

CRITICAL CARE CLINIC ROLE EXPECTATIONS OF
LEVEL I RESPIRATORY CARE STUDENTS

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To the Associate Vice President for Research and Dean of
the Graduate School:

I am submitting herewith a thesis written by Gretchen K.
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Level I Respiratory Care Students". I have examined the
final copy of this thesis for form and content and
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DEDICATION

This project is dedicated to my husband, Dave, who gave me the love, support, and understanding I needed to complete it; and to my parents, who gave me the vision to pursue it.

ACKNOWLEDGMENT

I would like to thank Dr. Barbara Cramer, my advisor and chair of my thesis committee, for the care she took in guiding me through the entire process.

ABSTRACT

COMPLETED RESEARCH IN HEALTH SCIENCES
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Clinical education is an essential part of most allied health education programs, including Respiratory Care Programs, as well as nursing and medical schools. The purpose of this study was to determine the difference between the role expectations of the Level I critical care clinic students and the clinical faculty.

The population was identified as all the Level I Respiratory Care students at a large metropolitan community college and the critical care clinical instructors at the same community college. A 30-item investigator-made Critical Care Clinic Role Expectation Inventory (CCCREI) was developed from the clinical scoring tool used at that college. The difference between faculty scores and students were determined by the Mann-Whitney U test. Analysis of data revealed no statistically significant difference in the perceived critical care role expectations between students and faculty.

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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Clinical education is an essential part of most allied health education programs, including Respiratory Care Programs, as well as nursing and medical schools. The clinical grades are based on the student's meeting or not meeting behavioral competencies. If students and teachers have different perceptions of what is expected of these students, the students may not perform well because he or she does not understand the clinical role expectations.

Statement of the Problem

The problem for this study was: Is there a difference in the role expectations between Level I critical care clinic students and the clinical faculty of a respiratory care program at a large metropolitan community college?

Statement of the Purposes

The purposes of this study were as follows:

1. To determine the role expectations for Level I critical care clinic students.
2. To determine the role expectations of clinical faculty for Level 1 critical care clinic students.

3. To determine the difference between the role expectations of the Level I critical care clinic students and the clinical faculty.

4. To determine the difference between the role expectations of the Level I critical care clinic students and clinical faculty by item.

5. To determine ex post facto reliability of the Critical Care Clinic Role Expectation Inventory (CCREI).

Hypothesis

The hypothesis tested in this study was as follows: There is no statistically significant difference between the role expectations of the Level I critical care clinic students and the clinical faculty.

Definition of Terms

For the purposes of this study the following terms were defined:

1. Clinical Faculty. Instructors engaged by the community college to teach Level I Respiratory Care students in the critical care clinical setting.

2. Critical Care Clinic. A summer course consisting of 24 consecutive 8 1/2 hour days, excluding weekends, of clinic in the intensive care units of three metropolitan hospitals. Skills practiced include ventilator care as well as general care modalities performed in a critical care setting.

3. Critical Care Clinic Student Role Expectations. Perceived level of participation and performance by Level I students in the critical care clinic environment as measured by the Critical Care Clinic Role Expectation Inventory (CCREI). These perceptions relate to clinical objectives, performance objectives, behavioral objectives, and clinical competencies.

4. Level I Students. The students enrolled in the first year critical care clinic course. All students have completed two semesters of respiratory care courses, including a one semester general care clinic prior to taking the critical care clinical course.

5. Perception. The act of understanding due to the senses, rather than through learning activities.

6. Student Role. Function performed by the learner in the critical care clinical setting in a Respiratory Care Program.

Assumptions

The following assumptions were basic to this investigation:

1. Perceptions and behaviors are complex.
2. Role expectations can be measured.
3. Faculty and students have role expectations of level I Respiratory Care Students in the critical care clinic.
4. Faculty and students will answer the self-report inventory accurately.

Limitations

The following were considered limitations of this study:

1. Students and faculty from only one program were used.
2. A sample of convenience was used, which may influence generalizability.
3. Small sample size may influence external validity.

Significance of the Study

Determining the perceived differences between faculty and student role expectations for the critical care clinic may allow the faculty opportunities to influence these expectations. Knowledge of role expectations may assist in decreasing the anxiety level of the students prior to entering the clinic. It may also provide faculty opportunities to review the teaching/learning process in the Respiratory Care classes prior to the critical care clinic. Hopefully, "teachable moments" may be found to increase the confidence and productivity of the students in the critical care clinic.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter reviews literature in three major areas. First clinical education, both in general and in the critical care setting is reviewed. Secondly, the clinical evaluation process, including clinical competencies and performance objectives were examined. The last area of review is the student role and perceived expectations of that role.

Clinical Education

Clinical education is an important component of most allied health programs. The clinical setting is the point of synthesis for theories learned in the lecture and laboratory settings. Successful integration of these theories into the clinic is paramount to the student's professional development. Infante stated (1975, p. 12) "The clinical laboratory is the place where the student comes in contact with the client, patient, pupil, or other consumer of his service for the purpose of testing his theories and learning the facts."

Swinehart and Meyers (1992) investigated focus groups of students, faculty and clinicians to identify the purpose of Level I fieldwork in Occupational Therapy. Students and clinicians agreed upon three purposes: (a) apply theory to practice, (b) develop confidence, and (c) separate reality from idealism. Students and faculty also agreed on three: (a) apply theory to practice, (b) expand exposure to practice settings and (c) observe professional role models. Clinicians and faculty agreed on two purposes: (a) apply theory to practice and (b) develop technical and interpersonal skills.

Irby (1986) identified three positive characteristics of clinical education: (a) the problem centered approach, (b) the use of an experience based learning model, and (c) the combination of both individual and team teaching. The patient is the focus of clinical education, providing multiple learning opportunities for the student from a problem-based perspective. Experiential learning allows the student to learn by doing, rather than assimilating information from a lecture format. Experiential learning is associated with increased recall, compared with traditional lecture methods. The third advantage of clinical education is the use of both team and individual learning. The

interaction between students, other health care workers and the clinical instructor enhances the learning opportunities.

Irby (1986) identified areas that may detract from an effective clinical experience. These are: (a) limited emphasis upon problem-solving, (b) lack of clear expectations for student performance, (c) inadequate feedback to students, and (d) inappropriate role models and clinical settings. The concentration on task performance leaves little time for thinking. If students are required to complete a specified number of duties in a specific time period, there may not be time to devote to problem solving. Secondly, if the objectives of the clinical experience are not clearly stated, different students may have different clinical experiences with the same clinical setting or instructor. Thirdly, if feedback is not prompt and constructive, students may not be able to change undesirable behaviors. Finally, the role models to which students are exposed in clinic may vary and may not be appropriate in given settings.

Flagler, Loper-Powers, and Spitzer (1988) surveyed 155 baccalaureate nursing students at the completion of their maternity nursing course in order to identify nursing instructor behaviors that could help or hinder self-confidence. The three most commonly chosen positive

behaviors were giving positive feedback, accepting students' questions and encouraging students to ask questions.

Another instructor behavior that was identified as helping enhance self-confidence was clarifying the purpose of the instructor's presence in observing the student providing patient care.

Wiseman (1994) studied junior and senior baccalaureate students to study role modeling behaviors by nursing faculty. She found agreement by both groups of students that role modeling behaviors are important and that students can identify them. Among the behaviors listed as important are: (a) providing a positive atmosphere for students to learn, (b) giving positive feedback and (c) giving negative feedback in a constructive manner. She advises clinical faculty to identify which behaviors they wish to promote and actively model these behaviors.

DeClute and Ladyshefsky (1993) compared two clinical instruction models used in physical therapy education programs. The traditional method was a one-to-one student to clinical preceptor ratio. They compared this method to a collaborative method using one preceptor for two students. They compared clinical competency evaluations of students in one-to-one versus two-to-one ratios and found that in the collaborative model, where the students were encouraged to

interact, the performance levels were statistically higher than in the one-to-one groups. Barnard and Dunn (1994) reviewed clinical education models in nursing schools in Australia. There are currently several models being used. The traditional model is one instructor with 8 to 10 students using the nursing staff to assist in overseeing the student's performance. Other models included heavy use of simulations prior to the clinic and then using an increased student-teacher ratio, blocks of clinic interspersed with teaching blocks to more closely match teaching with clinical experience and the use of focused learning where students focused on specific areas of care. The authors stressed the importance of linking course and student goals to clinical experiences, whatever the model.

Currently, patient care is taught in the classroom and intricacies of clinical practice are taught in the clinical setting. Packer (1994) proposes an alternative, to teach clinical practice in the classroom, using small classes so that teacher-student interaction is enhanced. In addition to clinical skills, she suggests students be taught other critical skills necessary to implement patient care. She includes planning of care, teaching patients and family, setting priorities, time management, and delegation skills.

She also advocates including interpersonal and interdisciplinary interaction skills as well as coping skills. Clinical practice would then enhance and mirror what is taught in the classroom.

Oermann (1991) studied the effectiveness of a critical care nursing course in preparing students for clinical practice in critical care. She randomly placed students in one of three groups. There were two experimental groups, one receiving the lecture component of a 14 week critical care course and the other receiving both the lecture component and a clinical component. The control group were senior nursing students not participating in the critical care course. Those students participating in the critical care course had greater knowledge of critical care and also had more positive perceptions of critical care nursing than did other students. Since clinical practice is an important component of many allied health programs, careful attention to enhancing the experience will improve the outcomes of the students.

Clinical Evaluation

Clinical evaluation poses a unique problem because so many areas of competency must be assessed (Morgan & Irby, 1978, p. 26). Faculty must assess the student's knowledge

base, their ability to perform critical tasks and their affective domain (the ability to interact with patients, staff, instructors, and other students). Assessment of the affective domain is one of the most difficult tasks. This evaluation relies on high-level inferences from finite behaviors and there is a great deal of subjectivity in these inferences, therefore, such evaluations may be open to question (Morgan & Irby, 1978, p. 70). Three approaches have been suggested to alleviate the subjectivity of assessment of the affective domain: The behavioral orientation, the psychometric orientation, and the counseling orientation (Morgan & Irby, 1978, pp. 70-71). The behavioral orientation assumes behavior is concrete and observable and that changes in behavior can lead to changes in attitude. The psychometric orientation assumes that attitudes and values are psychological constructs that can be measured by responses to standardized tests. The counseling orientation assumes that students will change behavior and attitudes only if they understand themselves more fully.

Bondy (1983) described a five point rating scale for evaluation of student clinical performance. This scale divides the practice into three main areas: (a) professional standards and procedures for the behavior,

(b) qualitative aspects of the performance, and (c) assistance needed to perform the behavior. She also identified five levels of clinical performance: independent, supervised, assisted, marginal, and dependent for each area of evaluation. Each level is defined behaviorally for each of the three areas. This method of evaluation was designed to decrease the subjectivity of clinical evaluation and increase the objectivity.

Krichbaum, Rowan, Duckett, Ryden, and Savik (1994) also developed a clinical evaluation tool. They formulated 10 descriptors of excellent nursing care. These descriptors became the clinical evaluation tool. One advantage of a general tool is that it is able to be used across courses rather than have objectives specific to a given course. These authors used Bondy's rating scale described above to rate each descriptor. Kirchbaum, et al. (1994) further modified each descriptor to behaviorally define each level. They then tested their tool by evaluating nursing students in seven clinical courses at junior and senior baccalaureate levels and found the instrument to be reliable across all clinical levels.

Johnson, Lehman and Sandoval (1988) described the use of a two-day test based on a clinical situation as a summative evaluation for the clinical setting. The

examination uses video taped sessions as well as written information and the student is asked questions about various aspects of nursing care based on the situation. Because it is video taped and written, each student will get the exact same test. In the clinic the situations often vary from student to student making the evaluation environment vary. The authors stated that they have used this summative evaluation successfully at their institution for three years.

Student Role and Perceived Expectations

Understanding what the students believe should be achieved during the clinical rotations can help the instructor structure the clinic for more effective teaching (Dowling & Wittkopp, 1982). Further, understanding the differences between the expectations of the students and faculty can also guide the clinical experiences (Neville & Crossley).

Wilson (1994) studied the perspectives of learning in the clinical setting of seniors in a baccalaureate nursing program. She discovered that students perspectives included student goals; actions consistent with these goals; criteria for goal achievement; and perceptions of the student, instructor and staff nurse roles. Wilson was able to

identify six major goals of these students, including: "to cause no harm to a patient, to help patients, to integrate theory-based knowledge from lecture and reading into clinical practice, to learn nursing clinical practice skills, to look good as a student, and to look good as a nurse."

Windsor (1987) also studied senior nursing student's view of the clinical learning experience. She found that nursing students hold definite ideas on what makes an effective clinic, what skills should be performed during clinic, and what is detrimental to the clinical experience. She also reported specific stages of development in the clinic. During the first stage, students reported being very nervous about even the simplest tasks. During the second stage, students "began to explore other aspects of the nursing profession" (p. 152). The final stage was characterized by independence and confidence.

Reider and Riley-Giomariso (1993) studied senior baccalaureate nursing students before and after a clinical nursing leadership experience. From the pre-experience phase they found anticipatory anxiety consistent with Windsor's findings. They also found students could identify the leadership role but had an "inflated view" of the leadership role. Finally, they found students had positive

expectations of the value of the upcoming clinical experience.

Dowling and Wittkopp (1982) assessed the students' perceived supervisory needs from students in six Michigan speech-language pathology training programs. Their results revealed students want, among other things, clearly outlined format and expectations for report writing, evaluative feedback following an observation, positive and negative feedback about their clinical behavior, and regular individual conferences with their supervisor. The students studied did not like clinical experiences with no feedback.

Neville and Crossley (1993) compared the perception of the role of the clinical tutor between physical therapy students and physical therapy clinicians. They defined clinical tutor as the faculty member responsible for overseeing the clinical rotation. They found statistically significant differences on several items. Seventy percent of students felt feedback on teaching methods would be useful but only 50% of clinicians agreed. Seventy-nine percent of the students felt the clinical tutor should not assist in the assessment of the students while 54% of clinicians agreed with the students. Both groups felt strongly (80% for students, and 96% for clinicians) that knowing the student's level of knowledge and clinical

experience prior to the start of the rotation would be helpful.

Kleehammer, Hart and Keck (1990) examined nursing students' perceptions of anxiety-producing situations. Several situations were identified by the students. Eighty-three percent listed the initial clinical experience as anxiety producing. This finding is not surprising as many people have a fear of the unknown. The authors suggested that faculty explore ways to acquaint students with the unit prior to requiring patient care in an attempt to decrease this anxiety.

These studies suggested that students have expectations for the clinical experience. They also suggested some of the expectations may cause anxiety and some may be incorrect. If these misconceptions can be identified and corrected prior to the clinical experience, perhaps the anxiety can be decreased.

Summary

Clinical education has been found to allow the students to synthesize all prior learning. There are definite advantages and disadvantages to the clinical setting. Students could identify positive and negative aspects of clinical education (Flagler, Loper-Powers, & Spitzer, 1988).

Clinical evaluation, while necessary, is also subjective. Attempts have been made to increase the objectivity of this evaluation (Bondy, 1983; Morgan & Irby, 1978; Kirchbaum, et al., 1994; and Johnson, et al., 1988). Finally, students could identify their expectations and perceptions of clinical settings.

CHAPTER III

METHODOLOGY

This is a descriptive study using a pretest only design. Students and clinical instructors from a metropolitan community college were surveyed prior to the start of the summer critical care clinic course. This chapter discusses the setting, population, and sample. It also presents a description of the design of the inventory and the determination of validity and reliability of that instrument. Provisions for confidentiality and anonymity and treatment of data are discussed.

Population and Sample

The population was identified as all the Level I Respiratory Care students at a large metropolitan community college and the critical care clinical instructors at the same community college. A nonrandomized sample of convenience was used because the number of students and instructors was small. The sample was the entire population. There were 13 students and 6 instructors. Of the 13 students, 2 failed to complete the inventory. One of

those two did not complete item 5. These two were excluded from the Mann-Whitney U test. They were included in the descriptive statistics by inventory item because the sample size was small, to make use of all data available.

Human Subjects Review

The Human Subject Review Committee of Texas Woman's University accepted the protocol to collect the data for this study. A letter of cooperation was obtained from the community college (see Appendix A).

Only volunteers were used in this study. In order to protect the anonymity and confidentiality of the subjects no names were placed on the inventories which were given to the subjects. Students were assured that completion of the inventory would in no way influence their grade for the course. Return of the inventory indicated consent to participate in this study. The faculty was surveyed by mail and the envelopes were coded for follow-up purposes only. Lastly, only group data were used.

Instrumentation

A 30-item investigator-made Critical Care Clinic Role Expectation Inventory (CCCREI) was developed (see Appendix B). This inventory was adapted from the scoring instrument

used by the clinical instructors to determine if the students have met all clinical competencies (see Appendix C). This instrument was developed by consensus of all the full-time faculty of this Respiratory Care program. Item 1 was demographic to determine which of the respondents were students and which were faculty members. The other 29 items were designed to assess the respondent's role expectations for critical care clinic students. A 5-point Likert scale was used to elicit responses to items 2 through 29, as follows: SA = strongly agree, A = agree, U = undecided, D = disagree, and SD = strongly disagree.

Scoring

Nineteen questions (2, 3, 4, 5, 6, 7, 8, 10, 12, 15, 17, 18, 20, 23, 24, 25, 27, 28, and 30) were favorably stated and ten items (9, 11, 13, 14, 16, 19, 21, 22, 26, and 29) were unfavorably worded to avoid a response set bias. The scoring system for the Likert-type items was: Strongly agree was given 5 points, Agree -- 4 points, Undecided -- 3 points, Disagree -- 2 points and Strongly disagree -- 1 point for the favorably worded items. Unfavorably worded items were scored in the reverse manner. This resulted in a range of 38 to 190 for possible scores. A summative score for each respondent was calculated.

Validity and Reliability

To determine content validity three Respiratory Therapists who have been closely allied with the selected community college program were consulted as experts. They included the former Clinical Coordinator, the former Satellite Program Coordinator and a current clinical instructor who was not teaching during the 1995 summer session. These individuals have worked with the students in the critical care environment and understand the expectations placed on these students. Each expert was mailed a cover letter and the Critical Care Clinic Role Expectation Inventory evaluation form shown in Appendix D. Each expert was given two weeks to review the Critical Care Clinic Role Expectation Inventory and made comments on the Critical Care Clinic Role Expectation Inventory Expert Evaluation Form. Any expert not responding within two weeks was contacted again. Changes were made according to a majority recommendation. Thus, only those items where at least two experts suggested the same change were changed. For example, item 6 originally read: "Relies on the instructor to indicate goals to be achieved during the clinical day" and was to be unfavorably scored (see Appendix B). Two of the three experts suggested it be changed to read: "In conjunction with the instructor, sets goals to be achieved

each clinical day." This change was made (see Appendix E). Item 12 was changed from: "Understands directions when given the first time." to "Demonstrates ability to understand directions when given the first time." One expert suggested all items be changed to read favorably. This change was not made, because Likert inventories use favorable and unfavorable statements.

Collection of Data

The survey instrument was administered in a classroom at a local community college to all students present on the last day of class prior to the start of the first critical care clinic rotation. Each participant received a packet which included a cover letter (see Appendix F), instructions and the inventory. The investigator distributed the inventories, read the cover letter and instructions orally, orally described the research hypothesis and the general procedure and answered questions of the participants. Each participant was informed that participation was voluntary and he or she could withdraw at any time. After distributing the inventories, presenting the information and answering questions, the investigator left the room. Each participant was given 30 minutes to complete the inventory. Upon completion of the CCCREI, each participant and

nonparticipant placed the inventory in a collection envelope. A designated student returned all surveys to the investigator once all CCCREI had been returned.

During the last week of class prior to the start of the critical care clinic, the clinical instructors were mailed a packet. The packet included a cover letter informing the clinical instructors of the research hypothesis and general procedures, the Critical Care Clinic Role Expectation Inventory, and a preaddressed, stamped envelope (see Appendix E). The return envelopes used by the faculty were coded for follow-up purposes only. The faculty were randomly listed and then assigned a number from one to six. This number was placed under the flap on the envelope. As surveys were returned, the respondent was checked off on the master list with respondent numbers. Those subjects not returning their inventory within two weeks were contacted by phone and a new packet was sent. These subjects were given an additional two weeks to return the packet. All faculty packets were received by the end of this additional two week period.

Treatment of Data

The perceived role expectations were determined for each group. The difference between faculty scores and students

were determined by the Mann-Whitney U test. The differences were determined for the total test score. The level of significance was set at 0.05. Descriptive statistics (frequency, percent, and mean) were used to describe item by item responses. The ex post facto reliability coefficient (0.70) was determined using the Cronbach's alpha test.

CHAPTER IV

FINDINGS

This descriptive study was conducted to determine if there was a difference in the perceived role expectations for Respiratory Care students in a critical care clinic between the faculty members and the students. This chapter will review the subject response rate and a summary of the findings.

Response Rates of Participants

Inventories were distributed to 13 Respiratory Care students. All students returned the instrument; however, two students had not completed the CCCREI and were eliminated from the data for testing the hypothesis but were included in the descriptive statistics related to CCREI items. This resulted in an 85% return rate for hypothesis testing. The inventory was mailed to 6 faculty members and all were returned, resulting in a 100% return rate.

Findings by Hypothesis

The hypothesis tested in this study was: There is no statistically significant difference between the role expectation perception level of the Level I critical care clinic students and the clinical faculty. A separate rank sum was determined for students and faculty. The rank sum for students was 111.0 and for faculty 42.0. The Mann-Whitney U test statistic was 45.00 and p value was 0.228. Therefore, there was no significant difference between faculty and students in their critical care clinic role expectations.

Additional Findings

Descriptive statistics (frequency, percentage and mean score) were used to describe item by item responses. Item 8, "Assumes responsibility for his or her own actions," the students agreed more strongly than the faculty (see Table 1). Seventy-seven percent of students chose strongly agree, and 50% of faculty did so. It is interesting to note that, regardless of the agree level, 100% of the students (13) and faculty (6) perceived that Level 1 critical care clinic students are expected to assume responsibility for his or her own actions. Item 11, "When assigned tasks are

Table 1

Student and Faculty Item Responses by Frequency and Percentage

Item	Group	<u>SA</u>		<u>A</u>		<u>U</u>		<u>D</u>		<u>SD</u>	
		f	%	f	%	f	%	f	%	f	%
2	Students	13	100.0	0	0.0	0	0.0	0	0.0	0	0.0
	Faculty	6	100.0	0	0.0	0	0.0	0	0.0	0	0.0
3	Students	12	92.3	1	7.7	0	0.0	0	0.0	0	0.0
	Faculty	6	100.0	0	0.0	0	0.0	0	0.0	0	0.0
4	Students	12	92.3	1	7.7	0	0.0	0	0.0	0	0.0
	Faculty	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0
5	Students	6	50.0	6	50.0	0	0.0	0	0.0	0	0.0
	Faculty	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0
6	Students	5	38.5	7	53.8	1	7.7	0	0.0	0	0.0
	Faculty	2	33.3	4	66.7	0	0.0	0	0.0	0	0.0
7	Students	7	53.8	6	46.2	0	0.0	0	0.0	0	0.0
	Faculty	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0
8	Students	10	76.9	3	23.1	0	0.0	0	0.0	0	0.0
	Faculty	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0
9	Students	3	23.1	1	7.7	2	15.4	3	23.1	4	30.8
	Faculty	0	0.0	2	33.3	1	16.7	2	33.3	1	16.7
10	Students	5	38.5	7	53.8	1	7.7	0	0.0	0	0.0
	Faculty	2	33.3	4	66.7	0	0.0	0	0.0	0	0.0
11	Students	3	23.1	6	46.2	0	0.0	3	23.1	1	7.7
	Faculty	0	0.0	3	50.0	1	16.7	1	16.7	1	16.7
12	Students	4	30.8	7	53.8	0	0.0	2	15.4	0	0.0
	Faculty	1	16.7	3	50.0	0	0.0	2	33.3	0	0.0
13	Students	0	0.0	0	0.0	0	0.0	3	23.1	10	76.9
	Faculty	0	0.0	0	0.0	0	0.0	1	16.7	5	83.3
14	Students	0	0.0	0	0.0	5	38.5	6	46.2	2	15.4
	Faculty	0	0.0	0	0.0	1	16.7	4	66.7	1	16.7
15	Students	6	46.2	6	46.2	0	0.0	1	7.7	0	0.0
	Faculty	1	16.7	5	16.7	0	0.0	0	0.0	0	0.0
16	Students	0	0.0	0	0.0	0	0.0	5	38.5	8	31.5
	Faculty	0	0.0	0	0.0	0	0.0	2	33.3	4	66.7
17	Students	10	76.9	3	23.1	0	0.0	0	0.0	0	0.0
	Faculty	4	66.7	2	33.3	0	0.0	0	0.0	0	0.0
18	Students	5	38.5	5	38.5	2	15.4	1	7.7	0	0.0
	Faculty	4	33.7	2	33.3	0	0.0	0	0.0	0	0.0
19	Students	0	0.0	0	0.0	0	0.0	10	76.9	3	23.1
	Faculty	0	0.0	1	16.7	0	0.0	4	66.7	1	16.7
20	Students	6	46.2	4	30.8	3	23.1	0	0.0	0	0.0
	Faculty	2	33.3	3	50.0	1	16.7	0	0.0	0	0.0

Table 1 (cont)

Item	Group	<u>SA</u>		<u>A</u>		<u>U</u>		<u>D</u>		<u>SD</u>	
		f	%	f	%	f	%	f	%	f	%
21	Students	0	0.0	0	0.0	0	0.0	1	7.7	12	92.3
	Faculty	0	0.0	1	16.7	0	0.0	2	33.3	3	50.0
22	Students	0	0.0	0	0.0	2	15.4	2	15.4	9	69.2
	Faculty	0	0.0	0	0.0	0	0.0	4	66.7	2	33.3
23	Students	6	46.2	6	46.2	0	0.0	1	7.7	0	0.0
	Faculty	2	33.3	3	50.0	0	0.0	1	16.7	0	0.0
24	Students	7	53.8	6	46.2	0	0.0	0	0.0	0	0.0
	Faculty	1	16.7	4	66.7	0	0.0	1	16.7	0	0.0
25	Students	7	53.8	5	38.5	1	7.7	0	0.0	0	0.0
	Faculty	2	33.3	4	66.7	0	0.0	0	0.0	0	0.0
26	Students	0	0.0	0	0.0	0	0.0	5	38.5	8	61.5
	Faculty	0	0.0	1	16.7	0	0.0	2	33.3	3	50.0
27	Students	10	76.9	3	23.1	0	0.0	0	0.0	0	0.0
	Faculty	1	16.7	5	83.3	0	0.0	0	0.0	0	0.0
28	Students	7	53.8	5	38.5	1	7.7	0	0.0	0	0.0
	Faculty	1	16.7	5	83.3	0	0.0	0	0.0	0	0.0
29	Students	0	0.0	1	7.7	1	7.7	6	46.2	5	38.5
	Faculty	0	0.0	0	0.0	0	0.0	4	66.7	2	33.3
30A	Students	10	90.9	1	9.1	0	0.0	0	0.0	0	0.0
	Faculty	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0
30B	Students	10	90.9	1	9.1	0	0.0	0	0.0	0	0.0
	Faculty	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0
30C	Students	11	100.0	0	0.0	0	0.0	0	0.0	0	0.0
	Faculty	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0
30D	Students	8	72.7	3	27.3	0	0.0	0	0.0	0	0.0
	Faculty	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0
30E	Students	10	90.9	1	9.1	0	0.0	0	0.0	0	0.0
	Faculty	4	66.7	2	33.3	0	0.0	0	0.0	0	0.0
30F	Students	7	63.6	3	36.4	0	0.0	1	9.1	0	0.0
	Faculty	4	66.7	2	33.3	0	0.0	0	0.0	0	0.0
30G	Students	8	72.7	2	18.2	0	0.0	1	9.1	0	0.0
	Faculty	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0
30H	Students	7	63.6	3	27.3	0	0.0	1	9.1	0	0.0
	Faculty	2	33.3	3	50.0	1	16.7	0	0.0	0	0.0
30I	Students	5	45.5	3	27.3	1	9.1	2	18.2	0	0.0
	Faculty	2	33.3	3	50.0	1	16.7	0	0.0	0	0.0
30J	Students	5	45.5	4	36.4	1	9.1	1	9.1	0	0.0
	Faculty	2	33.3	3	50.0	1	16.7	0	0.0	0	0.0

Note. SA = Strongly agree; A = Agree; U = Undecided; D = Disagree; SD = Strongly disagree

n = 13 students on items 2 through 4 and 6 through 29

n = 12 students on item 5

n = 11 students on items 30A through 30J

n = 6 faculty for all items

Question 1: The subject indicated his or her student or faculty status.

completed awaits additional assignments from instructor," there was no clear consensus in either group. Fifty percent of faculty chose the agree category, but one faculty member selected each of the following categories: undecided, disagree and strongly disagree (See Table 1). Students also varied on this item. Twenty-three percent of these subjects selected the strongly agree category, 46.2% chose agree, and 23.1% chose disagree and 7.7% chose strongly disagree. Item 12, "Demonstrates ability to understand directions when given the first time," also yielded a wide variety of answers. Thirty-one percent and 53.8% of students, respectively chose strongly agree and agree, but two students chose the disagree category. Whereas, 17% and 50% of faculty selected the strongly agree and strongly disagree categories on this item; 33.3% chose disagree. Item 14, "Has difficulty in the decision making process," 83.4% of faculty selected either disagree or strongly disagree, but only 61.6% of students selected those answers.

On several items (2, 5, 6, 9, 10, and 30J), faculty and student mean scores were very similar or identical (See Table 2). Other items showed a larger range in the mean scores. Item 21, "Insensitive to patients' needs and rights in planning and implementing care," the faculty mean was 1.83, while the student mean score was 1.08. Item 18,

Table 2

Student and Faculty Mean Scores by Item

Item Number	Student Mean Score	Faculty Mean Score
2	5.0	5.0
3	4.92	5.0
4	4.92	4.83
5	4.5	4.5
6	4.31	4.33
7	4.54	4.5
8	4.77	4.5
9*	2.69	2.67
10	4.31	4.33
11*	3.54	3.0
12	4.0	3.5
13*	1.23	1.17
14*	2.23	2.0
15	4.31	4.17
16*	1.39	1.33
17	4.77	4.67
18	4.08	4.67
19*	1.77	2.17
20	4.23	4.17
21*	1.08	1.83
22*	1.46	1.67
23	4.31	4.0
24	4.54	3.83
25	4.46	4.33
26*	1.38	1.83
27	4.77	4.17
28	4.46	4.17
29*	1.85	1.67
30A	4.91	4.83
30B	4.91	4.83
30C	5.0	4.83
30D	4.73	4.83
30E	4.91	4.67
30F	4.45	4.67
30G	4.45	4.5
30H	4.45	4.17
30I	4.0	4.17
30J	4.18	4.17

Note. *Indicates reverse scored item.

"Recognizes limitations of practice granted by the instructor," the student mean was 4.08 and the faculty mean was 4.67. Item 19, "Has difficulty accepting constructive criticism," the student mean was 1.77 and the faculty mean was 2.17.

The ex post facto reliability of the CCCREI was determined. Using Cronbach's alpha test the reliability coefficient was found to be 0.70. According to Balian (1994, p. 108), this value (0.70) gives the inventory a "fair" reliability rating.

Summary of Findings

In summary, 11 students and 6 faculty completed the survey instrument. There was no statistically significant difference in the perceived role expectations of students and faculty for the Level I Critical Care Clinic.

CHAPTER V
SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

This chapter presents a summary of this study, conclusions, and implications for respiratory care education. Recommendations for future studies are included.

Summary

Most health preparation programs require some type of clinical practice. This study sought to determine the difference between the role expectations of the Level I critical care clinic students and the clinical faculty.

Respiratory Care Program clinical faculty and Level I students in a large metropolitan community college were utilized for this study. Data were collected from the students and faculty using the Likert-type, researcher-developed Critical Care Clinic Role Expectations Inventory. The inventory was developed from the critical care clinic evaluation instrument. Content validity was assessed by three respiratory care practitioners who have been intimately involved with this program. The ex post facto reliability was determined using Cronbach's alpha technique.

The hypothesis was tested using the Mann-Whitney U test and no statistically significant difference was found between faculty and student expectations.

Conclusions

Based on the findings of this study, the conclusion was that Level I students and faculty had similar role expectations for behavior for the critical care clinical experience.

Discussion

The finding that the role expectations were similar for faculty and students has several implications. It may mean that the faculty expectations were communicated well to the students. It could also mean that the students learned their expectations from faculty members. The levels of stress in the Level I students may still have been high, but an agreement on expectations may have helped to lower the students' stress levels. Some stress is beneficial and a complete lack of stress is not a desirable situation. Stress level was not measured in this study, so this can only be speculated.

There may be other reasons for the lack of difference in perceived expectations. First, the sample size, using a non-randomized sample of convenience, was very small so the

findings may be skewed and cannot be generalized from this exploratory study. The sample size might have been increased by using students and faculty from more than one institution. However, some of the dilemmas of using other institutions were that different Respiratory Care Programs offer the critical care clinic at different times, use different evaluation techniques, and may have a different cultural and gender mix of students. Therefore using students and faculty from another school or schools may not have been representative of the population at the school that was studied.

Second, the students had seen the tool from which the survey was developed in their prior general care clinic rotation. This may have influenced their perceptions of role expectations. Students may also have responded in the way they thought they were "supposed to." It would be interesting to assess the same questions prior to any clinical rotation and prior to viewing the clinic evaluation tool. Another approach would be to use a tool not designed from their evaluation instrument.

No pilot test was used because of the small population. Thus, Cronbach's alpha analysis was used to assess the *ex post facto* reliability of the survey instrument. The reliability was 0.7 which is fair according to Balian (1994,

p. 108). A review of each item indicated a few items with a wide range of responses. The reliability coefficient would change by independently deleting the items noted: 14 ($r=.73$), 19 ($r=.72$), 21 ($r=.72$), 22 ($r=.74$), 26 ($r=.73$) and 29 ($r=.75$) would increase reliability. All of these items were unfavorably worded. This may have misled the respondents.

The Student Clinical Attribute and Characteristic Evaluation (SCACE) (Appendix C) was used in the development of the Critical Care Clinic Role Expectation Inventory. However, if a new inventory was created independent of the SCACE, the validity and reliability may improve. A more reliable instrument may have shown differences in the critical care clinic role expectation perceptions.

Students entering a critical care clinic for the first time appear to have an understanding of what is to be expected of them. Expectations may lead to anxiety related to these issues. Expectation anxieties were not measured in this study. However, a pre-clinic seminar for students to discuss their concerns might help clarify expectations. This expectation seminar could take several forms. Sophomore and freshman students might meet together so the freshmen could see that other students have been successful in that setting. The sophomores could give the freshmen

pointers on how to prepare for the clinic. The faculty could reinforce for the students that they would not be allowed in the clinic if the faculty did not feel they were ready. The faculty might also talk about their first clinical experiences and how they survived. The students themselves could reinforce each other. Also, talking among themselves, the students might realize they know more than they thought they did. Another strategy might be to pair sophomores with freshmen in a peer mentoring relationship. The sophomores could act as "big brother/sister" to the freshmen. This might help alleviate expectation concerns.

Another area of concern is the lack of references found in the area of Respiratory Care education. Most of the references found dealt with nursing education, medical education or other allied health disciplines, specifically physical and occupational therapy. This may be due, in part, to the lack of graduate level programs in Respiratory Care that encourage such research. It may also be due to the fact that most Respiratory Care programs are in community colleges. These colleges usually do not have a research requirement for their faculty, as opposed to four year institutions. The lack of this requirement would tend to decrease the number of studies performed.

Recommendations

Based on the findings of this study, the following recommendations for further research are made:

1. Replicate the study using a larger sample size of faculty and students from the clinical components of other Respiratory Care programs.

2. Replicate the study at different points in the program. For example, administering the instrument prior to each clinical course and comparing the student's score to see if exposure to the evaluation instrument changes their expectations.

3. Replicate the study to determine if there is a difference in the critical care clinic role expectations between full time college faculty and adjunct hospital based faculty.

4. Redesign the instrument to see if reliability can be improved.

REFERENCES

Balian, E. A. (1994) The Graduate Research Guidebook: A Practical Approach to Doctoral/Masters Research (3rd ed.) (p 108). New York: University Press of America.

Barnard, A. G., and Dunn, S. V. (1994). Issues in the organization and structure of clinical education for undergraduate nursing programs. Journal of Nursing Education, 33(9), 420-422.

Bondy, K. N. (1983). Criterion-referenced definitions for rating scales in clinical evaluation. Journal of Nursing Education, 22(9), 376-382.

DeClute, J. and Ladyshevsky, R. (1993). Enhancing clinical competence using a collaborative clinical education model. Physical Therapy, 73(10), 683-697.

Dowling, S. and Wittkopp, J. (1982). Students' perceived supervisory needs. Journal of Communication Disorders, 15, 319-328.

Flagler, S., Loper-Powers, S., and Spitzer, A. (1988). Clinical teaching is more than evaluation alone! Journal of Nursing Education, 27(8), 342-348.

Infante, M. S. (1975). The Clinical Laboratory in Nursing Education. New York: John Wiley and Sons, Inc.

Irby, D. M. (1986). Clinical Teaching and the clinical teacher. Journal of Medical Education, 61(9), 35-45.

Johnson, G., Lehman, B. B., and Sandoval, J. B. (1988). Clinical exam: A summative evaluation tool. Journal of Nursing Education, 27(8), 373-374.

Kleehammer, K., Hart, A. L., and Keck, J. F. (1990). Nursing students' perceptions of anxiety-producing situations in the clinical setting. Journal of Nursing Education, 29(4), 183-187.

Krichbaum, K., Rowan, M., Duckett, L., Ryden, M. B., and Savik, K. (1994). The clinical evaluation tool: A measure of the quality of clinical performance of baccalaureate nursing students. Journal of Nursing Education, 33(9), 395-404.

Morgan, M. K. and Irby, D. M. (1978). Evaluating Clinical Competence in the Health Professions. Saint Louis: The C. V. Mosby Company.

Neville, S., and Crossley, L. (1993). Clinical education: Perceptions of a clinical tutor's role. Physiotherapy, 79(7), 459-464.

Oermann, M. H. (1991). Effectiveness of a critical care nursing course: Preparing students for practice in critical care. Heart and Lung, 20(3), 278-283.

Packer, J. (1994). Education for clinical practice: An alternative approach. Journal of Nursing Education, 33(9), 411-416.

Reider, J. A., and Riley-Giomariso, O. (1993). Baccalaureate nursing students' perspectives of their clinical nursing leadership experience. Journal of Nursing Education, 32(3), 127-132.

Swinehart, S., and Meyers, S. K. (1992). Level I fieldwork: Creating a positive experience. The American Journal of Occupational Therapy, 47(1), 68-73.

Wilson, M. E. (1994). Nursing student perspective of learning in a clinical setting. Journal of Nursing Education, 33(2), 81-86.

Windsor, A. (1987). Nursing students' perceptions of clinical experience. Journal of Nursing Education, 26(4), 150-154.

Wiseman, R. F. (1994). Role model behaviors in the clinical setting. Journal of Nursing Education, 33 (9), 405-410.

APPENDIXES

APPENDIX A

Letter of Cooperation from Participating College

June 20, 1995

Dear Dr. (name withheld by request),

Clinical practice is an integral part of all health occupations programs to ensure competency of all students. The Respiratory Care Program, in particular, stresses critical care preparation. Determining the differences between faculty and student role expectations for the critical care clinic may allow the faculty to influence these expectations. This may assist in decreasing the anxiety level of the students prior to entering the clinic. In addition, it may allow faculty to increase the confidence and productivity of the students in the critical care clinic. Teachers of these students may review teaching strategies to improve basic knowledge level and reduce the anxiety level of students while they are working with patients. As part of the requirements for my master's degree, I am investigating the critical care student role expectations of Level I respiratory care students and the clinical faculty.

I would like permission to conduct a survey of the level one students and respiratory care clinical faculty this summer to determine if there are differences in the role expectations of the students and the faculty. This inventory will be conducted anonymously during class for the students and by mail for the clinical faculty meeting for faculty. I would like to conduct the survey on June 29, 1995. Please respond by filling in the enclosed form and returning it to me by June 23, 1995. If you have any questions, please call me at 231-4382. Thank you.

Sincerely,

Gretchen K. Riehl

TEXAS WOMAN'S UNIVERSITY
HEALTH STUDIES PROGRAM
COLLEGE PERMISSION FOR CONDUCTING SURVEY

The (college name withheld by request) grants to Gretchen K. Riehl, a student enrolled in the master's degree program in Health Studies at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Critical care clinic role expectations of Level I
respiratory care students.

Please read each item below and circle and initial the appropriate choice in parenthesis. You may fill in additional conditions if you wish. The conditions mutually agreed upon are as follows:

1. The college (may) (may not) be identified by name in the final report.
2. The names of consultative or administrative personnel in the college (may) (may not) be identified in the final report.
3. The college (wants) (does not want) a conference with the student when the report is completed.
4. Other (please fill in): _____
_____.

June 22, 1995
Date

Signature omitted by request
Signature of College

Gretchen K Riehl
Signature of Student

Barbara J. Tramer
Thesis Committee Chairperson

APPENDIX B

Original Critical Care Clinic Role Expectation Inventory

CRITICAL CARE CLINIC ROLE EXPECTATION INVENTORY

Directions: Read each item carefully. Each item describes a specific behavior that may be asked of the student in the critical care clinic rotation. For each statement, indicate whether you believe this behavior is expected of a student during a critical care clinic rotation by using the following scale:

SA - Strongly agree
 A - Agree
 U - Undecided
 D - Disagree
 SD - Strongly disagree

Mark your choices on the test by circling the appropriate letter(s). **DO NOT PLACE YOUR NAME ON THE INVENTORY.** For the first item, indicate if you are a student or faculty member by circling the appropriate word(s).

1. Arrives at the clinical site in his/her uniform.

SA A U D SD

2. Arrives at the clinical site at least five minutes prior to the start of the shift.

SA A U D SD

3. Arrives at the clinical site with a stethoscope.

SA A U D SD

4. If he or she is to be late or absent, he or she calls the instructor at least 30 minutes prior to the start of the clinic.

SA A U D SD

5. Relies on the instructor to indicate goals to be achieved during the clinical day.

SA A U D SD

6. Organizes assignments in order to assure that goals are achieved.
- SA A U D SD
7. Assumes responsibility for his/her own actions.
- SA A U D SD
8. Relies on instructor to find him/her when supervision is necessary.
- SA A U D SD
9. Knows his/her personal limitations.
- SA A U D SD
10. When assigned tasks are completed, awaits additional assignments from the instructor.
- SA A U D SD
11. Understands directions when given the first time.
- SA A U D SD
12. If directions are not understood, performs task without seeking further clarification.
- SA A U D SD
13. Has difficulty in the decision-making process.
- SA A U D SD
14. Communicates by using appropriate word choices to minimize ambiguity.
- SA A U D SD

15. Appears aloof and detached.
SA A U D SD
16. Consistently displays honest and forthright behavior.
SA A U D SD
17. Recognizes limitations of practice granted by the instructor.
SA A U D SD
18. Has difficulty accepting constructive criticism.
SA A U D SD
19. Actively participates in patient care plan as a collaborative member of the health care team.
SA A U D SD
20. Insensitive to patients' needs and rights in planning and implementing care.
SA A U D SD
21. Has limited knowledge of basic concepts.
SA A U D SD
22. Is quick to learn from new experiences.
SA A U D SD
23. Readily transfers theoretical knowledge to clinical situations.
SA A U D SD

24. Demonstrates an acceptable level of performance with minimal errors.

SA A U D SD

25. Inattentive to changes in patient's condition or needs.

SA A U D SD

26. Ensures that records kept are complete and concise.

SA A U D SD

27. Is able to complete delegated tasks in an appropriate time frame.

SA A U D SD

28. Is inefficient in the use or maintenance of equipment.

SA A U D SD

29. Upon completion of the critical care clinic, the Level I student will be able to perform the following procedures in the critical care environment.

a) Endotracheal suctioning

SA A U D SD

b) Medication nebulizer

SA A U D SD

c) Incentive spirometry

SA A U D SD

d) Oxygen Therapy

SA A U D SD

e) Intermittent Positive Pressure Breathing (IPPB)

SA A U D SD

d) Ventilator check

SA A U D SD

e) Ventilator circuit changeout

SA A U D SD

f) Ventilatory assessment (Weaning parameters)

SA A U D SD

g) Ventilator set-up and patient initiation

SA A U D SD

APPENDIX C

Student Clinical Attribute and Characteristic Evaluation

Student Clinical Attribute & Characteristic Evaluation

EXPECTED BEHAVIOR

Factor	1	2	3
Personal Appearance	Forgetful of standards of appearance or grooming, at times untidy or inappropriately dressed.	Usually presents clean and satisfactory appearance, rarely untidy or inappropriate.	Consistently neat and well groomed in accord with basic dress requirements.
Attendance & Punctuality	Is frequently absent or tardy; fails to give notification to appropriate personnel.	Is absent or late only under extenuating circumstances and with proper notification.	Is never absent and always arrives as scheduled (or early) for all rotations and activities.

SELF-DIRECTED BEHAVIOR

Factor	1	2	3
Organization & Efficiency	Makes some attempt to set goals and organize activities but many priorities are not achieved.	Usually establishes priorities and plans active-ties efficiently; most goals achieved as in-tended.	Organizes and plans assignments well; fails to achieve established goals only when unexpected circumstances intervene.
Dependability & Self-Direction	Reluctant to assume self-direction or independently initiate actions; requires close observation and supervision in most activities.	Is dependable and self-directed in assuming most responsibilities; is aware of limitations and seeks supervision and assistance when necessary.	Is generally able to assume responsibility for actions; usually initiates independent action and self-direction; requires minimal supervision.
Initiative	Requires occasional prodding to keep up with delegated tasks; does not use time constructively.	Keeps pace with regular work assignments and occasionally seeks out new activities.	Readily accepts assigned activities and constructively exploits their learning potential; frequently seeks out new or additional learning experiences.
Comprehension & Judgment	Requires needless re-explanations; has difficulty in the decision making process .	Seldom requires repetition of explanations or referral to instructions; demonstrates good judgment in most situations.	Grasps directions quickly and accurately; makes decisions based upon sound judgment.

OTHER-DIRECTED BEHAVIOR

Factor	1	2	3
Verbal Communication	Has difficulty in communicating meaning or intent; is ambiguous or indefinite; chooses misleading words, grammar, or context.	Generally initiates adequate communication with infrequent errors of indefiniteness or ambiguity; seldom displays misleading word choices, grammar, or context.	Initiates goal-directed communication that is informed, deliberate, and unambiguous.
General Demeanor	Abrupt and anxious at times, is detached or unresponsive; must be reminded to be tactful and courteous.	Usually pleasant and courteous; exhibits tactlessness or abruptness only in extenuating circumstances.	Consistently pleasant and courteous; is poised, accepting, and tactful.
Integrity/Ethics	Disregards patient's dignity or welfare and right to privileged communication; demonstrates negligence in acknowledging limitations of practice and responsibility/authority granted by the physician; fails at times to be forthright and honest.	Consistently displays concern for the dignity and welfare of patients and ensures confidence of privileged information; consistently displays forthright and honest behavior.	Displays concern for the dignity and welfare of patients; ensures confidence of privileged information; is honest and forthright. Fosters professional integrity and honest, ethical behavior in others.
Student Role/Professionalism	Fails to recognize limitations of practice and responsibility/authority granted by instructor, supervisor or physician; fails to act in accordance with current personal and professional preparation.	Recognizes limitations of practice and responsibility/authority granted by instructor, supervisor or physician; Acts in accordance with current personal and professional preparation.	Recognizes limitations of practice and responsibility/authority granted by instructor, supervisor or physician. Seeks to expand individual limits within the scope of safe practice.
Cooperativeness with/ Receptivity to Instructions	Resists or is unresponsive to instruction, supervision or guidance. Has difficulty accepting constructive criticism.	Accepts supervision and guidance; applies recommendations and is receptive to new ideas, suggestions and constructive criticism.	Incorporates supervision and guidance positively and applies recommendations to improve knowledge, skills, and attitudes.
Collaborativeness (With the Health Care Team)	Fails to act effectively as a member of the health care team; does not contribute to implementation of the patient care plan.	Actively participates in patient care plan as a collaborative member of the health care team.	Fosters collaboration with the health care team to enhance the patient care plan.
Patient Rapport and Consideration	Ignores or is inattentive to patient's rights or comfort; Inadequately gains patient's confidence; fails to be considerate, respectful and courteous; fails to communicate sincerity or consideration; fails to achieve rapport with patients.	Sensitive to patients' needs and rights in planning care and implementing care; communicates adequately to gain patient's confidence and is considerate respectful and courteous.	Sensitivity to patient's needs and rights in planning and implementing care fosters patient confidence and enhances therapeutic outcomes.

KNOWLEDGE

Factor	1	2	3
Knowledge & Comprehension	Has limited understanding of basic concepts; is unsure of essentials.	Displays adequate knowledge of essential concepts.	Demonstrates above average to superior knowledge and comprehension beyond that essential for routine practice.
Learning Adaptability	Is slow in learning new tasks and has some difficulty accommodating to changing conditions.	Grasps new experiences and adjusts to changes when given a satisfactory time interval.	Is quick to learn from new experiences; readily accommodates changed conditions or situations.
Theory Integration	Exhibits a superficial understanding of the application of theory in clinical activities.	Demonstrates how essential aspects of theory relate to specific clinical situations.	Readily transfers theoretical knowledge to clinical situations.

PERFORMANCE

Factor	1	2	3
Thoroughness & Safety	Demonstrates careless or negligent behavior, lacking attention to details; errors occur and safety considerations are overlooked; requires close supervision.	Demonstrates an acceptable level of performance with minimal (though not critical) errors; safety considerations are not over-looked.	Consistently demonstrates thoroughness, accuracy, attention to detail; performance exceeds safety expectations and is essentially error-free.
Observation, Assessment, Reporting of Patient's Status & Needs	Is careless in observing and assessing patient's condition or needs; fails to communicate changes to the appropriate personnel.	Alert to changes in patient status or needs, communicates patient's changes to appropriate personnel.	Demonstrates advanced observations or assessments; recognizes subtle changes in patient condition or needs, and reports to appropriate personnel.
Record Keeping	Is careless in completing proper records; commits many errors or is inaccurate and incomplete.	Ensures that records kept are complete and concise; recognizes and corrects any errors or omissions.	Maintains exceptionally complete, accurate and concise records.
Quantity of Performance	Is unable to complete assigned functions within a satisfactory time limit.	Maintains satisfactory output; is able to complete delegated tasks in appropriate time interval.	Works consistently with above average output; always completes assigned functions in appropriate time interval.
Care & Use of Equipment & Supplies	Is inefficient in the use or maintenance of equipment and provides less than adequate care.	Employs available equipment and supplies, giving due care to their use and maintenance.	Demonstrates competence and resourcefulness in the utilization and care of equipment and supplies.

APPENDIX D

Critical Care Clinic Role Expectation Inventory
Expert Evaluation Form with Cover Letter

May 22, 1995

Dear (name withheld by request),

Clinical practice is an integral part of all health occupations programs to ensure competency of all students. The Respiratory Care Program, in particular, stresses critical care preparation. Determining the differences between faculty and student role expectations for the critical care clinic may allow the faculty to influence these expectations. This may assist in decreasing the anxiety level of the students prior to entering the clinic. In addition, it may allow faculty to increase the confidence and productivity of the students in the critical care clinic. Teachers of these students may review teaching strategies to improve basic knowledge level and security of students.

I am investigating the critical care student role expectations of Level I respiratory care students and the clinical faculty through the use of a critical care clinic role expectation inventory. Please review each item and make specific recommendations for changes if you feel change is necessary. This will help insure that the instrument is measuring what is intended. That is, does the inventory adequately measure the respondents role expectations for the critical care clinic? This questionnaire will be completed by both Level I students and clinical faculty.

I appreciate any feedback you can give me. Please return your comments by June 14, 1995. Thank you for your assistance.

If you have any questions, please call me at (214) 231-4382.

Sincerely,

Gretchen K. Riehl

Critical Care Clinic Role Expectation Inventory
Expert Evaluation Form

Directions: Please read each and every item. Do not answer the items. Respondents will be instructed to indicate the degree to which they believe each item is expected of students in the critical care clinic using the following scale:

- SA - Strongly agree
- A - Agree
- U - Undecided
- D - Disagree
- SD - Strongly disagree

As with any Likert-type questionnaire, some of the questions are designed for positive responses and some for negative responses. For each item, select one of three choices: leave as is, delete, or change by placing an x in the space provided. If you select change, please identify the specific changes you suggest in the space provided. Finally, indicate any other specific suggestions for improving this questionnaire. Thank you.

1. Arrives at the clinical site in his/her uniform.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

2. Arrives at the clinical site at least five minutes prior to the start of the shift.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

3. Arrives at the clinical site with a stethoscope.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

4. If he or she is to be late or absent, he or she calls the instructor at least 30 minutes prior to the start of the clinic.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

5. Relies on the instructor to indicate goals to be achieved during the clinical day.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

6. Organizes assignments in order to assure that goals are achieved.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

7. Assumes responsibility for his/her own actions.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

8. Relies on instructor to find him/her when supervision is necessary.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

9. Knows his/her limitations.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

10. When assigned tasks are completed, awaits additional assignments from the instructor.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

11. Understands directions when given the first time.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

12. If directions are not understood, performs task without seeking further clarification.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

13. Has difficulty in the decision making process.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

14. Communicates by using appropriate word choices to minimize ambiguity.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

15. Appears aloof and detached.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

16. Consistently displays honest and forthright behavior.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

17. Recognizes limitations of practice granted by the instructor.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

18. Has difficulty accepting constructive criticism.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

19. Actively participates in patient care plan as a collaborative member of the health care team.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

20. Insensitive to patients' needs and rights in planning and implementing care.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

21. Has limited knowledge of basic concepts.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

22. Is quick to learn from new experiences.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

23. Readily transfers theoretical knowledge to clinical situations.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

24. Demonstrates an acceptable level of performance with minimal errors.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

25. Inattentive to changes in patient's condition or needs.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

26. Ensures that records kept are complete and concise.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

27. Is able to complete delegated tasks in an appropriate time frame.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

28. Is inefficient in the use or maintenance of equipment.

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

29. Upon completion of the critical care clinic, the Level I student will be able to perform the following procedures in the critical care environment.

a) Endotracheal suctioning

SA A U D SD

b) Medication nebulizer

SA A U D SD

c) Incentive spirometry

SA A U D SD

d) Oxygen Therapy

SA A U D SD

e) Intermittent Positive Pressure Breathing (IPPB)

SA A U D SD

d) Ventilator check

SA A U D SD

e) Ventilator circuit changeout

SA A U D SD

f) Ventilatory assessment (Weaning parameters)

SA A U D SD

g) Ventilator set-up and patient initiation

SA A U D SD

_____ Leave as is

_____ Delete

_____ Change _____

APPENDIX E

Final Critical Care Clinic Role Expectation Inventory

CRITICAL CARE CLINIC ROLE EXPECTATION INVENTORY

Directions: Read each item carefully. Each item describes a specific behavior that may be asked of the student in the critical care clinic rotation. For each statement, indicate whether you believe this behavior is expected of a student during a critical care clinic rotation by using the following scale:

SA - Strongly agree
 A - Agree
 U - Undecided
 D - Disagree
 SD - Strongly disagree

Mark your choices on the test by circling the appropriate letter(s). **DO NOT PLACE YOUR NAME ON THE INVENTORY.** For the first item, indicate if you are a student or faculty member by circling the appropriate word(s).

1. Are you a:

Student Faculty member

2. Arrives at the clinical site in his/her uniform.

SA A U D SD

3. Arrives at the clinical site on time or early.

SA A U D SD

4. Arrives at the clinical site with a stethoscope.

SA A U D SD

5. If he or she is to be late or absent, he or she calls the instructor at least 2 hours prior to the start of the clinic.

SA A U D SD

6. In conjunction with the instructor, sets goals to be achieved each the clinical day.
SA A U D SD

7. Organizes assignments in order to assure that goals are achieved.
SA A U D SD

8. Assumes responsibility for his/her own actions.
SA A U D SD

9. Relies on instructor to find him/her when supervision is necessary.
SA A U D SD

10. Knows his/her personal limitations.
SA A U D SD

11. When assigned tasks are completed, awaits additional assignments from the instructor.
SA A U D SD

12. Demonstrates ability to understand directions when given the first time.
SA A U D SD

13. If directions are not understood, performs task without seeking further clarification.
SA A U D SD

14. Has difficulty in the decision making process.
SA A U D SD
15. Communicates by using appropriate word choices to minimize ambiguity.
SA A U D SD
16. Appears aloof and detached.
SA A U D SD
17. Consistently displays honest and forthright behavior.
SA A U D SD
18. Recognizes limitations of practice granted by the instructor.
SA A U D SD
19. Has difficulty accepting constructive criticism.
SA A U D SD
20. Actively participates in patient care plan as a collaborative member of the health care team.
SA A U D SD
21. Insensitive to patients' needs and rights in planning and implementing care.
SA A U D SD
22. Has limited knowledge of basic concepts.
SA A U D SD

23. Is quick to learn from new experiences.
SA A U D SD
24. Readily transfers theoretical knowledge to clinical situations.
SA A U D SD
25. Demonstrates an acceptable level of performance with minimal errors.
SA A U D SD
26. Inattentive to changes in patient's condition or needs.
SA A U D SD
27. Ensures that records kept are complete and concise.
SA A U D SD
28. Is able to complete delegated tasks in an appropriate time frame.
SA A U D SD
29. Is inefficient in the use or maintenance of equipment.
SA A U D SD

30. Upon completion of the critical care clinic, the Level I student will be able to perform the following procedures in the critical care environment.

a) Oxygen Therapy

SA A U D SD

b) Medication nebulizer

SA A U D SD

c) Incentive spirometry

SA A U D SD

d) Chest physical therapy

SA A U D SD

e) Intermittent Positive Pressure Breathing (IPPB)

SA A U D SD

f) Endotracheal suctioning

SA A U D SD

g) Ventilator check

SA A U D SD

h) Ventilator circuit changeout

SA A U D SD

i) Ventilatory assessment (Weaning parameters)

SA A U D SD

j) Ventilator set-up and patient initiation

SA A U D SD

APPENDIX F

Cover Letters for Questionnaire Respondents

July 11, 1995

Dear Respiratory Care Clinical Faculty,

Clinical practice is an integral part of all health occupations programs to ensure competency of all students. The Respiratory Care Program, in particular, stresses critical care preparation. Determining the differences between faculty and student role expectations for the critical care clinic may allow the faculty to influence these expectations. This may assist in decreasing the anxiety level of the students prior to entering the clinic. In addition, it may allow faculty to increase the confidence and productivity of the students in the critical care clinic. Teachers of these students may review teaching strategies to improve basic knowledge level and security of students.

I am investigating the critical care student role expectations of Level I respiratory care students and the clinical faculty. You may be assured of the confidentiality and anonymity of your responses. **Do not place your name on the answer sheet or questionnaire.** This will ensure the anonymity of the responses. Further, by placing the answer sheet in the pre-addressed envelope provided upon completion, only the researcher will be reading the responses and you can be assured that only group data will be used in the final report. If I do not receive the inventory within two weeks, I will call you for follow-up. I have coded each inventory I mailed for this purpose. If you do not wish to participate, simply return the inventory without completing it. Completion of the inventory will indicate consent to participate.

Thank you for taking the time to complete this survey. Upon completion of the study, I will make a copy of the final results available to you, upon request.

If you have any questions or concerns regarding this research or how it is being conducted, you may call me at (214) 231-4382. Or you may call the Office of Research and Grants at TWU at (817) 898-3375.

Sincerely

Gretchen K. Riehl

June 29, 1995

Dear Respiratory Care Level I Student,

Clinical practice is an integral part of all health occupations programs to ensure competency of all students. The Respiratory Care Program, in particular, stresses critical care preparation. Determining the differences between faculty and student role expectations for the critical care clinic may allow the faculty to influence these expectations. This may assist in decreasing the anxiety level of the students prior to entering the clinic. In addition, it may allow faculty to increase the confidence and productivity of the students in the critical care clinic. As a Respiratory Care student, understanding these differences may allow you to identify misconceptions that may have increased anxiety and thus decrease this anxiety and improve performance and confidence. It may also help the clinical faculty of this program determine ways to decrease the anxiety level of future student groups.

I am investigating the critical care student role expectations of Level I respiratory care students and the clinical faculty. You may be assured of the confidentiality and anonymity of your responses. **Do not place your name on the answer sheet or questionnaire.** This will ensure the anonymity of the responses. Further, by placing the answer sheet in an envelope upon completion, only the researcher will be reading the responses and you can be assured that only group data will be used in the final report. Completion of the inventory will indicate consent to participate. Completion of the inventory **will not** affect your grade in this course in any way.

Thank you for taking the time to complete this survey. Upon completion of the study, I will make a copy of the final results available to you, upon request.

If you have any questions or concerns regarding this research or how it is being conducted, you may call me at (214) 231-4382. Or you may call the Office of Research and Grants at TWU at (817) 898-3375.

Sincerely

Gretchen K. Riehl