGANIZATION AND EFFICIENCY 5	
4	ALWAYS SETS GOALS AND PLANS AND ORGANIZES ACTIVITIES SO AS TO ACHIEVE OPTIMUM AND EFFICIENT PATIENT CARE.
3	ORGANIZES AND PLANS ASSIGNMENTS WELL; FAILS TO ACHIEVE ESTABLISHED GOALS ONLY WHEN UNEXPECTED CIRCUMSTANCES INTERVENE. 66
2	USUALLY ESTABLISHES PRIORITIES AND PLANS ACTIVITIES EFFICIENTLY; MOST GOALS ACHIEVED AS INTENDED.
1	MAKES SOME ATTEMPT TO SET GOALS AND ORGANIZE ACTIVITIES BUT MANY PRIORITIES ARE NOT ACHIEVED.
0	EXHIBITS NO PLANNING OR GOAL SETTING; IS UNAWARE OF PRIORITIES AND IS CONSTANTLY DISORGANIZED.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

OBSERVATION, ASSESSMENT, REPORTING OF PATIENT'S STATUS/NEEDS 6	
4	CONSISTENTLY ASTUTE AND CONSCIENTIOUS IN THE OBSERVATION, ASSESSMENT, AND REPORTING OF PATIENT'S STATUS OR NEEDS TO APPROPRIATE PERSONNEL.
3	USUALLY ALERT TO MOST CHANGES, NEVER OVERLOOKS OR FAILS TO REPORT PATIENT'S CONDITION OR NEEDS TO APPROPRIATE PERSONNEL.
2	PROVIDES SATISFACTORY OBSERVATION AND ASSESSMENT OF PATIENT'S STATUS AND NEEDS; GENERALLY ASSURES THAT APPROPRIATE PERSONNEL ARE NOTIFIED.
1	IS OFTEN CARELESS IN OBSERVING AND ASSESSING PATIENT'S CONDITION OR NEEDS; OFTEN FAILS TO COMMUNICATE CHANGES TO APPROPRIATE PERSONNEL.
0	HABITUALLY DISPLAYS NEGLIGENCE IN PATIENT OBSERVATION AND ASSESSMENT; DOES NOT INFORM APPROPRIATE PERSONNEL OF PATIENT'S STATUS OR NEEDS.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

THOROUGHNESS AND SAFETY 7	
4	CONSISTENTLY DEMONSTRATES THOROUGHNESS, ACCURACY, ATTENTION TO DETAIL; PERFORMANCE EXCEEDS SAFETY EXPECTATIONS AND IS ESSENTIALLY ERROR-FREE. 67
3	USUALLY EXHIBITS THOROUGHNESS; WORK SELDOM NEEDS TO BE RECHECKED; DEMONSTRATES DUE CONSIDERATION FOR SAFETY AND ERRORS ARE FEW.
2	DEMONSTRATES AN ACCEPTABLE LEVEL OF PERFORMANCE WITH OCCASIONAL (THOUGH NOT CRITICAL) ERRORS; SAFETY CONSIDERATIONS ARE RARELY OVERLOOKED.
1	IS FREQUENTLY CARELESS OR NEGLIGENT, LACKING ATTENTION TO MANY DETAILS; ERRORS OCCUR FREQUENTLY AND SAFETY CONSIDERATIONS ARE OFTEN OVERLOOKED; REQUIRES CLOSE SUPERVISION.
0	EXHIBITS OVERT CARELESSNESS AND CONSISTENTLY POOR QUALITY OF PERFORMANCE; MAKES CRITICAL ERRORS OF POTENTIAL DANGER TO PATIENT'S WELL-BEING; IS UNSAFE AND HAZARDOUS.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT)
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

QUANTITY OF PERFORMANCE 8	
4	WORKS CONSISTENTLY AND WITH EXCELLENT OUTPUT, UTILIZES TIME EFFICIENTLY.
3	WORKS CONSISTENTLY WITH ABOVE AVERAGE OUTPUT; ALWAYS COMPLETES ASSIGNED FUNCTIONS IN APPROPRIATE TIME INTERVAL.
2	MAINTAINS SATISFACTORY OUTPUT; IS USUALLY ABLE TO COMPLETE DELEGATED TASKS IN APPROPRIATE TIME INTERVAL.
1	FREQUENTLY IS UNABLE TO COMPLETE ASSIGNED FUNCTIONS WITHIN A SATISFACTORY TIME LIMIT.
0	DEMONSTRATES UNREALISTICALLY LOW OUTPUT IN RELATION TO EXPECTATIONS; IS SLOW AND HABITUALLY INEFFICIENT.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

RECORD KEEPING 9	
4	ALWAYS MAINTAINS EXCEPTIONALLY COMPLETE, ACCURATE, AND CONCISE RECORDS IN FULL ACCORD WITH HOSPITAL AND DEPARTMENTAL POLICY AND PROCEDURES. 68
3	ENSURES THAT RECORDS KEPT ARE COMPLETE AND CONCISE; RECOGNIZES AND CORRECTS ANY ERRORS OR OMISSIONS.
2	USUALLY MAINTAINS RECORDS THAT ARE SATISFACTORY; OCCASIONALLY MAKES MINOR ERRORS OR FAILS TO PROVIDE COMPLETE DESCRIPTION OF ACTIONS/ASSESSMENTS.
1	IS FREQUENTLY CARELESS IN COMPLETING PROPER RECORDS; COMMITS MANY ERRORS OR IS OFTEN INACCURATE AND INCOMPLETE.
0	HABITUALLY FAILS TO PROVIDE DOCUMENTATION OF ACTIVITIES.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

CARE AND USE OF EQUIPMENT AND/OR SUPPLIES 10	
4	DEMONSTRATES EXEMPLARY COMPETENCE AND RESOURCEFULNESS IN THE UTILIZATION AND CARE OF EQUIPMENT AND SUPPLIES.
3	EFFICIENTLY EMPLOYS AVAILABLE EQUIPMENT AND SUPPLIES, GIVING DUE CARE TO THEIR USE AND MAINTENANCE.
2	EXHIBITS SATISFACTORY CARE AND USE OF EQUIPMENT IN MOST SITUATIONS; IS NEVER NEGLIGENT, WASTEFUL, OR ABUSIVE.
1	IS OFTEN INEFFICIENT IN THE USE OR MAINTENANCE OF EQUIPMENT AND OCCASIONALLY PROVIDES LESS THAN ADEQUATE CARE.
0	IS ABUSIVE, NEGLIGENT, AND CARELESS IN THE USE AND CARE OF EQUIPMENT OR SUPPLIES.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

ATTENDANCE AND PUNCTUALITY 11	
4	IS NEVER ABSENT AND ALWAYS ARRIVES AS SCHEDULED (OR EARLY) FOR ALL ROTATIONS AND ACTIVITIES.
3	IS ABSENT OR LATE ONLY UNDER EXTENUATING CIRCUMSTANCES AND WITH PROPER NOTIFICATION.
2	IS RARELY ABSENT OR LATE FOR SCHEDULED ACTIVITIES; PROPERLY NOTIFIES APPROPRIATE PERSONNEL IN ADVANCE OF DIFFICULTIES IN ATTENDANCE; SEEKS TO MAKE UP LOST TIME.
1	IS FREQUENTLY ABSENT OR TARDY AND OFTEN FAILS TO GIVE NOTIFICATION TO APPROPRIATE PERSONNEL; AVOIDS EFFORTS TO RESCHEDULE TIME.
0	SHOWS DISDAIN FOR ATTENDANCE AND PUNCTUALITY REQUIREMENTS; HABITUALLY NEGLECTS TO GIVE NOTIFICATION; REJECTS EFFORTS TO RESCHEDULE LOST TIME.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

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GENERAL Demeanor 12	
4	ALWAYS PLEASANT, COURTEOUS, FRIENDLY, AND TACTFUL; FOSTERS POSITIVE RESPONSE IN OTHERS.
3	GENERALLY PLEASANT AND COURTEOUS; IS POISED, ACCEPTING, AND TACTFUL MOST OF THE TIME.
2	USUALLY COURTEOUS AND PLEASANT; EXHIBITS TACTLESSNESS OR ABRUPTNESS ONLY IN EXTENUATING CIRCUMSTANCES.
1	ABRUPT AND ANXIOUS AT TIMES, OFTEN DETACHED OR UNRESPONSIVE; MUST BE REMINDED OCCASIONALLY TO BE TACTFUL AND COURTEOUS.
0	REGULARLY ABRUPT, RUDE, DOMINEERING, UNACCEPTING, OR CONDESCENDING; REQUIRES CONSTANT REMINDER TO DISPLAY TACT, COURTESY, OR UNDERSTANDING.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

PATIENT RAPPORT AND CONSIDERATION 13	
4	COMMUNICATES READILY WITH PATIENTS; ALWAYS ATTENTIVE TO THEIR EMOTIONS, NEEDS, RIGHTS, AND COMFORT; IS CONSISTENTLY CONSIDERATE, PATIENT, AND ACCOMMODATING.
3	MAINTAINS GOOD RAPPORT WITH PATIENTS; RECOGNIZES THEIR RIGHTS AND ATTEMPTS TO ACCOMMODATE THEIR NEEDS; IS RESPECTFUL AND COURTEOUS. 70
2	GENERALLY SENSITIVE TO PATIENTS' NEEDS AND RIGHTS IN PLANNING CARE; COMMUNICATES ADEQUATELY TO GAIN PATIENTS' CONFIDENCE AND IS USUALLY CONSIDERATE AND RESPECTFUL.
1	OFTEN IGNORES OR IS INATTENTIVE TO PATIENTS' RIGHTS AND COMFORT; HAS DIFFICULTY COMMUNICATING SINCERITY OR CONSIDERATION; GENERALLY FAILS TO ACHIEVE RAPPORT WITH PATIENTS.
0	IS INCOGNIZANT OF PATIENTS' NEEDS, RIGHTS, OR NECESSARY COMFORTS; FAILS TO ADEQUATELY COMMUNICATE WITH PATIENT; IS INSINCERE OR DETACHED.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

VERBAL COMMUNICATION 14	
4	CARRIES ON CONSISTENTLY GOAL-DIRECTED COMMUNICATION; IS ALWAYS DEFINITE, UNAMBIGUOUS, AND CLEAR IN MEANING AND INTENT.
3	USUALLY INITIATES GOAL-DIRECTED COMMUNICATION THAT IS INFORMED, DELIBERATE, AND GENERALLY UNAMBIGUOUS.
2	GENERALLY INITIATES ADEQUATE COMMUNICATION WITH INFREQUENT ERRORS OF INDEFINITENESS OR AMBIGUITY; SELDOM DISPLAYS MISLEADING WORD CHOICES OR ILLFORMIDNESS.
1	OFTEN HAS DIFFICULTY IN COMMUNICATING MEANING OR INTENT; IS FREQUENTLY AMBIGUOUS OR INDEFINITE; OFTEN CHOOSES MISLEADING WORDS OR EXHIBITS ILLFORMIDNESS.
0	IS CONSISTENTLY AMBIGUOUS AND INDEFINITE; MISLEADING WORDS OR LACK OF CLARITY IN INTENT AND MEANING PRECLUDE EFFECTIVE COMMUNICATION.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

INITIATIVE 15	
4	EXHIBITS ENTHUSIASM AND INITIATIVE IN PERFORMING ASSIGNED TASKS; CONTINUALLY SEEKS OUT NEW LEARNING EXPERIENCES BEYOND THOSE SCHEDULED OR PLANNED.
3	READILY ACCEPTS ASSIGNED ACTIVITIES AND CONSTRUCTIVELY EXPLOITS THEIR LEARNING POTENTIAL; GENERALLY SEEKS OUT NEW OR ADDITIONAL LEARNING EXPERIENCES.
2	KEEPS PACE WITH REGULAR WORK ASSIGNMENTS AND OCCASIONALLY SEEKS OUT NEW ACTIVITIES.
1	REQUIRES OCCASIONAL PRODDING TO KEEP UP WITH DELEGATED TASKS, RARELY USES TIME CONSTRUCTIVELY.
0	MUST BE CONTINUOUSLY PRODDED TO MEET RESPONSIBILITIES; COMPLETES ASSIGNED ACTIVITIES ONLY BECAUSE THEY ARE REQUIRED; DOES NOT SEEK OUT NEW LEARNING EXPERIENCES.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

COLLABORATIVENESS 16	
4	CONSISTENTLY COLLABORATES WITH SUPERVISORS AND INSTRUCTORS TO MAXIMIZE LEARNING AND IMPLEMENT OPTIMUM PATIENT CARE.
3	REACTS POSITIVELY TOWARDS GUIDANCE AND APPLIES SUPERVISORS' RECOMMENDATION TO IMPROVE KNOWLEDGE, SKILLS, OR ATTITUDES.
2	WILLINGLY ACCEPTS SUPERVISION AND GUIDANCE; GENERALLY APPLIES RECOMMENDATIONS AND IS RECEPTIVE TO CONSTRUCTIVE CRITICISM.
1	SOMETIMES REACTS NEGATIVELY TOWARDS SUPERVISION; OFTEN REJECTS GUIDANCE OR FAILS TO APPLY RECOMMENDATIONS; HAS DIFFICULTY ACCEPTING CONSTRUCTIVE CRITICISM.
0	RESENTS SUPERVISION AND REJECTS GUIDANCE; IS DEFENSIVE OR ABUSIVE WHEN APPROACHED WITH RECOMMENDATIONS; FAILS TO ALTER BEHAVIOR WHEN APPROPRIATENESS CRITICIZED.
	AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

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DEPENDABILITY AND SELF-DIRECTION 17	
4	ASSUMES FULL RESPONSIBILITY FOR ACTIONS AND EXHIBITS SELF-DIRECTION IN ALL ACTIVITIES; CAN INDEPENDENTLY INITIATE POSITIVE ACTION AND RARELY REQUIRES DIRECT SUPERVISION.
3	IS GENERALLY ABLE TO ASSUME RESPONSIBILITY FOR ACTIONS; USUALLY INITIATES INDEPENDENT ACTION AND SELF-DIRECTION; REQUIRES MINIMAL SUPERVISION.
2	IS DEPENDABLE AND SELF-DIRECTED IN ASSUMING MOST RESPONSIBILITIES; IS AWARE OF LIMITATIONS AND SEEKS SUPERVISION AND ASSISTANCE WHEN NECESSARY.
1	RELUCTANT TO ASSUME SELF-DIRECTION OR INDEPENDENTLY INITIATE ACTIONS; REQUIRES CLOSE OBSERVATION AND SUPERVISION IN MOST ACTIVITIES.
0	CANNOT ASSUME RESPONSIBILITY FOR ACTIONS; LACKS DIRECTION AND REQUIRES CONSTANT OBSERVATION AND DIRECT SUPERVISION.
AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).	
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

COOPERATIVENESS AND RECEPTIVENESS 18	
4	EXCEPTIONALLY COOPERATIVE AND RECEPTIVE TO SUGGESTIONS AND NEW IDEAS.
3	HIGHLY RESPONSIVE AND COOPERATIVE; GENERALLY RECEPTIVE TO SUGGESTIONS AND NEW IDEAS.
2	USUALLY COOPERATES, DOES NOT RESIST NEW IDEAS. SELDOM FAILS TO TAKE SUGGESTIONS.
1	UNRESPONSIVE AT TIMES, OFTEN FAILING TO COOPERATE; RESISTS NEW IDEAS AND SELDOM CARRIES OUT SUGGESTIONS.
0	IS HABITUALLY UNCOOPERATIVE AND UNRECEPTIVE; RESENTS OR REJECTS SUGGESTIONS AND NEW IDEAS.
AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).	
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

BEHAVIORAL RATING SCALE (LONG FORM)

INTEGRITY 19	
4	CONSISTENTLY EXHIBITS CONCERN FOR THE DIGNITY AND WELFARE OF PATIENTS AND ENSURES CONFIDENCE OF PRIVILEGED INFORMATION; ALWAYS ACKNOWLEDGES LIMITATIONS OF PRACTICE AND RESPONSIBILITY/AUTHORITY GRANTED BY THE PHYSICIAN; MAINTAINS FORTHRIGHT AND HONEST BEHAVIOR AT ALL TIMES. 73
3	GENERALLY DISPLAYS CONCERN FOR THE DIGNITY AND WELFARE OF PATIENTS AND ENSURES CONFIDENCE OF PRIVILEGED INFORMATION; GENERALLY RECOGNIZES LIMITATIONS OF PRACTICE AND RESPONSIBILITY/AUTHORITY GRANTED BY THE PHYSICIAN; CONSISTENTLY DISPLAYS FORTHRIGHT BEHAVIOR.
2	SELDOM FAILS TO RECOGNIZE THE IMPORTANCE OF THE PATIENT'S DIGNITY AND WELFARE AND RESPONSIBILITY OF PRIVILEGED COMMUNICATION; USUALLY RECOGNIZES LIMITATION OF PRACTICE AND RESPONSIBILITY/AUTHORITY GRANTED BY THE PHYSICIAN; USUALLY DISPLAYS FORTHRIGHT AND HONEST BEHAVIOR.
1	OFTEN DISREGARDS PATIENT'S DIGNITY OR WELFARE AND RIGHT TO PRIVILEGED COMMUNICATION; IS SOMETIMES NEGLIGENT IN ACKNOWLEDGING LIMITATIONS OF PRACTICE AND RESPONSIBILITY/AUTHORITY GRANTED BY THE PHYSICIAN; FAILS AT TIMES TO BE FORTHRIGHT AND HONEST.
0	IS NEGLIGENT OR ABUSIVE OF PATIENT'S DIGNITY AND CONSISTENTLY FAILS TO MAINTAIN CONFIDENTIALITY OF PRIVILEGED COMMUNICATIONS; FAILS TO RECOGNIZE LIMITATIONS TO PRACTICE AND IS ABUSIVE OF RESPONSIBILITY/AUTHORITY GRANTED BY PHYSICIAN; IS OFTEN DISHONEST.
AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).	
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

PERSONAL APPEARANCE 20	
4	ALWAYS PRESENTS A CLEAN AND WELL-GROOMED APPEARANCE THAT EXCEEDS THE BASIC DRESS CODE REQUIREMENTS.
3	CONSISTENTLY NEAT AND WELL-GROOMED IN ACCORD WITH BASIC DRESS REQUIREMENTS.
2	USUALLY PRESENTS CLEAN AND SATISFACTORY APPEARANCE, RARELY UNTIDY OR INAPPROPRIATE.
1	OFTEN FORGETFUL OF STANDARDS OF APPEARANCE OR GROOMING, AT TIMES UNTIDY OR INAPPROPRIATELY DRESSED.
0	HABITUALLY NEGLIGENT OF APPEARANCE; CONSISTENTLY UNTIDY, UNKEMPT, OR UNCLEAN.
AT PRESENT THERE IS INSUFFICIENT INFORMATION AVAILABLE TO PROVIDE A VALID RATING; OR, THIS SCALE IS NOT APPLICABLE (CIRCLE APPROPRIATE STATEMENT).	
COMMENTS (CITE SPECIFIC INCIDENTS FROM WHICH THE ABOVE CONCLUSIONS WERE DRAWN)	

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