MEMORANDUM

DATE: November 21, 2002

TO: Academic Senate

FROM: Academic Program Review Council

RE: Recommendations for:
Associate in Applied Science Degree in Respiratory Care

CC: Dave Zobeck, Julian Easter, Stephen Perialas, Laurie Chesley, Thomas Oldfield, Barbara Chapman

DESCRIPTION OF PROGRAM:

AAS Degree in Respiratory Care

Accredited by the Commission on Accreditation of Allied Health Education Programs in conjunction with the Committee on Accreditation for Respiratory Care (CoARC)

Respiratory care practitioners are actively involved in the diagnosis, treatment, and rehabilitation of patients with chronic and acute diseases of the heart and lung. The curriculum is designed to provide highly qualified and competent therapists to the health care system.

The academic program consists of general education courses and highly specialized instruction in such professional areas as: pulmonary disease, administration of diagnostic and therapeutic gases, mechanical ventilation, pulmonary and cardiovascular testing, pharmacology, equipment maintenance and pulmonary rehabilitation. Clinical instruction is provided at several hospitals throughout the state of Michigan. The two clinical internships are full-time (thirty-six to forty hours per week) and are closely structured and supervised by full-time and adjunct program faculty.

Satisfactory completion of the six-semester program leads to an associate in applied science degree and eligibility to sit for the national credentialing examinations sponsored by the National Board for Respiratory Care.

Required for admission are a high school cumulative GPA of 2.5 GPA, an ACT math score of 19, and a B average (one year) in biology and chemistry.

A college student transferring into the program must have a 2.5 cumulative GPA with C grades in a Math 110 (Fundamentals of Algebra) equivalent, biology, and chemistry.

In order to graduate, a student must earn a C grade or better in each respiratory care course and a C or better in BIOL 205 (Human Anatomy and Physiology); meet all Ferris academic requirements, including completion of all requirements as outlined in the General Education section of this catalog; complete the two clinical internships and the curriculum listed below.

To assure students of quality technical training in both classroom/lab instruction and clinical practice, enrollments are limited. Students who meet the programs admission criteria are accepted by priority date of application, so it is essential to apply for admission very early.

Prior to the first clinical internship, the student must provide proof of current CPR certification; recent (within one year) negative TB test results; health insurance; and several vaccinations, including Hepatitis B (full series of three doses), or proof of antibody titer. Please contact the program coordinator at 1-800-462-8553 for a list of specified immunizations.

If the Hepatitis B vaccine waiver declining the vaccine is signed, it is with the understanding that the waiver may make the student ineligible for placement at internship sites, which will ultimately result in the inability to graduate.

COST INFORMATION:

According to the 1999-2000 report from institutional research:

	Total cost per SCH
AAS Degree in Respiratory Care	$206.30
	Total program cost
AAS Degree in Respiratory Care	$14,234.83

RECOMMENDATIONS:

We recommend that the program be continued. The council requests that an interim report be submitted discussing the progress that has been made in implementing a recruitment plan. The report should include a discussion of the role of University Advancement and Marking in the process. This report should be submitted on or shortly before October 15, 2003. In addition, the council requests that on or shortly before October 15, 2005 the panel will submit a short written interim report summarizing the most recent enrollment data and their evaluation of the success of their efforts at instruction using on line courses.

(1) The program has a number of important strengths:

- It is central to Ferris' mission.
- It is the only respiratory care program centered in a 4-year University in the state and 1 of 10 respiratory care programs in the state.
- The program is accredited by the Commission on Accreditation of Allied Health Education Programs in conjunction with the Committee on Accreditation for Respiratory Care (CoARC).
- It has a solid reputation among employers.
- Through the placement of graduates, this program provides an essential service to the state since there is a severe shortage of respiratory care technologists.
- The program has a dynamic faculty that is actively exploring new and innovative ways to provide instruction to both on and off campus students.
- There is a very high demand for graduates of the program as is evidenced by the almost 100% placement rate of students.
- The average starting salary is in excess of $30,000 and many hospitals are offering signing bonuses.
- The faculty is experienced and well qualified.
- The faculty is very involved in continuing education and scholarly activities.
- The faculty is active in recruiting students.
- There is a good mixture of equipment

(2) We recommend that the following steps need to be taken to maintain the quality of these program:

- The program faculty, the administration of the College of Allied Health, and University Advancement and Marketing should continue to support and be involved in focused recruitment activities.
- The program faculty and the administration of the College of Allied Health should continue their exploration of innovative relationships with community colleges.
- The program faculty should continue to monitor and assess their on-line course offerings.
- The faculty should continue to assess the feasibility and value to their students of offering a BS degree.
- The program faculty should continue to investigate curricular modifications that will enhance the pass rate on NBRC credentialing exams.
- The program faculty should continue to find ways to improve communication between FSU, students, and clinical faculty at hospitals throughout the state.
- The program faculty and the administration of the College of Allied Health should pursue alternative clinical internship settings to meet the changes in the healthcare delivery system.

Criteria Summary for
AAS Degree in Respiratory Care

AAS Degree in Respiratory Care

Accredited by the Commission on Accreditation of Allied Health Education Programs in conjunction with the Committee on Accreditation for Respiratory Care (CoARC)

Respiratory care practitioners are actively involved in the diagnosis, treatment, and rehabilitation of patients with chronic and acute diseases of the heart and lung. The curriculum is designed to provide highly qualified and competent therapists to the health care system.

The academic program consists of general education courses and highly specialized instruction in such professional areas as: pulmonary disease, administration of diagnostic and therapeutic gases, mechanical ventilation, pulmonary and cardiovascular testing, pharmacology, equipment maintenance and pulmonary rehabilitation. Clinical instruction is provided at several hospitals throughout the state of Michigan. The two clinical internships are full-time (thirty-six to forty hours per week) and are closely structured and supervised by full-time and adjunct program faculty.

Satisfactory completion of the six-semester program leads to an associate in applied science degree and eligibility to sit for the national credentialing examinations sponsored by the National Board for Respiratory Care.

Required for admission are a high school cumulative GPA of 2.5 GPA, an ACT math score of 19, and a B average (one year) in biology and chemistry.

A college student transferring into the program must have a 2.5 cumulative GPA with C grades in a Math 110 (Fundamentals of Algebra) equivalent, biology, and chemistry.

In order to graduate, a student must earn a C grade or better in each respiratory care course and a C or better in BIOL 205 (Human Anatomy and Physiology); meet all Ferris academic requirements, including completion of all requirements as outlined in the General Education section of this catalog; complete the two clinical internships and the curriculum listed below.

To assure students of quality technical training in both classroom/lab instruction and clinical practice, enrollments are limited. Students who meet the programs admission criteria are accepted by priority date of application, so it is essential to apply for admission very early.

Prior to the first clinical internship, the student must provide proof of current CPR certification; recent (within one year) negative TB test results; health insurance; and several vaccinations, including Hepatitis B (full series of three doses), or proof of antibody titer. Please contact the program coordinator at 1-800-462-8553 for a list of specified immunizations.

If the Hepatitis B vaccine waiver declining the vaccine is signed, it is with the understanding that the waiver may make the student ineligible for placement at internship sites, which will ultimately result in the inability to graduate.

- **CENTRALITY TO FSU MISSION:**

  The AAS Degree in Respiratory Care is central to the mission of Ferris State University. The emphasis on preparation for a career clearly reflects the historic roots of the University.

- **UNIQUENESS AND VISIBILITY OF PROGRAM:**

  The AAS Degree in Respiratory Care is the only such program in the state that is housed in a 4-year University. It is 1 of 10 programs in the state. The program appears to be visible to potential employers of students but, like many of the allied health fields, does not appear to be highly visible to potential students.

- **SERVICE TO STATE, NATION, WORLD:**

  There is a severe shortage of respiratory care technologists in the state of Michigan. The graduates of this program help allay that deficit.

- **DEMAND BY STUDENTS:**

  As is true of most of the Allied Health programs across the country, low enrollment continues to be a problem. The enrollment in the first Respiratory course (RESP 100) in the curriculum has increased significantly this fall. Intensive recruitment and retention activities have been implemented to improve enrollment. Some of these efforts are multiple entry points, newspaper advertisements, and marketing to High School students and unemployed BS degree graduates.

- **DEMAND FOR GRADUATES:**

  The demand for graduates is very high. Many hospitals are willing to offer a signing bonus and most students are easily able to find employment in the geographical region in which they choose to live.

- **PLACEMENT RATE AND AVERAGE SALARY OF GRADUATES;**

  The placement rate of graduates is close to 100%. The average salary of a respiratory therapist is the in the range of $30,000 a year.

- **SERVICE TO NON-MAJORS:**

  Not applicable

- **QUALITY OF INSTRUCTION:**

  The program is accredited by the Commission on Accreditation of Allied Health Education Programs in conjunction with the Committee on Accreditation for Respiratory Care (CoARC). The quality of instruction appears to be very high and the program has a reputation for producing quality graduates.

- **FACILITIES AND EQUIPMENT:**

  The facilities are good and the equipment is adequate to meet the needs of the program. Certain pieces of equipment are rented for short periods of time, which allows the students to use modern equipment without the University having the expense of purchasing such equipment.

- **LIBRARY INFORMATION RESOURCES:**

  The library resources meet the needs of the program

- **COST:**

  According to the 1999-2000 report from institutional research:

	Total cost per SCH
AAS Degree in Respiratory Care	$206.30
	Total program cost
AAS Degree in Respiratory Care	$14,234.83

- **FACULTY:**
  - **QUALIFICATIONS:**
    The faculty is well qualified.
  - **PROFESSIONAL AND SCHOLARLY ACTIVITIES:**

    The faculty is active in professional organizations, continuing education, and scholarly writing and presentations.
  - **QUANTITY:**

    The number of faculty is adequate for the needs of the program.
- **ADMINISTRATION EFFECTIVENESS:**

  Good

MEMORANDUM

DATE: November 21, 2002

TO: Academic Senate

FROM: Academic Program Review Council

RE: General Recommendations for Programs reviewed in the 2002-2003 review cycle

CC: Vice-Presidents Chapman, Oldfield, and Chesley; All Deans

Approximately one year ago 12 panels charged with reviewing a total of 18 programs were formed. These panels were composed of program faculty and friends of the program. The panels collected information, analyzed that information, and wrote thorough and rigorous reports that detailed the status of the programs. These reports also identified needs of the programs. Based upon the written documents submitted to the Academic Program Review Council, the answers to written questions generated by the Council, and discussion with panel members and program administrators, the APRC has generated specific recommendations for each program reviewed. These recommendations have been submitted as separate memos. On behalf of the entire University, the APRC extends its appreciation and gratitude for the work done by the program review panels.

GENERAL RECOMMENDATIONS

The following recommendations are derived from our collective review of the programs and represent our suggestions for addressing concerns that affect more than one program in the University. A review of general recommendations from previous Academic Program Review Council reports reveals that, although progress has been made, some programs still encounter the same or similar difficulties observed in previous years. It is clear many of these problems must be solved at the institutional level. If a similar recommendation was made previously, the years are indicated in parentheses.

THERE SHOULD BE A MORE THOROUGH PROOFREADING OF THE UNIVERSITY CATALOG BEFORE IT IS PUBLISHED.

At the beginning of each recommendation memo, under the section titled program description, a statement concerning each program is reproduced exactly as it appears in the online catalog. Often, the first impression of the University that is gained by prospective students and the general public is obtained through the Catalog. Therefore, it is a matter of concern when there are misspellings and examples of poor use of language in one of the most visible documents of the University.

THE ANNUAL REPORT ON THE CUMULATIVE IMPACT OF ACADEMIC PROGRAM REVIEW RECOMMENDATIONS SHOULD LIST THE RECOMMENDATIONS MADE BY THE COUNCIL AND THE SPECIFIC ADMINISTRATIVE RESPONSE TO THEM.

The Academic Program Review Council would like to thank Vice-President Chapman for providing the Senate and the Council with an Annual Report on the Cumulative Impact of Academic Program Review, which was in the form of a memo dated August 5, 2002. The Council recognizes that it may not be possible for the University to completely address all of the recommendations made by the Council in a calendar year and appreciates the efforts of the administration to follow up on the issues that are raised. The Council notes, however, that some of the actions taken do not directly correspond to the actual recommendations of previous Councils. For the sake of clarity of communication, the Council requests that in future updates, starting with the current review cycle, there be a list of the specific recommendations of the Council and the administrative response to them (2001-2002). There is a precedent for this in the memo from Teshome Abebe, former Provost and Vice-President for Academic Affairs dated July 30, 1996 in which he provided a status report on the progress that had been made concerning the Senate-approved APRC recommendations for programs reviewed in 1995-1996.

OTHER DIVISIONS OF THE UNIVERSITY SHOULD BE REVIEWED WITH RESPECT TO THE QUALITY OF SERVICE THAT THEY PROVIDE TO ACADEMIC PROGRAMS AND THE EDUCATIONAL MISSION OF THE UNIVERSITY. FEED BACK CONCERNING THE OUTCOME OF THESE REVIEWS SHOULD BE SUPPLIED TO THE ACADEMIC SENATE AND THE ACADEMIC PROGRAM REVIEW COUNCIL.

The Council appreciates the decision by the administration to develop a review process for University Advancement and Marketing and the computer consortia. The council would like to point out, however, that the focus of these reviews as described in the memo from Dr. Chapman dated August 5, 2002 does not completely address the concerns of previous Academic Program Review Councils. Hopefully the QI2000+ Committee mentioned in the document will establish a thorough process of review of divisions in the University that support and serve academic programs so that, when problems arise because of policy or implementation of policy, a mechanism will be in place to correct the problems and allow affected programs input in the development of new policies. The purpose of this request is to ultimately improve the quality of academic programs (2000-2001, 2001-2002).

THE UNIVERSITY SHOULD REVIEW THE POLICIES ASSOCIATED WITH THE ISSUING OF STUDENT ID CARDS AND THE PROCEDURES FOR ASSIGNING STUDENT BARCODES.

Students still have trouble accessing library databases from off-campus. Barcode numbers needed for database login are not tracked when ID's are issued so students must call the library to have their barcode entered before they can access the databases from off-campus. The FLITE staff has worked diligently to alleviate some of these problems, however, much of the difficulty could be avoided by coordination between Telcommunications and FLITE.

THE UNIVERSITY AND, IN PARTICULAR, THE COLLEGE OF ARTS AND SCIENCES, SHOULD ENSURE THAT AN ADEQUATE NUMBERS OF COURSES, OFFERED IN AN APPROPRIATE FORMAT (12 WEEKS), ARE OFFERED DURING THE SUMMER SEMESTER.

The curricular design in several of the colleges (particularly Allied Health and Business) requires that students build a full load schedule during the summer. While offering courses of varying lengths during the summer may be convenient for faculty, such an arrangement makes it extremely difficult for students to achieve a full load of classes. That in turn may cause the student to choose a course based on the timeframe in which it is offered rather than the its educational value.

THE UNIVERSITY SHOULD REQUIRE THAT THE ADMINISTRATIVE PROGRAM REVIEW FORMS SHOULD BE FILLED OUT ACCURATELY AND COMPLETELY.

The Administrative Program Review documents provided to the council by the program panels varied significantly with respect to their completeness and reliability. In several cases, questions on the form were not answered and data related to enrollment according to class standing and the number of graduates in a given year was not listed. The Council relies heavily on this document in assessing the status and viability of each program.

THE DESIGN AND DISTRIBUTION OF SURVEYS FOR ACADEMIC PROGRAM REVIEW SHOULD BE PROCESSED THROUGH A CENTRAL UNIVERSITY OFFICE WITH INPUT FROM THE PROGRAM REVIEW PANEL.

The academic program review process relies extensively on information gathered through surveys. It is apparent to the council that this type of activity should be coordinated through a central office, which provides services to panels for programs undergoing review. Most program faculty are not trained or experienced in survey methodology. This often results in poorly designed surveys, low response rate, and information of dubious validity. This problem is compounded by the fact that other divisions within the University are sending out different surveys, in many cases to some of the same individuals. It is true that different divisions within the University may be interested in obtaining different kinds of information, however there is certainly a basic core of information that is important to all units within the University. A standardized survey form should be designed and distributed utilizing established survey methodology. This form should allow individual programs or units in the University to ask additional specific questions related to information unique for their needs. The staff of this central office should provide support for follow up procedures to ensure adequate response rates. They should also assist the program review panels in the use of applicable statistical procedures to insure proper interpretation of the data.

THE UNIVERSITY NEEDS TO HAVE A CENTRAL DATABANK THROUGH WHICH ALUMNI AND GRADUATES OF PROGRAMS ARE TRACKED.

Most panels reported that significant numbers of surveys were returned due to an incorrect address. There is no question that in this mobile society it is difficult to keep track of individuals, however, if there is a cooperative approach to collecting data from various sources on campus, it should be possible to increase the reliability of existing databases.

INSTITUTIONAL RESEARCH SHOULD COMPILE THE INFORMATION REQUIRED BY PROGRAM FACULTY AND ADMINISTRATORS FOR THE PROGRAMS UNDERGOING THE ACADEMIC PROGRAM REVIEW PROCESS.

The document titled Academic Program Review: A Guide for Participants lists some specific types of information that are required for the review process. Currently, the seeking out and collecting of relevant programmatic information on an individual basis is an inefficient process and is an inordinately consuming use of program faculty and administrator's time. The previous Academic Program Review Council did meet with a representative from Institutional Research last spring to discuss their methods of data collection and how they arrived at their interpretation of the data. At that time, this individual expressed a willingness to work with the Panels in obtaining the information that they need. The current Academic Program Council should develop a specific list of the information that is required and communicate this to the staff in Institutional Research. The council requests administrative approval for this expansion of duties by the staff of Institutional Research (2001-2002).

THE UNIVERSITY SHOULD CONTINUE TO EXPLORE WAYS IN WHICH IT CAN HELP PROGRAMS MAINTAIN AND ACQUIRE NEW EQUIPMENT AS THE NEEDS OF INDUSTRY CHANGE.

The Council appreciates the response of the administration documented in Dr. Chapman's August 5, 2002 memo to previous recommendations concerning maintenance and acquisition of equipment. The Council also recognizes there is no way that the University can fund all of the equipment requirements of all of the programs at the University. With a few exceptions, most of the programs reviewed this cycle had adequate facilities and equipment. However, concern was expressed by several program panels related to funding for maintenance, replacement of equipment items, and the purchase of new equipment. Updating of computers to handle increasingly sophisticated software continues to be a problem. The University should continue to provide support for the maintenance of equipment and establish funds the upgrading of equipment. The procedures for requesting such funds should be widely communicated throughout the campus. In addition, the University should continue to encourage and support the efforts of faculty and program administrators as they seek off campus sources of equipment and resources. (1995-1996, 1997-1998, 1998-1999, 1999-2000, 2001-2002)

THE UNIVERSITY SHOULD INVEST IN PROGRAM SPECIFIC ENROLLMENT AND RECRUITING EFFORTS:

The current guidelines for the academic program review process require the APRC to evaluate enrollment in programs as a part of the review process. Low enrollment in a program does have a direct impact on program cost and faculty productivity (as defined by the business operations of the University), particularly in programs that are laboratory and technology intense. Low enrollment does not necessarily have a direct relationship to the quality of education that is delivered to students.

As far as the Academic Program Review Council was able to determine, at least with respect to the programs that were reviewed this year, low enrollment levels were unrelated to the quality of instruction, the availability of jobs in the field, the potential salaries of employees in the field, and even the availability of financial aid in the form of scholarships to students. Some of the under-enrolled programs that were reviewed this year have few or no competitors in the state of Michigan and in some cases in the country. The faculty in several

of these under-enrolled programs has made an intensive recruiting effort, which seems to have had only a limited impact on increasing student numbers. On the other hand, new degree initiatives in the College of Education and Human Services and in the College of Arts and Sciences have resulted in programs with rapidly increasing enrollments but limited opportunities in the job market. The difference seems to be the visibility of programs to prospective students.

It has become apparent to the members of the Council, particularly those who have served several years, that allocating a few marketing dollars to a program with enrollment difficulties and creating an attractive brochure does little to increase student numbers. Asking faculty to spend increasingly more time in recruitment efforts is not a particularly productive or effective approach to solving the problem. Typically faculty members have had little, if any, training in marketing techniques, demographic analysis, and brochure design. Most faculty members choose teaching because of their love of their subject area and their desire to share their knowledge with students, not because of an interest in the marketing of their program to prospective students.

If the University is truly committed to its historic mission of preparing students for a career and wishes to continue to serve the state of Michigan by providing graduates who are prepared to work in vital areas of our economy such as heavy industry or health care and yet maintain the fiscal viability of the University, it must address the issues related to the marketing low enrollment programs at an institutional level. It must supplement the efforts of faculty and administrators in programs with low enrollment through the use of institutional resources for focused marketing that increases the visibility of low enrollment programs and increases the awareness on the part of prospective students that many of the programs at Ferris State University lead to career options in vital industries in which high paying jobs are going unfilled.

THE ACADEMIC SENATE SHOULD REVIEW ITS CHARGE TO THE ACADEMIC PROGRAM REVIEW COUNCIL.

The Academic Program Review Council has begun the second round of program review. It is time to review and to reevaluate the criteria that are utilized as the basis for recommendations that are listed in the document Academic Program Review: A Guide for Participants. The academic program review process should focus on the quality of instruction offered in each program. Some of the criteria mentioned previously seem to have a marginal relationship to that goal, at best. For example, the focus on enrollment, productivity, cost of instruction, demand for graduates and the salaries they achieve are certainly of interest and importance to the administration. The question that arises is whether the academic program review process is the appropriate medium to collect and tabulate that data. Perhaps the academic program review process should focus more directly on what skills or competencies are required of graduates, how effectively programs deliver instruction that provides students with those skills and competencies, how the programs assess the skills and competencies of their students and graduates, and what hinders the programs in their attempts to fulfill their responsibilities to their students.

The Academic Program Review Council, 2002-2003

Jack Buss, Arts and Sciences , Chair
Douglas Fonner, Arts and Sciences
Carrie Forbes, Library and Information Services
Michael P Keating, Optometry
Richard Kowalkoski, University College
Jim Mayhew, Allied Health Sciences
Connie L Morcom, Education and Human Services
Norwood "Woody" Neumann, Pharmacy
Dan Skurski, Technology
William Smith, Business
Randy Stein, Technology

Questions for APR Panel
AAS Degree in Respiratory Care

The APR panel questions are in 10 font italics with the response in 12-font standard type.

Please list the primary skills, abilities, and knowledge base that you expect that a graduate of your program would possess.

General Education Competencies: mathematics, written and oral communication, social/behavior sciences, computer science, critical thinking skills, scientific literature and technology assessment.

Basic Sciences: Human anatomy and physiology, cardiopulmonary A&P, chemistry, physics, microbiology, pharmacology.

Respiratory Care: patient assessment, medical gas therapy, aerosol and humidity therapy, airway management, lung inflation therapy, bronchial hygiene therapy, mechanical ventilation, infection control, cardiopulmonary diagnostics of pulmonary function, arterial blood gas, hemodynamics, electrocardiology, exercise testing, sleep studies, chest x-ray, and non-invasive assessment; cardiopulmonary resuscitation, application of clinical practice guidelines, case management, alternate site care of home care, subacute care, skilled nursing facilities, hospice, physician office, cardiac and pulmonary rehabilitation, health promotions, pediatric and neonatology, geriatrics; medical record keeping and reimbursement, and professional ethics.

For each skill, ability or knowledge base listed above, identify the major component(s) of your curriculum that are designed to develop that characteristic in your graduate.

General education competencies met with math requirement, communication requirement, social awareness and cultural enrichment requirement, English requirement. Computer science skills and critical thinking developed through the respiratory course.

Basic sciences met with biology and chemistry course requirements. Also met with RESP 119 Cardiopulmonary A&P and RESP156 Cardiopulmonary pharmacology as well as in portions of other courses.

Respiratory Care competencies met with required courses for Respiratory program. The clinical practicum (internships) helps to merge didactic and lab exercise with actual delivery of patient care. Often it is this also helps better understand concepts that are not easily shown in the classroom.

What is your current enrollment? What is the enrollment in other programs in the state? Approximately how many graduates are being produced in the state each year? How does this compare with the number of open positions in the state?

Current enrollment: 2nd year – 10 students,
1st year - 19 students (as noted by enrollment in RESP100)
preRESP – 4 students (not enrolled in RESP100)

There are 30 institutions posting job opportunities on the Michigan Society for Respiratory Care web site right now. Many of the institutions have more than one open position. Some utilize job fairs, like those held at FSU, to market to students. Many other hospitals have stated there is not much value in currently spending money of advertising job opportunities as most of the Respiratory Care Programs in the state graduate students in May. There are and will be for the next few years far more job opportunities than

graduates to fill the positions. But without contacting each hospital, home care company, etc it is not possible to determine the number of positions in the state. We note that students are able to find positions within a 60-mile radius of their home.

Enrollment of other Respiratory care programs is not openly shared with FSU since we are seen as competition with community college programs as our students come to us though out the state. There has been interest in affiliation with FSU by colleges without a Respiratory program.

You indicate that respiratory therapy programs have closed in the state. What is the viability of respiratory therapy programs across the country? How has the mergers, restructuring and downsizing of hospitals that have occurred in the state in recent years affected the job prospects of your students?

Across the country a number of programs have closed due to low enrollment. Yet, the need for RTs has been high. This has created an opportunity for the existing programs to become creative in over coming the low health care enrollment. FSU RC has been creative with its online courses and is developing opportunities to provide training in this different media. We have also been creative in marketing of the Respiratory program.

Mergers and restructuring has created changes with in hospitals but it has only minimally affected the number of RTs. Some hospitals have experimented eliminating RT depts., only to resurrect them later. These changes often lead to RT departments and staff becoming cross-trained for additional service. The impact has not created a difficulty for our students as they can easily find jobs even before graduation. The shortage is best demonstrated by the fact that hospitals are often willing to pay sign on bonus from $1,000 up to $10,000. Others are actively considering scholarships to recruit potential employees.

What do you see as the future for the respiratory therapy profession? Who will be the employers of practitioners in the future? How will the type of education that they need differ from what is currently offered?

The field is moving away from a technical nature in which the respiratory therapist followed the orders of a physician or managed various basic respiratory treatments and equipment. The evolution is to a case manager in which the therapist assesses, manages and adjusts therapy according to the assessed needs of the individual patient. This is seen in the increasing application of protocols and involvement of the therapist in determining care. Instead of simply knowing equipment and procedures, graduates will need increasing skills in assessing and evaluating success of services. This will create stress on an already full program.

The basic foundations are required before the assessment step can be taken. The next natural step that is being discussed at a national level is the bachelor degree. The advanced respiratory therapist skills are needed, yet there is no wage differential for the new skills.

The major employer of the future will still be hospitals but they will focus the skills of patient assessment into the critical care and emergency care areas. A small but new area will be connected with physician offices primarily those of pulmonary specialties. Therapists will become Respiratory Care Practitioners in determining care, assessing patients and educating patients.

On page 1 you mention your internships. Please compare the first and second internships. Do you have any logistical problems with the 6-week internship in the fall semester e.g., students finding housing? What would be the impact of increased enrollment on your internship program? On page 7 you indicate that a disadvantage of the summer practicum is that fewer patients with respiratory problems are available at this time of year. What is the logic of scheduling the internship at this time?

The first 6-week internship is basic respiratory care typically delivered in the medical-surgical areas, general patient care units. This internship gives the student their first exposure to real patient care. They deliver respiratory therapy like percussion and drainage, incentive spirometry, oxygen, PEP therapy, and nebulized medications to name a few. They will learn the basics of patient care and medical charting.

The second, 12-week internship is adult and neonatal critical care which application of mechanical ventilation and other critical care services are experienced. They will begin will simple monitoring of the ventilator and eventually become proficient in all aspects of mechanical ventilation including setting parameters. Pressure monitoring, ECGs, performing measurements on the critical care patients are part of this internship. They will have rotations in neonatal critical care to learn respiratory care on premature infants and how that differs for adults and pediatrics.

The internship sites are located in communities requested by the student. These are often selected so students are near their family or friends thereby creating no housing problems. The first basic respiratory care internship can be done in nearly any affiliated hospital from a small community hospital to a large medical center across the state of Michigan. There are usually sufficient numbers of clinical sites within a 60-mile radius of the students preferred location. The second internship is critical care in nature, and is limited to large medical centers where neonatal, pediatric, surgical, neurological, cardiac and sometimes burn intensive care units exist. We have been able to place all students for advanced critical care internships without many problems. We warn students that each area has only a limited number of available sites. If the number of student requests for an area exceeds the available number of internship slots, students may be given an alternate choice.

Increased enrollment numbers would not place a burden or exceed our placement of students, as we utilize internship sites (hospitals) throughout the State of Michigan. Higher enrollment numbers could result in more students being sent to their alternate internship site choice than their primary site selection. To offer students temporary rental housing one department has contacted their staff asking them to consider housing our students. In the past if necessary, colleges in the area of the clinical setting were contacted for possible student housing. This was successful and could be utilized again if deemed necessary.

Placing the 12 week critical care internship in the summer was the result of extending the program from 5 to 6 semesters due to the addition of the classes to meet the CAHS core curriculum requirements, course sequencing and maintaining reasonable credit hour loads. The benefit was it gave students three entry points into the program (Fall, Winter and Summer semester). The downside of the change is that during the summer typically fewer respiratory patients (that is fewer not zero) are admitted to hospitals for care. Patients are sufficient in numbers such that students still have an

acceptable clinical experience. It would not be practical to have students take the summer semester off and wait until fall to finish the clinical internship and program.

You also mention on page 1 a CD-ROM that was developed for clinical adjunct instructors. Please indicate how this is used.

As a part of our accreditation process, we must assure unpaid clinical adjunct instructors across the state are evaluating student performance on clinical procedural competencies the same way. The CD-ROM was created to aid in assuring inter-rater reliability in the assessment of our student's clinical performance. Not all adjunct clinical faculty, have time or are available when the program clinical coordinator visits to receive initial or follow up training. The CD-ROM methodology provides flexibility for training according to the availability of the individual adjunct instructor. The CD-ROM can be watched and an evaluation of the procedural performance be done at any time. Follow up on questions or comments is the all that needs to be done by FSU. The clinical sites have been provided a copy of the CD-ROM for their staff to use, along with a clinical manual.

On page 3, you indicate that we have the only University based respiratory therapy program in the state. Why are not other Universities offering this program?

It is possible that another University could begin a Respiratory program if it felt it could create full and continued enrollment but with the enrollment difficulties in health care that may not be much of a concern. Most programs in Michigan and nation are around half full thus there is not a waiting list of students for a new college program to draw from.

On page 4 you mention the possibility of offering a BS degree. Please discuss the advantages that such a degree would give to your students. How would the training that they receive differ from an AAS student? Would you retain the AAS degree? Please explain what you mean by the statement that the change was approved by FSU but not funded.

A survey 2-3 years ago showed interest in a BS of RC degree. At this time, a degree beyond AAS does not usually result in a higher starting wage. It would give greater promotional opportunities and advanced assessment skills in patient care. Most therapists expressed interest in self-improvement in their chosen profession either by selected courses or by attaining an advanced degree. Many are seeing the profession moving in the direction toward the assessment and management of pulmonary patient cases. The current AAS degree is unable to fully meet that need because of time constraints. The suggested BS direction would focus on improving therapist clinical skills (assessment and case management). This would be a 2 plus 2 program, wherein the AAS degree component would continue and students could either continue in the program for a BS degree or graduate with an AAS degree and return at a later date. The 2 plus 2 model would also accept graduates of other two-year Respiratory Care degree programs, since they must all meet the same accreditation standards.

On page 4 you indicate that you intend to have a SLA on line. Please explain how this would be accomplished.

Many years ago the RESP Program faculty identified RESP 119, Cardiopulmonary Anatomy and Physiology as a difficult gateway course. To address the high attrition rate in the course a SLA Workshop was added. The SLA has made a significant difference in the number of students retained in the course, but more importantly has helped the students attain a good foundation of knowledge upon which all other RESP courses are based. It seemed logical to put the SLA online when the course was going totally online. The online SLA will utilize worksheets, practice quizzes and exams, as well as discussion groups to help the student with specific problems and questions over course material. The Workshop facilitator will be available three hours a week at specific time frames online to provide immediate response to student questions. The SLA Facilitator will be paid one other hour a week to answer e-mails from students.

On page 7 you mention the core courses. Please elaborate on your concerns.

The RESP Program faculty has the following concerns about CAHS Core Courses:

CCHS 101 - Overview of the Health Care System is three credits in length (2 too many); not all content is necessary or relevant; taught from one perspective, that of the department teaching it.

CCHS 103 - Clinical Skills - (2 credits) - needs some content eliminated and other content (Pulse Oximetry) added. Major topic areas need a re-assignment of hours for content and skill delivery.

A committee to evaluate the CAHS Core curriculum has be convened since the writing of the program review document. The program has representation on this committee through two individuals in the department. The committee was charged with evaluating the three core courses. Program concerns, ideas and recommendations are being channeled through the two department representatives to the committee.

On page 9 your enrollment data suggests that you are having a difficult time attracting freshman to your program. Do you have any insights into why this might be the case?

Enrollment for all of health care programs across the state and nation are down as students have seen business and internet as a hot direction to pursue. With the down turn in the economy and bad press of business and CEOs, health care may be seen as a more stable career path. In fact, some of our marketing has been in this direction. Bachelor of Science degree grads are finding it difficult to locate jobs and are redirecting their education into health care. We have directed advertisements towards this group.

Respiratory Care is a health care profession that the public as a whole does not really know about unless they or their loved ones have needed our services. Students entering a health care career usually know of nursing, physical therapy, pharmacy, and physicians. The other health careers are largely unknown. The program has been trying to connect with high school health occupation programs. We are investigating the possibility of offering the online RESP100 Introduction to Respiratory Care (1 credit) to high school students. This and other online courses would help link students to FSU, College of Allied Health and the Respiratory Care program.

On page 25 in the labor market analysis the terms respiratory therapist and respiratory technician are used. How do these positions differ and what is the educational requirement for each?

Until Jan 2002, community colleges could offer a 1 yr. technician program. That has ended yet there are many technicians in the field. Most hospitals have a hiring preference for the 2-year AAS respiratory therapist. Discussion in the field is to move toward a 4-year degree. Technicians often provide basic respiratory therapy and the therapist provides care in critical care units.

Do your students typically enter the workforce after they receive their AAS degree? What is the percentage of your students who ladder into a 4-year degree? On page 27, you indicate that many of your students are dual degree and are not recognized in computation of respiratory care data. Please give us your best estimate of the number of students that fall in this category.

Most students 95+% enter the work force with an AAS degree. Those that ladder into a 4 yr degree often do so because of enrollment status for financial aid. They finish the AAS in RC, then work part time and finish the BS degree. Each year 4-5 students fall into the dual degree category. Many will work on a BS in Health Care Systems Administration.

You also indicate on page 27 that other institutions are required to pay to have their students study at clinical sites. Has the fact that Ferris does not pay affected your ability to arrange a quality clinical experience for your students.

Historically, only one hospital, U of M, has refused to allow FSU RC students due to the fact we don't pay for our student's internship experiences. A few hospitals have made inferences that they would like us to pay but have not refused our students internship experiences. Many Respiratory Care department managers see the benefit to having students as interns, as a natural employment source. Quality of clinical experiences has not been affected by our lack of payment for student internship time.

If the Respiratory Care Program began paying for its students to intern at various hospitals there is the potential for all other Allied Health program students interning at those same hospitals having to pay for clinical time as well.

Please elaborate on the statement on page 28 that "Several hospitals have expressed concern that the number of our students visits may be insufficient."

With the lack of payment, hospitals expect FSU will monitor the progress of their students and not limit the visits as a method of reducing costs. Typically, a student is visited at least once in a six-week clinical period. A clinical check sheet is used to assess the progress of each student. And a visit will be made immediately if a clinical adjunct expresses concerns about a student. Other Respiratory programs hire staff at the hospital to monitor and evaluate their students.

In the student comments on page 33 the suggestion is made that you need new equipment. What is the status of your equipment with respect to the kind of equipment that students will be using in the hospitals?

Students are taught on both new and old versions of equipment that can be found in hospitals in Michigan and nationally. The older versions often teach skills and principles that are lost in the newer computerized models. Also older versions are also those still on credentialing tests. The newer models are taught as they begin to show up in our clinical sites. Of course, students do not see the value in older technology.

Would you please supply us with the data for the graduate survey and the employer surveys?

This information is attached at the end of this summary

On page 42 you indicate that your students take the National Board for Respiratory Care. Please explain the table on page 42 with respect to the sequencing of the tests and your interpretation of the data. What is the standard for the pass rate by students in your program that is required for you to retain accreditation?

With regard to sequencing of the tests, the entry level (CRT) must be passed before either the Written (RRT) or the Clinical Simulation (RRT) can be attempted. The difficulty with this data is that graduates are not required by licensing or by the employer to obtain credentials. Thus only a small pool of students attempts the test each year. This small pool can have a big impact of the pass rate if even one student fails. Example: If three students attempt the test and one fails, the pass rate is 67% . The pass rate threshold of participants is 80% for CRT, 75% for RRT Written, and 65% for RRT Clinical Simulation.

The pass rates for the CRT frequently fall below the threshold because of the low numbers of student attempting the test. This is further complicated by the fact that student ID can be hidden. Repeated fails by the same student within the same year can further lower the pass rate. Those passing the CRT usually go on to pass the RRT credentials thus giving 100% pass rates.

On page 55 there appears to be a communication problem with the advisory committee. What are you doing to address that concern? How frequently do you meet?

The observation that distance can restrict communication is a realist concern. Programs located near or in the same city as their advisory committee can easily meet and discuss the program. Since FSU has advisory committee members statewide, many must travel 2+ hours to attend. This can result in occasional absences of members. We are evaluating Online Advisory Committee Discussions, which would be similar to email but with threaded discussions so comments would be linked. WebCT would be the best for this. This concept needs to be investigated. At this time, the Advisory Committee meets about twice a year.

The administrative report on page 70 shows that your S&E budget is declining. Why is this the case? On page 28 you indicate that you need to rent ventilators. What is the source of funding for those rental fees?

As the state economy is going south, so is the funding to the university. At the meeting with the President and Vice President this past Thursday the CAHS faculty and staff we told of how the university intends to meet the need to save $600,000 dollars this year in the Academic Affairs budget. If the university is not getting the funding from the state as it has in the past, program budgets will take the hit.

We find rental equipment allows us to have a great variety and new models than to own. We often find the best rental deal to keep costs low. Funding often comes from the Vocational Education money. At times, it does not making it difficult to have sufficient rental equipment.

RESPIRATORY CARE PROGRAM
COLLEGE OF ALLIED HEALTH SCIENCES
FERRIS STATE UNIVERSITY

PROGRAM REVIEW REPORT
September 15, 2002

PROGRAM REVIEW PANEL

Brenda K. Brown, M.A., R.R.T.
Julian F. Easter, M.S., R.R.T.
Douglas Fonner, Ph.D.
Barbara Ross, A.B., MT(ASCP)
David Zobeck, M.M., R.R.T., C.P.F.T. (chair)

Table of Contents

Table of Contents

PURPOSE: To conduct the scheduled review of the Respiratory Care Program to evaluate the goals and outcomes, thus establishing that the program and the University make informed decisions about curricular issues and resource allocations.

SECTION I: OVERVIEW OF THE PROGRAM

INTRODUCTION

The Respiratory Care Program is a two-year program which leads to the awarding of an Associate in Applied Science degree. The program is structured within six consecutive academic semesters and a total of 79 semester hours of credit are required for program completion. One and a half semesters are committed to full-time clinical internships at one of 28 affiliated hospitals located in Michigan.

The first year of the program is comprised of three (3) semesters on the Ferris State University campus. The second half of the Fall semester second year, is a six week, full-time clinical internship. During this internship students practice the procedures learned the two semesters beforehand at hospitals located throughout the State of Michigan. Students return to the Ferris campus for the Winter semester of the second year. During this semester, students take the more advanced diagnostic and critical care courses within the program. The Summer semester of the second year is a 12-week advanced clinical internship semester, with students being assigned to an affiliated hospital.

Clinical sites are used according to student requests. Some clinical sites may not be utilized for years. To insure quality of clinical adjunct instructor skills a training CD-Rom has been created to allow the review of the procedural evaluation process before students begin the clinical internship experience.

The recent curriculum revision allows students to start in the Respiratory Care Program at their local community college by taking prerequisite and general education courses. RESP 100, Introduction to Respiratory Care, and RESP 119, Cardiopulmonary A&P, are now offered online to allow students to enter the program while finishing courses at their local community college. All students must be on-campus by the Summer semester of the first year.

CLINICAL AFFILIATE	LOCATION	INTERNSHIP
Alpena General Hospital	Alpena	Basic
Bronson Methodist Hospital	Kalamazoo	Advanced/Basic
Central Michigan Community Hospital	Mt. Pleasant	Basic
Covenant Health Care	Saginaw	Basic/Critical Care/Neo
DMC – Children's Hospital	Detroit	Neo/Peds
DMC – Harper Hospital	Detroit	Basic/Advanced
Genesys Regional Medical Center	Grand Blanc	Basic/Advanced
Gerber Hospital	Fremont	Basic
Hurley Medical Center	Flint	Advanced
Ingham Medical Center	Lansing	Basic/Advanced
Lakeland Regional Health System	St. Joseph	Basic/Advanced
Mecosta County General Hospital	Big Rapids	Basic
Memorial Hospital	South Bend, IN	Basic/Advanced/Neo
Mercy Health Services North	Cadillac	Basic
Metropolitan Hospital	Grand Rapids	Basic/Advanced
Mid-Michigan Regional Center	Midland	Basic/Advanced

CLINICAL AFFILIATE	LOCATION	INTERNSHIP
Munson Medical Center	Traverse City	Basic/Advanced
Northern Michigan Health Organization	Petoskey	Basic
Oakwood Hospital	Dearborn	Advanced
Port Huron Hospital	Port Huron	Basic/Advanced
Reed City Hospital	Reed City	Basic
Saginaw General Hospital	Saginaw	Advanced
Sparrow Health System	Lansing	Basic/Advanced
Spectrum Health (Blodgett)	Grand Rapids	Basic/Advanced
Spectrum Health (Butterworth)	Grand Rapids	Advanced/Neo
St. Mary's Health Services	Grand Rapids	Basic/Advanced
St. Mary's Medical Center	Saginaw	Basic/Advanced
United Memorial Hospital	Greenville	Basic

A Respiratory Care curriculum check sheet is included at the end of this section. Requirements for admission are a high school GPA of 2.5, Math ACT subscore of 19 or higher and a "B" grade in both biology, and chemistry. A college student transferring into the program must have a 2.5 CGPA. Also "C" grades in MATH 110 or equivalent, biology, and chemistry (one semester each with labs).

Aside from standard University requirements, respiratory care students are required to maintain a 2.00 cumulative average in professional courses in order to maintain program progression, enter into clinical internships and/or graduate from the program. Satisfactory completion of the program leads to eligibility to sit for the national credentialing examinations sponsored by the National Board for Respiratory Care.

MISSION AND GOALS

The primary mission of the Respiratory Care Program has always been to provide highly qualified and competent respiratory therapists to the health care system. Over the years, the program has evolved from having two internship sites in Grand Rapids, Michigan to having nearly 30 basic and advanced level sites throughout the State of Michigan.

The program's basic competency goal is to assure that all graduates demonstrate upon graduation a competency level commensurate with that of an advanced respiratory care practitioner. The standards (cognitive, psychomotor, and affective) associated with the program's competency goal are:

1. Upon completion of the program, all students will demonstrate the ability to comprehend, apply, and evaluate information relevant to their roles as advanced respiratory care practitioners.

2. Upon completion of the program, all students will demonstrate technical proficiency in all skills necessary to fulfill their roles as advanced level respiratory care practitioners. (Psychomotor Domain)

3. Upon completion of the program, all students will demonstrate personal and professional behaviors consistent with those expected of advanced level respiratory care practitioners. (Affective Domain)

PROGRAM HISTORY

The Respiratory Care Program at Ferris State University began in 1972 in response to the demand for qualified respiratory therapists in western Michigan. At the time it was believed that it was the fourth program at the therapist level in this state. In the early years of the program, enrollments were high as a large number of on-the-job-trained therapists recognized the need for formal training.

The program is accredited by the Committee on Allied Health Education Programs (CAHEP). The Committee on the Accreditation of Respiratory Care (CoARC) program establishes accreditation requirements, conducts on-site accreditation visits, and recommends accreditation actions to the CAHEP. FSU's Respiratory Care Program has undergone four accreditation visits since 1982. It has been granted full unqualified accreditation each time. This academic year the program is writing and submitting its self study in preparation for a site visit as part of the accreditation process.

The joint venture between the Nursing Program and Respiratory Care Program instituted in 1992, continues to be an option for two or three students each year. Students usually complete the requirements for their A.A.S. degree in Respiratory Care and then enter the Nursing Program the following semester. Students completing both degrees are then eligible to sit for both sets of credentialing examinations.

IMPACT OF THE PROGRAM ON THE UNIVERSITY, THE STATE, AND THE NATION

Since the 1996 program review, three (3) programs have closed in the State of Michigan. There are 10 associate degree programs statewide. Nine of these programs are sponsored by community colleges. The Ferris program is the only one sponsored by a four year state supported universities. There are no B.S. level programs within the State of Michigan, nor are there licensure requirements for practitioners within this state.

There are approximately 295 therapist level programs at the associate degree level nationwide. While there are approximately 50 B.S. level programs, the A.S. entry level remains the principal educational level for the profession.

FSU graduates are still primarily employed in acute care hospitals. Respiratory care practitioners are involved in the diagnosis, management and continuing care of patients with diseases and disorders of the cardiopulmonary system. They have exclusive responsibility for the care and monitoring of patients requiring sophisticated and technical management of cardiac and ventilatory functions. The patients they care for range from premature infants to geriatric patients.

The starting salaries of respiratory therapists are surprisingly high for associate degree graduates. FSU respiratory care program graduates have typically been found in the upper ten percent of the University's graduates salary ranges. A national survey found that the range of salaries of respiratory care practitioners is $31,000 - $46,000 (salary.com).

EXPECTATIONS

The health care industry has been experiencing some interesting changes the last few years. Shorter hospital stays and an increase in the amount of patient care being given on an outpatient basis has provided many new job arenas for the respiratory care practitioner. Physician offices, clinics, sub-acute care facilities, long-term care facilities and home care companies are a few of the areas respiratory care practitioners of the future will find alternative employment opportunities besides the hospital setting. Job opportunities will still be plentiful and available for those individuals looking for full or part time employment in the field of Respiratory Care in the future. Currently, there is manpower storage in the field as respiratory care programs are not meeting the demand.

Some of our graduates will continue their educational endeavors and obtain B.S. degrees in Health Care Systems Administration, Applied Biology or Allied Health Teacher Education programs as is currently occurring.

PLANS FOR IMPROVEMENT

Our plans for improvement include continuing the development of a B.S. degree in Respiratory Care. To date two other B.S. degree program proposals have been written by the Respiratory Care program faculty. Both B.S. proposals were approved by FSU but never funded. By design this degree would allow articulation of community college A.A. or A.A.S. degree graduates into the program. The Respiratory Care Program would continue to run the A.A.S. portion of the program to act as a student feeder for the B.S. degree. The B.S. degree being developed has been placed on hold until enrollment in the A.A.S. program has been improved.

The program will continue to change faculty teaching assignments every few years to keep faculty current in most areas of Respiratory Care. Recent curriculum revisions in the program and other situations have resulted in switching the teaching assignments of the Clinical Coordinator and the current on-campus faculty member.

Use of computer technology allows us to link with our clinical affiliates around the state, as well as our students in clinical internships. This improves the communication between the students, clinical affiliates, and the faculty of Ferris State University. Additionally, on-line courses are another mechanism for teaching students in a variety of locations off-campus.

The Structured Learning Assistance course has been so successful in RESP 119 and RESP 156 that it is being modified for use in the online version of RESP 119 for the Winter semester of 2003.

The faculty is working hard on recruitment and retention efforts to improve the program enrollment numbers, and the productivity of faculty. We are linking with other community colleges. This is to develop a 1 + FSU option to encourage students to begin respiratory care at their local community college. Students begin the first year of the program at their community college. Then transfer to Ferris beginning Summer semester of the first year.

We are continuing to incorporate state-of-the-art computer technology into the Respiratory Care curriculum so that graduates will leave FSU with a basic level of computer literacy. Basic computer literacy is now a necessity for persons working in the highly technological environment of the health care setting. We are encouraging students to purchase and use a Palm (Personal Digital Assistant) as a bedside educational resource.

We are also continuing to upgrade the equipment utilized by students in the hands-on laboratory that is a vital component of the various procedures courses taught in the Respiratory Care Program. Staff downsizing at our clinical affiliates has created the expectation that our students will enter their internships with basic procedural competency levels. Staffing levels permit students to refine the skills they already possess under supervision but, not the direct teaching of many new skills. With this situation at hand the FSU Respiratory Care Laboratory must maintain relatively current and operational equipment for students to practice the skills they are learning and perform their procedural competency evaluations on.

When purchasing is not possible, the program rents key equipment such as mechanical ventilators. In some cases, equipment vendors have been willing to present their product to the class and allow us to use it for no cost for 1-4 weeks. This provides students with the most current product information.

FERRIS STATE UNIVERSITY
COLLEGE OF ALLIED HEALTH SCIENCES
Respiratory Care Program – Associate in Applied Science Degree

NOTE: Meeting requirements for graduation is the responsibility of the student. Your advisor is available to assist you.

FIRST YEAR

Fall Semester		Grade
BIOL 205	Human Anatomy & Physiology	5 ____
CCHS 101	Orientation to Health Care	3 ____
CHEM 114	Intro. to General Chemistry	4 ____
ENGL 150	English 1	3 ____
RESP 100	Introduction to Resp. Care	1 ____
		16

Winter Semester		Grade
CCHS 102	Safety Issues in Health Care	1 ____
CCHS 103	Clinical Skills	1 ____
ENGL 250	English 2	3 ____
MRIS 102	Orient. to Medical Vocabulary	1 ____
RESP 119	Cardiopulmonary A & P	4 ____
	Cultural Enrichment Elective	3 ____
		13

Summer Semester		Grade
BIOL 108	Medical Microbiology	3 ____
COMM 105	Interpersonal Communications	3 ____
OR		
COMM 221	Small Group Decision Making	
RESP 141	Respiratory Care Procedures 1	4 ____
RESP 160	Cardiopulmonary Pathophys. 1	2 ____
		12

SECOND YEAR

Fall Semester		Grade
Session A – 1st 9 Weeks		
RESP 151	Respiratory Care Proc. 2	4 ____
RESP 156	Cardiopulmonary Pharm.	2 ____
RESP 170	Cardiopulmonary Pathophys. 2	2 ____
Session B – 2nd 6 Weeks		
RESP 193	Clinical Practicum 1	6 ____
		14

Winter Semester		Grade
RESP 251	Cardiopulm. Diagnostics	3 ____
RESP 261	Ventilator Mechanics	3 ____
RESP 266	Neonatal/Pediatric Ventilation	3 ____
	Social Awareness Elective	3 ____
		12

Summer Semester		Grade
RESP 293	Clinical Practicum 2	12 ____
		12
	Computer Competency	_____

MATH 110, equivalency or proficiency (Math ACT subscore of 19 or better) required for admission.

**Social Foundation elective recommended for students pursuing a Bachelor's degree.

79 semester hours required for graduation

Revised 3/19/00

SECTION II: CURRICULUM EVALUATION

The RESP Program is in the second year following its curriculum revision. Evaluation of the specific revisions and outcomes has been accomplished by guided discussions at Respiratory Care Program faculty and Advisory Committee meetings, and the analysis of the data gained from the student, graduate, employer and advisory committee surveys. Overall, a majority of the revisions to the curriculum have received positive endorsements and have yielded positive outcomes.

BIOLOGY AND CHEMISTRY COURSES

The faculty is satisfied with the two Biology courses (BIOL 205, Human Anatomy and Physiology, and BIOL 108 Medical Microbiology) that students currently take. It was felt that the contents of each course met the current needs of the Respiratory Care Program. Moving BIOL 205 and CHEM 114 to the first semester of the RESP Program has assisted students in successfully completing and understanding the content material presented in RESP 119, Cardiopulmonary Anatomy and Physiology.

GENERAL EDUCATION COURSES

Respiratory Care students are required to take one Social Awareness and one Cultural Enrichment elective course. Historically, faculty have recommended during advising sessions that students take HUMN 220 & 320 (Ethics in Health Care and Biomedical Issues), PSYC 150 (Introduction to Psychology), and SOCY 121 (Introduction to Sociology) as their Social Awareness and Cultural Enrichment Awareness electives. Many of our students continue their education past the A.A.S. degree level, and pursue BS degrees in Health Care Systems Administration and Applied Biology. The courses typically recommended by faculty apply to the requirements of the advanced degrees. Recent race, gender, and ethnicity requirements are being met in PSYC 150 or other designated courses. COMM 105 or 221 was added to the curriculum as a component of the CAHS Core Curriculum implemented two years ago.

MATHEMATICS

Prior to graduation, RESP students must demonstrate proficiency in MATH 110 (Fundamentals of Algebra) either by taking the course or through a proficiency examination. This course seems to provide adequate preparation of students for the math utilized in the various respiratory care courses and profession.

MEDICAL TERMINOLOGY

MRIS 102 (Introduction to Medical Vocabulary) is a one credit course which teaches basic medical terminology any health care professional needs in communicating in the written or oral form within any health care setting. This course currently meets the needs of the respiratory care student. The course is now offered both in the on-line and on campus format. The on-line format meets the need of off-campus students.

ENGLISH

Students complete ENGL 150 (English 1) and ENGL 250 (English 2) as part of the respiratory care curriculum. These courses meet the needs of the respiratory care student.

CORE CURRICULUM IN HEALTH SCIENCES

In 2001, the College of Allied Health Sciences instituted core competencies for all its programs. This resulted in the addition of three courses to the RESP curriculum: CCHS 101, Orientation to Health Care (3 credits); CCHS 102, Safety Issues in Health Care (1 credit); and CCHS 103, Clinical Skills (1 credit). These courses were designed to provide an overview of the health care system, address safety issues affecting all health care professionals, and teach basic clinical skills. The addition of these three courses along with COMM 105 to the curriculum resulted in the loss of credit hours from professional courses.

The program faculty has discussed on many occasions some serious concerns about the two of the three CAHS core courses the students must take. In an effort to address these concerns faculty have tried to discuss with the CAHS Core Curriculum Coordinator, and specific core course instructors. Each and every time there was a discussion the concerns raised were never passed or any changes made. The faculty spent a great deal of time sharing concerns and offering suggestions for course improvements on the Core Curriculum surveys they completed this past spring.

Students taking the CCHS 101, Introduction to Health Care course, have routinely complained to their advisors about the large number of credits assigned to an introductory course. They feel that the material is taught from a "billing or non-clinical perspective", is quite irrelevant, and very boring. When asked if students shared these comments about the course and its instructors on Student Assessment of Instruction survey students stated "yes". The RESP faculty feels this course does not need to be three credits in length.

The CCHS 103 course and lab instructor last year revised the clinical skill competencies written by committee members whose students routinely take the course. Competency evaluations of procedures in CCHS 103 are currently be done by the course and lab instructor at a level below that utilized in other Allied Health Programs. This situation has created a great deal of frustration for faculty and students when competency evaluations are performed in professional courses. Bad habits learned in CCHS 103 must be broken and skills supposedly learned must be retaught even at the most basic level. As credit hours were removed from professional courses so was the time for teaching the basic clinical skills. Re-teaching of basic clinical skills is often necessary.

The RESP Program faculty would like to see the CAHS Core Curriculum re-evaluated and re-voted on by the entire CAHS faculty.

RESPIRATORY CARE COURSES

Evaluation of respiratory care course syllabi revealed course objectives that follow the national credentialing examination matrices and the Committee on Accreditation of Respiratory Care standards fairly well. Approximately one-half of the on-campus respiratory care courses include a lecture and a laboratory component. Each laboratory section is four hours in length and is limited to no more than eight students. This design provides for a lot of one-on-one and hands-on instruction between instructor and students. In doing so, instruction can be adapted to meet most students learning styles and special needs.

With the addition of the CCHS courses, it was necessary to add a sixth semester to the Respiratory Care program. Since it was felt many students were not aware of the expectations of the program or in the field, and that they may not fully understand what respiratory care was, a RESP 100 Introduction to Respiratory Care was added. This overview course allows us to broadly cover the topic of respiratory care.

The change in course scheduling has provided an additional entry point for students in the RESP Program. Now students can begin the RESP Program either in the Fall or Winter semester. This is especially valuable for students changing majors from programs like Nursing. In Winter Semester 2002, three students entered the RESP Program at this additional entry point.

With the change in curriculum, the 1st year Summer session is no longer two 6-week sessions. It is 12 weeks in length with students taking two respiratory courses: RESP 141, Respiratory Care Procedures 1, and RESP 160, Cardiopulmonary Pathophysiology 1. During the summer session students begin learning respiratory care therapeutic procedures and the use of equipment in RESP 141. In RESP 160, the students learn about the pathophysiology and treatment of the most common pulmonary diseases. This course is taught such that students are assigned to groups of 2 or more wherein they research a specific disease and make a presentation of that disease to the class. Not only does the student understand their disease assignment, but they also improve their public speaking skills. The program faculty is in the beginning stages of discussing a revision in the first year summer semester from a 12 to a 9-week format to provide students and faculty with a short break between summer and fall semesters.

The Fall semester of the second year is divided into a 9-week and a 6-week session. The first nine weeks the students take RESP 151, Respiratory Care Procedures 2, RESP 156, Cardiopulmonary Pharmacology, and

RESP 170, Cardiopulmonary Pathology courses. RESP 151 is a continuation of RESP 141 and provides instruction on the remaining basic respiratory care equipment and therapeutic procedures. Each procedure must be completed following very specific check list of steps.

Lastly, RESP 170 is the second disease course. This coruse is structured much the same as RESP 160. Students continue to research and present more advanced diseases to their classmates.

The last 6 weeks of Fall semester of the second year is where the students begin actual patient care in their first clinical internship (RESP 193). During this semester, students are in hospitals throughout the state and are limited to refining the basic respiratory care procedures and skills they learned the previous two semesters.

Students return to campus for Winter semester of the second year. During this semester, they take 3 advanced Respiratory Care classes: RESP 261, Ventilator Mechanics, RESP 251, Cardiopulmonary Diagnostics, and RESP 266, Neonatal/Pediatric Ventilation.

During the final Summer semester of the program, students take RESP 293 (Clinical Practicum 2). This is the final clinical internship in which students apply the adult critical care, neonatal, and pediatric skills they learned in lecture/lab sessions to patients in ICU units. This final clinical was previously in the winter semester, which was a better time of year for their internship. However, the CAHS Core Curriculum made it necessary to push the final clinical internship into the summer semester where there are overlaps in the scheduling of FSU students with other students from other community college Respiratory Care Program. In the summer fewer patients with pulmonary or cardiac disease are admitted to the hospital thereby decreasing the number of patient care procedures available for students to perform.

The procedural evaluations of students for basic and advanced respiratory care competencies are performed in four on campus courses (RESP 141, 151, 261, 266), and during the two clinical internship courses (RESP 193 and 293). The procedural evaluations done in the laboratory prior to the clinical experience continue to be one of our student's greatest assets in the hospital setting. We to some extent compete with six other community colleges for slots for student internships at various clinical affiliates. Community colleges currently pay hospitals between $.50 and $1.50 per hour per student to educate their students. FSU does not, nor has it ever, paid for an internship experience of its students. We have been able to continue this non-payment to affiliates because our students are more clinically prepared in the on campus laboratory than are the students coming from the community colleges. The less didactic instruction clinical instructors have to do in a time of staff restructuring and downsizing, the happier and more productive the clinical staff is. FSU students have not required didactic education in the clinical settings. We feel students are in the hospital to refine the skills they learned in the laboratory, and observe procedures done by other members of the healthcare team, not to learn basic respiratory care skills for the first time.

SECTION III: ENROLLMENT TRENDS OVER THE PAST FIVE YEARS

The data for the enrollment/graduate trends was ascertained from the Administrative Review of the Respiratory Care Program. Enrollment in the Respiratory Care Program reached a low in 2001. Intensive recruitment and retention efforts on the part of the program faculty and CAHS are resulting in an increased enrollment in the 2002 Respiratory Care Program.

	1997	1998	1999	2000	2001
Enrollment on-campus total*	31	26	35	25(a)	14(a)
Freshman	6	6	5	6	1
Sophomore	9	7	13	6	5
Junior	10	6	14	7	7
Senior	6	7	3	6	0
Pre-respiratory care	13	18	10	14	9

* Use official count (7-day count for semesters, 5-day count for quarters).
(a) Under-reported since number of students are simultaneously enrolled in HCSA, Pre-Nursing, or Nursing.

Respiratory care, like all other health care fields, struggles with a national shortage of students. The Respiratory Care program has been aggressively attacking this problem by a redesign of its program, unique marketing efforts, along with traditional recruitment (open lab tours, career day presentations, Dawg Day and Autumn Adventure) and retention efforts. The program increasing its efforts in recruitment and retention has addressed the declining enrollment rate.

Retention Efforts:

The faculty has worked hard to improve retention rates in a variety of ways. Historically the program had the highest attrition rate during the first semester of the program. A key element in the programs retention efforts has been the use of Structured Learning Assistance Workshops in difficult respiratory care courses. Structured Learning Assistance is part of the RESP 119 course (Cardiopulmonary Anatomy and Physiology), and RESP 156 (Cardiopulmonary Pharmacology). This requires students whose current course average is below a "C" to attend mandatory tutoring workshops. Typically, the RESP program has the lowest S has been added to the program to further help students understand the field and the program and assess whether they have chosen the appropriate career.

Incoming RESP and Pre-RESP students are highly encouraged to actively participate in the activities of the Respiratory Care Student Organization. Through participation in club activities, Pre, first, and second year RESP students interact together creating a sense of community amongst the various groups and assists in the retention of students.

All students in the program are required to see their advisor a minimum of two to three times per semester excluding the clinical phase for intrusive advising sessions. These intrusive advising sessions last approximately fifteen minutes to a half hour and promote one-on-one faculty student interactions in a private setting. Many student situations have been successfully resolved in this

fashion improving retention and graduation rates. This provides the student and advisor an opportunity to discuss program requirements, and to avoid potential schedule difficulties.

An Alumna of the program and her family has established a memorial scholarship of $1,000 a year for the next 10 years for RESP students. This scholarship will assist students in the second year of the program with educational expenses thereby improving graduation rates for students with financial concerns.

Recruitment Efforts:

The Respiratory Care curriculum has recently been revised to include the Core Curriculum. This resulted in the need to expand the program from five semesters to six. One of the benefits from this redesign was the increase in number of entry points into the program. Students can enter the program in fall, winter, and summer semester providing they meet program requirements Multiple program entry points:

a. provides students changing programs out of sequence (such as Nursing program students) the ability to enter the program in a timely fashion.

b. provides pre-respiratory students an additional semester to take coursework needed to meet the program's admission requirements.

c. provides students with a Bachelor of Science degree meeting program admission requirements entry into the program summer semester. With the downturn in the economy, it was noted that Bachelor of Science degree graduates might be interested in training for a health care career. Most BS degrees meet a majority of FSU general education requirements and, providing individuals pass a proficiency test for RESP 119, these individuals could enter the program quite easily.

d. provides community college students entry into the program by transferring their general education and other classes plus taking the two on-line FSU respiratory courses. This "one plus Ferris" has sparked interest by approximately five (5) community colleges throughout the state. This mechanism provides community colleges the opportunity to provide another health care program to a limited number of students without the costs incurred for program development.

To test this assumption, the program placed two small 2-inch ads into the job wanted section of the Sunday editions of Grand Rapids Press and Lansing State Journal. It read:

> *Bachelor of Science degree? Need a career? Qualified candidates can become a Respiratory Therapist in 15 months through Ferris State University. Nationwide, Statewide, and local shortage. Information on-line at Ferris.edu or call 231-591-2262.*

These geographical locations were chosen as they have large labor market, which are easily effected by the recent down turn in the economy. Lansing was targeted since Lansing Community College closed their Respiratory Care program two years ago and we have a close relationship with

the Lansing hospitals. Information on the program redesign and entry points is described on the Ferris web site. The ads generated 5-6 e-mails the following week, and yielded several students enrolling into the Respiratory Care program.

A Programmatic Marketing Grant for $1,100 was awarded to the RESP Program in 2001 for the creation and distribution of program recruitment brochures. A tri-fold brochure describing the three entry points into the Respiratory Care program was developed for individuals interested in Respiratory Care. Separate information a sheet describing the FSU Respiratory Care program's entry points allows the program to focus directly on separate areas of interest. The three areas addressed were community colleges, students in community colleges, and BS degree graduates. Another information sheet was written to encourage hospitals to develop Respiratory Care scholarships for students. Scholarships would assist students financially in completing the RESP Program while recruiting future employees for the hospital. A copy of the various brochures are provided in Appendix D. Brochures and specific information sheets were bundled in packets and sent to community colleges with strong health care programs. Other packets with scholarship information sheets were sent to Respiratory Care departments in hospitals around the state. Brochures were not sent to hospitals where there was a community college with a Respiratory Care Program in its area. As noted previously, this has resulted in contacts with five community colleges.

The nationwide shortage of allied health students has resulted in a shortage of Respiratory Therapists. In response, hospitals have expressed concern in replacing their staff vacancies. The program faculty created a document to assist the hospitals in developing a scholarship program. In essence, the hospital offers Respiratory Care students a scholarship to pay all or part of their tuition. In turn, the student commit to working at the hospital for a period of time after graduation. Several hospitals have developed scholarships with current students. At least one student was given a full scholarship whereas; others have reimbursed students up to $7,500 of tuition expenses.

In the 2002-03 academic year the Respiratory Care Program will be offering two totally on-line courses. The RESP 100, Introduction to Respiratory Care, (offered in the Fall semester) and RESP 141, Cardiopulmonary Anatomy and Physiology (offered in the Winter semester) will both be offered only in the on-line format. The faculty believes this format will allow the program to market itself to students outside of the Ferris campus. There has been interest voiced by the faculty of Kent Skill Career Tech Center in Grand Rapids in their high school students taking the RESP 100 and 119 courses on-line as a part of their Health Careers Work. This could potentially yield high school students earning FSU credits.

In the 2002-03 academic year the Respiratory Care Program will be offering two totally on-line courses. The RESP 100, Introduction to Respiratory Care, (offered in the Fall semester) and RESP 141, Cardiopulmonary Anatomy and Physiology (offered in the Winter semester) will both be offered only in the on-line format. Program faculty expects this format to provide the program marketing opportunities outside of the Ferris campus. There has been interest voiced by the faculty of Kent Skill Career Tech Center in Grand Rapids in their high school students taking the RESP 100 and 119 courses on-line as a part of their Health Careers Work. This could potentially yield high school students earning FSU credits.

The faculty expects an increase in enrollment numbers based on their intensive recruitment activities, newspaper ads placed, brochures distributed and contacts established.

Graduates

	AY 96-97	AY 97-98	AY 98-99	AY 99-00	AY00-01	AY 01-02
Respiratory Care	16	14	13	15	13	8

We noted a decline in the number of graduates in 2001 (down to 8) due to the small class admitted. The soft enrollment in all health care fields has impacted the Respiratory Care program. The lack of waiting lists and low drop out rates in other programs like nursing adds to the lower admission rates in Respiratory Care. Financial and health problems of several students in the program futher reduced the class size. In response, the program actively sought new sources of students and redesigned it curriculum to allow more entry points.

SECTION IV: EVALUATION OF FACILITIES AND EQUIPMENT

The laboratory facilities of the Respiratory Care program at Ferris State University are located on the third floor of the Victor F. Spathelf Center for Allied Health Sciences (VFS). VFS 324 occupies a space of 37 feet by 78 feet, and can accommodate 30-40 students comfortably. It is used for instruction of all respiratory care procedures and lectures. A movable partition can close off the two halves of the room, creating two separate laboratory/classroom spaces. When open, the rooms can be used as one large, integrated laboratory.

In the room, there are several cabinets, which hold disposable and non-disposable respiratory care supplies. There is a separate closet with shelving to accommodate more supplies. There are gas outlets (which carry compressed air at 50 psi), and suction (vacuum) outlets in the walls. The quick connect outlets were replaced in fall of 2001.

Classroom instruction takes place mostly in this classroom in the VFS building, with some classes being taught in other nearby lecture rooms as necessary. The lecture section has a computer and projector for display of PowerPoint presentations. A computer laboratory, containing more than 32 IBM-compatible (some equipped with "Windows") computers is located within the VFS building, available for student use approximately 56 hours per week. It can be scheduled for instructional use and testing as needed, although most commonly it is used for self-directed computer simulations, quizzes and tutorials. Through the mainframe, students can access the Internet, the medical databases (such as Medline and CINAHL), e-mail (each student has an e-mail address), and many other network resources (word processing, databases, and so on).

The office of the Respiratory Care program director/department head is located on the fourth floor of the VFS building. Some student and program records are kept in this office. The offices of the program faculty are located on the third and fourth floors of the VFS building. Each office is self-contained, and provides space for small meetings and confidential student advising. Each faculty member has a program owned IBM compatible Pentium 4 with zip drive and CD-RW, and is connected to the network and laser jet printer on their desk for their use.

Within the laboratory of the respiratory care program is found most of the equipment needed to introduce students to the common procedures used in respiratory care today. There are, for example, enough adult ventilators for each student to work on his/her own ventilator in the course where ventilator concepts are taught. Students spend many unhurried hours practicing and learning at their own pace. The laboratory has typically been open for student practice from 7:00 a.m. to 5:00 p.m. on Monday through Friday. The laboratory/classroom available to the program is modern, well lighted, and presents an instructionally sound environment for student education.

A small supply room housing the various medical gas cylinders used by the program is located on the first floor of the VFS building off of the loading dock.

A list of major items of equipment available for student use follows along with a list of library resources available in the in the respiratory care lab, and lists of computer tutorials, simulations, and videotapes available for instructional purposes.

RESPIRATORY CARE PROGRAM
CAPITAL EQUIPMENT INVENTORY

EQUIPMENT	BRAND	MODEL #	NO.
Ventilator	Puritan-Bennett	MA-1	2
Ventilator	Puritan-Bennett	7200	1
Ventilator	Bennett	AP-5	1
Ventilator	Bennett	PR-2	1
Ventilator	Life Care	PLV100	1
Ventilator	Siemens-Elema	Servo-900c	1
Ventilator	Sechrist	IV – 100 B w/monitors	2
Ventilator	Bird	6400	1
Ventilator	Bird	Mark 2	1
Ventilator	Bird	Mark 8	1
Ventilator	Bird	Mark 7	5
Ventilator	Bird	Mark 10	1
Ventilator	Bird	Mark 14	1
Ventilator	Bird	VIP	1
Ventilator	Bear	Bear 3	1
Ventilator	Bear	Bear 2	1
Ventilator	Infant Star	BP 200	1
Low pressure alarms	Ventronics	Model 5520	3
Low pressure alarms	Healthdyne		2
CPAP machine	Respironics Inc.	Sleep Easy III	2
Adult test lung	MI instruments		4
Infant/adult test lung	MI instruments		1
Lung model	Drager		1
Infant lung/airway simulator			1
Infant intubation model			1
Adult intubation model	MPL		2
Adult intubation model	Laerdal		1
Thorax cut-away lung model			1
Resusci-Annies			1
Arterial training arm – adult			4
Arterial training arm – neonatal			2
Lung model			3
Resusi-head			1
Cabbage Patch Kid			1
Heart model			1
Infant/fetal models			2
Compressor	Timeter	Airdyne 2000	1
Oxygen concentrator	DeVO2		1
Oxygen concentrator	DeVilbiss		1
Portable LOX	Healthdyne		1
Oxygen analyzer	Beckman		4
Oxygen analyzer	Mira		4

EQUIPMENT	BRAND	MODEL #	NO.
Oxygen analyzer	Ohio		1
Oxygen analyzer	VTI		2
Oxygen analyzer	Ventronic		1
Oxygen analyzer	Minox 1		2
Oxygen blender	Puritan/Bennett	AO-1	1
Oxygen blender	Bird		1
Nebulizer	Hydrosphere		1
Nebulizer	Ohio Deluxe w/heater		1
TB Maskfit Test	3M		1
Disposable Incentive Spirometers			variety
PEP			2
Flutter			1
Acapella			1
Compressor Outlet Head	3-way		2
Outlet (Wye Adaptors)	2-way		3
Flowmeter	Oxygen		12
Flowmeter	Air		2
Regulator	E cylinder		2
Regulator	H cylinder		2
Laryngoscope kit	Welch Allyn		1
Flowmeter tester	Brooks		1
Wall outlets and adaptors			variety
Disposable bubble humidifiers			variety
Disposable nebulizers			variety
Disposable passover humidifiers	Neonatal/Peds		variety
Disposable Swan Ganz kit			1
Portable air compressor			1
High pressure gas hose	Oxygen/air		variety
Demand valve			1
Medications	Liquid/MDI/DPI		variety
Disposable MDI spacers			variety
Disposable suction catheter systems	Open/closed		variety
Disposable blood gas sampling kits			variety
Suction regulator and bottles			2
Disposable airway supplies	ET/Oral/Nasal		variety
Pari nebulizer compressor	Proneb		1
Pulmonaid nebulizer compressor			1
Spirometer	Wright		3
Spirometer	Bear	VM-90	1
Spirometer	Bourns	LS-75	1
Spirometer – PFT	Spirometric	Flowmate	1
Spirometer	Electronic	295	1
Volume monitor	Ohmeda		1
NIF/MIP manometer			3
Peak flow meter	Wright		1
Peak flow meter	Disposable		variety

EQUIPMENT	BRAND	MODEL #	NO.
PFT function	Respiradyne		1
PFT machine	Riko spirometer		1
3-liter syringes	Collins		1
3-liter syringes	Welch		1
1-liter syringes			1
Spirocare	Marion		1
Computer	Dell		1
Computer	Dell	(faculty offices)	3
Printer	Epson		1
Printer – laser	Hewlett-Packard	(faculty offices)	3
Projector	Proxima		1
Overhead projector			1
File cabinet		4 drawer	2
File cabinet		2 drawer	1
Cart			6
Beds			2
Bedside table			2
Blood pressure – wall			2
Blood pressure – rolling stand			1
Percussor	G-5 Electronic	K-3	1
Humidifiers – Neo/Peds	Fisher Paykell		4
Ultrasonic nebulizer	DeVilbiss		2
Oxygen tent	Ohio High Humidity	Pediatric Aerosol Tent	1
Isolette	Airshields		1
Light board		(x-ray light)	1
Pulse oximeter	Nellcor		2
Teaching stethoscope	Littman		2
Stethoscope – infant	Littman		1
Electrocardiograph	Burdick	12-lead	1
Simulator	Dynatech Nevada	Med Sim 300	1
Simulator	Dynatech Nevada	Med Sim 23A	1
Oscilloscope	Johnnie Walker		1
EKG Printer	Johnnie Walker		1
Apnea monitor	Healthdyne		2
Apnea monitor	Electronic Medical, Inc.		1
Transcutaneous oxygen monitor	Kontron		1
Fans			2
First Aid kit			1
Tool kit			1
Resuscitation bags – Adult			variety
Resuscitation bags – Peds			variety
Resuscitation bags – Neonatal			variety
Ventilator circuits – Adult			variety
Ventilator circuits – Peds			variety
Ventilator circuits – Neonatal			variety
Isolation gowns			variety

EQUIPMENT	BRAND	MODEL #	NO.
Ventilator components – Adult			variety
Ventilator components – Neo/Peds			variety
H cylinder carts			2
E cylinder carts			3
E cylinder bases			3
TV/VCR			1
ECG/Hemodynamic simulator	Armstrong	AA820/AA900	1
Blood pressure simulator			1
Disposable oxygen supplies			variety
Filters			variety
Small volume nebulizers			variety
Heated Cascade humidifiers			2
Mercury barometer			1
Cylinder bulk gas system			1
Cylinders – E			variety
Cylinders – H oxygen			2
Disposable aerosol supplies			variety
Placebo MDI's			8
MDI			variety
Heat moisture exchangers			variety

RESPIRATORY CARE PROGRAM RESOURCES

SUBJECT ID	TITLE	LOCATION
Disorders (D)		
D-1	Chronic Obstructive Pulmonary Disease	VFS 318
D-2	Respiratory Therapy Conference "Sleep Disorders"	VFS 318
D-3	Learning to Live Well with COPD: Managing Yourself	VFS 318
Equipment (E)		
E-1	Dale: Abdominal Binders, Trachs, and Catheters	VFS 318
E-2	HEPA – Tech 3010	VFS 318
E-3	KGT ¾ Set-up	VFS 318
E-4	MMCA Misty OX Multifit System Hospital Inservice	VFS 318
E-5	Monaghan PFM Sales Video	VFS 318
E-6	Nellcor N-10 Pulse Oximeter Training Video	VFS 318
E-7	Prefil Adjustable Electronic Aerosol Heater	VFS 318
E-8	REM Star Choice Advantage	VFS 318
E-9	Shiley: Ped Track Products	VFS 318
E-10	Shiley: Adult Track Products	VFS 318
E-11	Ohmeda: Vacuum Systems and Nasogastric Suction	VFS 318
E-12	Ohmeda: Airway Suction	VFS 318
Inhalers (I)		
I-1	Aerosol Cloud Enhancer (ACE)	VFS 318
I-2	Aerochamber Instructional Video	VFS 318
I-3	How to get the most out of your Atrovent Inhaler	VFS 318
I-4	How to use your Ventolin Rotahaler	VFS 318
I-5	MaxAir Auto Inhaler	VFS 318
I-6	Optihaler for use with MDI	VFS 318
Professional (P)		
P-1	Butterworth Employee Education	VFS 318
P-2	Ferris State: A Career Commitment	VFS 318
P-3	Lee Memorial Hospital Opportunities	VFS 318
P-4	Respiratory/Radiography Video Resume	VFS 318
P-5	"Life and Breath"	VFS 318
Safety & Precautions (S/P)		
SP-1	AMBU CPR Training video	VFS 318
SP-2	HIV and the Health Care Worker	VFS 318
Treatments & Care (T/C)		
TC-1	Exosurf – Neonatal for Intratracheal Suspension	VFS 318
TC-2	Flutter: Mucus Clearing Device	VFS 318
TC-3	New Approaches in the Treatment of Asthma	VFS 318
TC-4	RESITEX: PEP Expiratory Resistance Exercise	VFS 318
TC-5	Survanta Administration Instructions	
TC-6	Serevent	VFS 318
TC-7	Trach Care	VFS 318
TC-8	Therapep	VFS 318

SUBJECT ID	TITLE	LOCATION
Ventilators (V)		
V-1	Adult Star Ventilator for the Nineties	VFS 318
V-2	BiPap S/T-D #1	VFS 318
V-3	BiPap S/T-D #2	VFS 318
V-4	Companion 2801 Volume Ventilator	VFS 318
V-5	Infant Star Ventilator: New Concepts	VFS 318
V-6	Monitoring Respiratory Mechanics During Ventilation	VFS 318
V-7	P/N VIP Bird Ventilator	VFS 318
V-8	Pressure Support AARC Update 1989	VFS 318
V-9	Pressure Support Ventilation	VFS 318
V-10	Puritan Bennett 7200 Series Respiratory Mechanics	VFS 318
V-11	BIRD: Returning Ventilation to the Baby	VFS 318
V-12	Servo 900 C – Introduction	VFS 318
V-13	Servo 900 (#1) – Pressure support vent.	VFS 318
V-14	Servo 900 (#2) – Inverse ratio ventilation	VFS 318
V-15	Servo 300 Ventilator – control panel	VFS 318
V-16	Theory and Application of Neonatal Ventilators	VFS 318
V-17	VIP Bird Pediatric Ventilator Volume Monitor	VFS 318
V-18	VIP Bird Infant/Pediatric Ventilator 1991	VFS 318
V-19	VIP Bird Infant/Pediatric Ventilator 1994	VFS 318
V-20	Newport "Breeze" Ventilator	VFS 318
V-21	Introduction to the 7200	VFS 318
V-22	7200 Pressure Support	VFS 318
V-23	7200 Ventilator Settings	VFS 318
V-24	7200 Respiratory Mechanics Opt 30/40	VFS 318
V-25	Servo 300 Ventilator – Introduction	VFS 318
V-26	Servo 300 Ventilator – Modes of Ventilation	VFS 318

COMPUTER PROGRAMS
VFS 318

Simulation	Serial	SIM #	Company
Acker, Randy – Status Asthmaticus	21212969	212	MedEd
Anderson, Allie – Meconium Aspiration		207	MedEd
Chapman, Terri – MVA		204	MedEd
Chase, Gary – Mechanical Ventilation		219	MedEd
Fields, Herb – COPD and Mechanical Ventilation		206	MedEd
Gilson, Al – Burn trauma		214	MedEd
Grant, Carrie – Near drowning		205	MedEd
King, Travis – ARDS		215	MedEd
Landon, Jeff – Chest trauma		220	MedEd
Martin, Doris – Myasthenia Gravis		202	MedEd
McMillian, James – Vent weaning		221	MedEd
Miller, Martha – Guillain Barre		223	MedEd
Morris, Bruce – Smoke inhalation		208	MedEd
O'Brien, Mitch – Multiple trauma		210	MedEd
Pinkerton – General		201	MedEd
Stanton, Mark – Drug overdose		217	MedEd
Taylor, Steven – Heart trauma		211	MedEd
Tillan, Rob – Aspiration pneumonitis		222	MedEd
Vaugn, Vincent – Pulmonary edema		216	MedEd
Pediatrics/Neonatal			
Nelson Farley – Pediatric Asthma		203	MedEd
Andrew Larsen		209	MedEd
Megan Hill – Croup		213	MedEd
Katy Norwood		218	MedEd
Jena Hinds – Neonatal Respiratory Distress		224	MedEd
Tutorials			
Auto-Peep: Measurement and Management			Medi-Sim
Lung Cancer			Medi-Sim
Neuromuscular Disorders of the Brain and Spinal Cord			Medi-Sim
Permissive Hypercapnia			Medi-Sim
Pneumonia			Medi-Sim
Ventilator-Induced Lung Injury			Medi-Sim

TRAINING CDs

Title	Type
Respironics – BiPap Vision	CD-Rom
PB 840 Ventilator	CD-Rom
Drager Ventilator	CD-Rom
Auscultation of Normal Breath Sounds – Williams/Wilkins	CD-Rom
Heart & Lung Sounds	CD-Rom

CASSETTE TAPES

Heart Sounds and Murmurs – B. Erickson	VFS 410
Lung Sounds, 2nd Edition – R.L. Wilkins	VFS 410

LIBRARY RESOURCES
RESPIRATORY CARE LAB (VFS 324)

Title	Quantity
Anatomy and Physiology texts	2
Arterial blood gas/fluid balance/acid-base balance texts	15
Cardiology texts	16
Chest Physiotherapy texts	2
Equipment texts	7
General respiratory care texts	11
Intubation/airway management texts	1
Medical dictionary	2
Microbiology texts	4
Neonatal/pediatric texts	5
Pathology texts	20
Pharmacology texts	4
Physician's Desk Reference	
Practice Exam texts	7
Radiology texts	5
Ventilator manuals for all the program's ventilators	

LIBRARY RESOURCES

A substantial volume of medical texts are available in FLITE for student references. A list of these can be accessed through FLITE's online catalog – OPAC.

Other online databases that are available are: CINAHL, Health Reference Center, and MEDLINE.

The following lists those periodicals which are available on the shelves of FLITE.

Academic Medicine
American Journal of Cardiology
American Journal of Clinical Pathology
American Journal of Diseases of Children
American Journal of Epidemiology
American Journal of Forensic Medicine & Pathology
American Journal of Hospital Pharmacy
American Journal of Medicine
American Journal of Nursing
American Journal of Pharmaceutical Education
American Journal of Physiology
American Journal of Public Health
American Journal of Resp. & Critical Care Medicine
American Journal of the Medical Sciences
American Nurse
American Review of Respiratory Disease
Anesthesia and Analgesia
Anesthesiology
Annals of Internal Medicine
Annals of Pharmacotherapy
Archives of Internal Medicine
Archives of Neurology
Archives of Pediatrics and Adolescent Medicine
Bioethics Quarterly
Biomedical Products
Blood
British Journal of Clinical Pharmacology
British Medical Journal
Canadian Journal of Public Health
Canadian Medical Association Journal
Canadian Nurse
Cancer Research
Cancer Treatment Reports
Chemical and Pharmaceutical Bulletin
Circulation
Cleveland Clinic Journal of Medicine
Cleveland Clinic Quarterly
Clin-Alert
Clinical Chemistry
Clinical Drug Investigation
Clinical Laboratory Science
Clinical Pharmacokinetics
Clinical Pharmacology and Therapeutics
Computers in Nursing
Controlled Clinical Trials
Critical Care Nursing Quarterly
Critical Care Quarterly
Current Topics in Microbiology & Immunology
Diagnostic Medicine
Drug Investigation
Drug Topics
Electroencephalography & Clin. Neurophysiology
Emergency Medicine
European Journal of Clinical Pharmacology
European Journal of Respiratory Diseases
Experimental Brain Research
Hospital Progress
Hospital Topics
Hospitals
Hospitals and Health Networks
Immunology
Journal of the American Medical Assoc.
Journal of the American Osteopathic Assoc.
Joint Comm. on Accreditation of Hospitals
Journal of Allergy
Journal of Allergy & Clinical Immunology
Journal of Allied Health
Journal of Applied Physiology
Journal of Bacteriology
Journal of Bioethics
Journal of Continuing Education in Nursing
Journal of Health, Politics, Policy, and Law
Journal of Immunology
Journal of Infectious Diseases

Journal of Medical Education
Journal of Medical Ethics
Journal of Neurology
Journal of Nursing Care
Journal of Nursing Education
Journal of Pediatrics
Journal of Physiology
Journal of Professional Nursing
Journal of Respiratory Disease
Journal of the American Medical Association
Journal of Virology
Lancet
Medical Care
Medical Care Review
Metabolism Clinical and Experimental
Michigan Health and Hospitals
Michigan Hospitals
Michigan Medicine
Michigan Nurse
Morbidity and Mortality Weekly Report
Neurobiology of Disease
Neurology
New England Journal of Medicine
Nurse Educator
Nurse Practitioner
Nursing
Nursing and Health Care
Nursing Clinics of North America
Nursing Research
Pediatric Clinics of North America
Pediatrics
Public Health Nursing
R N
Research in Nursing and Health
Respiratory Care
Respiratory Management
Respiratory Technology
Seminars in Respiratory and Critical Medicine
Seminars in Respiratory Medicine

SECTION V: LABOR MARKET ANALYSIS

This report is based on data gathered in 2002. Sources of information included the Michigan Occupational Information Service, US Bureau of Labor Statistics, US Census Bureau, and surveys of job postings on respiratory care web sites.

NATIONAL EMPLOYMENT AND OUTLOOK

The Bureau of Labor Statistics and US Census Bureau all report that job opportunities are expected to remain good for respiratory therapists for the future. Employment of respiratory therapists is expected to increase faster than average for all occupations though the year 2006, because of substantial growth of the middle-aged and elderly population, a development that will heighten the incidence of cardiopulmonary disease.

Older Americans suffer most from respiratory ailments and cardiopulmonary diseases such as pneumonia, chronic bronchitis, emphysema, and heart disease. As their numbers increase, the need for respiratory therapists will increase, as well. In addition, advances in treating victims of heart attacks, accident victims, and premature infants (many of whom are dependent on a ventilator during part of their treatment) will increase the demand for the services of respiratory care practitioners. Opportunities are expected to be especially favorable for respiratory therapists with cardiopulmonary care skills and experience working with infants.

Although hospitals will continue to employ the vast majority of therapists, a growing number of therapists can expect to work outside of hospitals in respiratory therapy clinics, offices of physicians, nursing homes, or homecare.

The Bureau of Labor Statistics reports that respiratory therapists held about 110,000 jobs in 2000. More than 4 out of 5 jobs were in hospital departments of respiratory care, anesthesiology, or pulmonary medicine. Respiratory therapy clinics, offices of physicians, nursing homes, and firms that supply respiratory equipment for home use accounted for most of the remaining jobs. The Bureau of Labor Statistics reports that job opportunities are expected to remain good. Employment of respiratory therapists is expected to increase faster (21-35%) than the average for all occupations through the year 2010.

The United States Census Bureau reports that respiratory therapy is projected to be one of the 25 fastest growing occupations in the United States. In 1998, there were 86,00 respiratory therapists employed in the United States. By the year 2008, the number is expected to increase by 37,000 or 43%.

Earnings for respiratory therapists vary depending on their experience, education, and certification, and the type, size and geographic location of the employer.

The Bureau of Labor Statistics reports that the median annual earnings of respiratory therapists were $37,680 in 2000. The middle 50 percent earned between $32,140 and $43,430. The lowest 10 percent earned less than $28,620, and the highest 10 percent earned more than $50,660. In hospitals, median annual earnings of respiratory therapists were $38,040 in 2000.

MICHIGAN EMPLOYMENT AND OUTLOOK

The Michigan Occupational Information Service (MOIS) reports that there are approximately 2,925 Respiratory Therapists and Technicians employed in Michigan in 1999. Most worked in hospitals. Others worked for nursing homes, clinics, university health centers, and ambulance services, oxygen equipment centers and in respiratory therapy education programs.

Industry	% Employed
Hospitals, Public and Private	93.6
Offices of Other Health Practitioners	1.7
Health and Allied Services	1.3
Home Health Care Services	1.2
Nursing and Personal Care Facilities	0.8
Offices of physicians Including Osteopaths	0.8
Federal Government	0.5
Other	0.1

Employment of Respiratory Therapists in Michigan is expected to increase much faster than the average for all occupations through the year 2005. An average of 140 annual openings is expected during this period, with 90 due to growth and 50 due to replacement of those who retire or leave the labor force for other reasons. Some additional openings will occur as workers change occupations.

MOIS reports that new uses for Respiratory Therapy, increased acceptance of its use and the need to relieve nurses and other health services personnel from this therapy have increased the need for trained Respiratory Therapists. Because of increasing sophistication of therapeutic procedures for heart and lung disorders and new and improved equipment, opportunities are best for highly trained graduates of accredited programs.

In Michigan hospitals, the annual salaries (mid 1998) of Respiratory Therapists were:

	Average Minimum	Average	Average Maximum
Statewide	$27,560	$34,570	$37,274
Southeast	$29,203	$35,360	$40,102
East Central	$25,126	$29,245	$31,824
West Central	$26,125	$32,261	$35,922
Upper Peninsula	$25,043	$30,680	$34,778

According to MOIS, Respiratory Therapists usually receive hospitalization and life insurance; paid vacations; sick leave; disability insurance; pension plans; tuition assistance; uniforms; and parking. Benefits are usually paid for, at least in part, by the employer.

JOB POSTINGS

The large number of jobs posted by employment and recruiting services supports government statistics citing the need for respiratory therapists. For example, the web site of *The Michigan Society for Respiratory Care* averaged more than 30 respiratory therapy job postings from January through August 2002. *Absolutely Health Care*, a national database of health care jobs, posted 500 respiratory therapy jobs in August 2002.

JULIAN F. EASTER
17260 Valley Drive
Big Rapids, MI 49307-9523
easterj@ferris.edu

Home (231) 796-1650
Work (231) 591-2261

SUMMARY:

Over 20 years of progressively responsible positions in health care. Enjoy patient care and didactic duties. Good combination of practical and theoretical experience.
Motivated. Hard working. Well organized.

EDUCATION:

Western Michigan University, Kalamazoo, Michigan
Doctoral Degree Program, Fall, 1999
Anticipated graduation, May, 2003
Education Administration and Supervision – Higher Education

Pittsburgh State University, Pittsburgh, Kansas
Master of Science Degree: 1986
Major: Community College Teaching

Biosystems Institute, Tempe, Arizona, 1980-1981
Graduate AMA accredited Respiratory Therapist Program

University of Notre Dame, Notre Dame, Indiana, 1970-1974
Bachelor of Arts Degree in Music Education

Lorain Catholic High School, Lorain, Ohio, 1966-1970
Graduate

PROFESSIONAL CERTIFICATION:

Registered Respiratory Therapist (RRT) – June, 1983
Certified Respiratory Therapy Technician (CRTT) – June, 1982

PROFESSIONAL AFFILIATIONS:

American Association for Respiratory Care
National Board for Respiratory Care
Michigan Society for Respiratory Care

PROFESSIONAL EXPERIENCE:

Ferris State University, Big Rapids, Michigan
Department Head, Health Related Programs, May 1992 – Present

Responsible for the administrative management of the Respiratory Care, Radiography, Nuclear Medicine, Clinical Laboratory Sciences, and Opticianry programs.

Program Director, Respiratory Care, August, 1991 – Present

Responsible for the management of the Respiratory Care program. Duties include supervising of personnel and program/curriculum development.

Firelands College, Huron, Ohio
Director of Clinical Education, August, 1988 – July 1991
Responsible for supervising the clinical instruction of the Respiratory Care students. Assist in didactic/lab instruction. Assist the Program Director with program and curriculum development.

PROFESSIONAL EXPERIENCE: (cont)

Labette County Medical Center, Parsons, Kansas
Director of Respiratory Care, July 1985 – August, 1988
Responsible for managing the Respiratory Care Department and formal training programs for students, nursing personnel, and medical staff.

Labette Community College, Parsons, Kansas
Didactic/Clinical Instructor, July 1983 – July 1985
Primary Instructor of the technician program. Assisted in teaching advanced respiratory therapy theory in the therapist program. Extensive involvement in program and curriculum development for the Joint Review Committee for Respiratory Therapy Education Accreditation.

Biosystems Institute, Tempe, Arizona
Didactic/Clinical Instructor, February 1981 – June 1983
Served as didactic instructor teaching the basic sciences, math, pharmacology, EKG, basic and advanced theory in the technician and therapist program.

Primary instructor of five month accelerated therapist program.

As a clinical instructor, worked with students supervising and instructing them on practical applications of RT techniques. Served as a clinical evaluator of students in the external technician and therapist programs. Assisted in program development.

St. Joseph Hospital of Phoenix Arizona
Staff technician (part-time) November 1980 – February 1981
Performed general and critical care duties.

Central Michigan Community Hospital, Mt. Pleasant, MI
Staff Technician, January 1978 – September 1980
Responsibilities in general and critical care. Performed basic pulmonary function testing, basic cardiography, and a full range of respiratory technician procedures.

RELATED PROFESSIONAL EXPERIENCE:

American Heart Association of Michigan, Mecosta County, County Division
Board Member – 1992-1994

Michigan Society for Respiratory Care
Chairman – Awards and Scholarships Committee – 1995-1996

Sandusky/Medical College of Ohio Health Education

Committee Advisory Board Member – 1990-91

Easter Seal Society of Northwest Ohio Board of Trustees – 1989-91

American Lung Association of Ohio's South Shore Board of Trustees – 1990-91

PROFESSIONAL EXPERIENCE: (cont)

Ohio Consortium for Blacks in Higher Education
State Treasurer – 1989-91

President, Kansas Respiratory Care Society (Section VIII) – 1986-1987

Chairman of Advisory Board for the Labette Community College Respiratory Care Program – 1985-1988

National Board of Respiratory Care Entry Level and Advanced Practitioner Examinations Item Writer – 1985-Present

Clinical Facilitator for "Freedom From Smoking" clinics sponsored by the American Lung Association

PERSONAL:

Birthdate: November 28, 1952 - Lorain, Ohio
Health: Excellent
Marital Status: Married
Children: Four

REFERENCES:

Available on request.

BRENDA K. BROWN, M.A., R.R.T.
123 Heritage Place
Reed City, MI 49677

I. EXPERIENCE

Ferris State University, Associate Professor – Respiratory Care Program, Big Rapids, MI, May, 1995 – May, 1997; July 1998 – Present.

Ferris State University, Clinical Coordinator – Respiratory Care Program, Big Rapids, MI, Winter Semester 1997 and Summer Semester 1998.

Ferris State University, Assistant Professor – Respiratory Care Program, Big Rapids, Michigan, December, 1984 – May, 1995.

Ferris State College, Technical Instructor – Respiratory Therapy Program, Big Rapids, Michigan, September, 1981 - December, 1984.

Wyandotte General Hospital, Critical Care Respiratory Therapist, 2333 Biddle Avenue, Wyandotte, Michigan, July, 1979 - August, 1981.

Mecosta County General Hospital, Staff Respiratory Therapist, 405 Winter Avenue, Big Rapids, Michigan, June, 1978 - June, 1979.

Metropolitan Hospital, Non-Registered Cardiopulmonary Technician, 1919 Boston Avenue, Grand Rapids, Michigan, September, 1977 - April, 1978.

II. EDUCATION

Lay Certificate in Basic Theological Education, Methodist Theological School, Delaware, Ohio, May 1998 (28 credits towards a Master of Divinity degree).

Master of Arts degree in Health Care Administration, Central Michigan University, Mt. Pleasant, Michigan, December 1984.

Bachelor of Science degree in Applied Biology, Ferris State College, Big Rapids, Michigan, May 1979.

Associate in Applied Science degree in Respiratory Therapy, Ferris State College, Big Rapids, Michigan, May 1978.

III. CREDENTIALS - The National Board for Respiratory Care:

Certified Respiratory Therapy Technician - December 2, 1978
Registered Respiratory Therapist #10898 - November 22, 1980

IV. PROFESSIONAL AFFILIATIONS

Member – American Association for Respiratory Care since 1977.
Member – Michigan Society for Respiratory Care since 1977.
Member – Education Section, Michigan Society for Respiratory Care since 1991.
Member – Ferris State University Alumni Association since 1990.

BB:9/9/02
cad:RESUME

Faculty Member - Lambda Beta Honor Society, since April 1996.
Member - International Alliance of Teacher Scholars, 2001-02.
Member – American Association of University Women, 1982-83.

V. PUBLICATIONS

2002	Author, CAHS Spring Newsletter, Respiratory Care Program Article
2001	Author, CAHS Spring Newsletter, Friend of CAHS Article
2001	Author, CAHS Spring Newsletter, Respiratory Care Program Article
2000	Co-Author, CAHS Spring Newsletter, Respiratory Care Program Article
1999	Author, CAHS Spring Newsletter, Respiratory Care Program Article
1987	Author, "A Chat with the 1988 AARC President", Michigan Society for Respiratory Care Newsletter
1987	Author, Review of the book "Manual of Pulmonary Function Testing", Michigan Society for Respiratory Care Newsletter

VI. RESEARCH/GRANTS

2002	Co-Author, Image Database Grant - Ferris Foundation
2001	Respiratory Care Program Marketing Grant
2001	FSU Pride Day Grant
1996	Assisted Judy Hooper with the research for a RESP SLA Abstract
1993	Participated in research for Librarian Maureen Watson's article, "A Comparison of CINAHL and MEDLINE CD-ROM in Four Allied Health Areas".

VII. PROFESSIONAL DEVELOPMENT ACTIVITIES

Field of Respiratory Care:

4/2-5/01	Michigan Society for Respiratory Care 43rd Annual Scientific Symposium
5/10-12/00	Michigan Society for Respiratory Care 42nd Annual Scientific Symposium
4/28-30/99	Michigan Society for Respiratory Care 41st Annual Scientific Symposium
4/7-9/97	Michigan Society for Respiratory Care 39th Annual Scientific Symposium
4/30-5/2/96	Michigan Society for Respiratory Care 38th Annual Scientific Symposium
11/1-4/95	American Association for Respiratory Care 41st Annual Meeting and Exhibition
9/20-22/95	Michigan Society for Respiratory Care Fall Conference
5/10-12/95	Michigan Society for Respiratory Care 37th Annual Scientific Symposium
5/4-6/94	Michigan Society for Respiratory Care 36th Annual Scientific Symposium
9/22-24/93	Michigan Society for Respiratory Care Fall Conference
4/20-22/93	Michigan Society for Respiratory Care 34th Annual Scientific Symposium
4/7-10/92	Michigan Society for Respiratory Care 34th Annual Scientific Symposium
4/16-19/91	Michigan Society for Respiratory Care 33rd Scientific Symposium
10/3-4/91	Michigan Society for Respiratory Care Fall Conference – Gaylord, MI
4/10-13/90	Michigan Society for Respiratory Care 32nd Annual Scientific Symposium, Southfield, MI
4/18-21/89	Michigan Society for Respiratory Care Meeting – 31st Annual Symposium, Grand Rapids, MI
9/29-30/88	Michigan Society for Respiratory Care Fall Conference
5/19-22/87	Michigan Society for Respiratory Care 30th Annual Symposium, Flint, MI
4/8-11/86	Michigan Society for Respiratory Therapy 29th Annual Scientific Symposium
11/7-11/86	American Association Respiratory Care Annual Meeting, Dallas, TX
11/15-19/85	American Association Respiratory Care Annual Meeting, Atlanta, GA
4/3-5/85	Michigan Society for Respiratory Therapy 27th Annual Symposium, Dearborn, MI
10/29-31/82	AARC Annual Meeting, New Orleans, LA
5/25-27/82	Michigan Society for Respiratory Therapy 24th Annual Symposium, Dearborn, MI

4/1-2/82	Michigan Society for Respiratory Therapy Pulmonary Rehabilitation Symposium, Kalamazoo, MI

Other:

	Annual WebCT Conference - Boston, MA
Summer 2002	Facilitating Online Learning - 4 weeks, FSU CTFLD
3/22/02	Advanced WebCT Training - Multimedia
3/22/02	Spring Teaching Institute - FSU
Fall 2001	8 week Web CT Course Development
Fall 2001	Lilly North Conference
3/22-23/01	Equity within the Classroom XI
9/07/00	WebCT - Syllabus, Center for Teaching Learning and Faculty Development, FSU
8/23/00	Programmatic Marketing - Faculty Orientation
8/23/00	Services for Learning Disabled
8/21/00	Values in Higher Education
7/20/00	WebCT - Student Perspective, Center for Teaching Learning and Faculty Development, FSU
7/10/00	Critical Thinking - Faculty Development Institute
5/24/00	X-rays and Respiration
4/14/00	WebCT - Student Management, Center for Teaching Learning and Faculty Development, FSU
3/17/00	WebCT - Using Front Page, Center for Teaching Learning and Faculty Development, FSU
2/25/00	WebCT - Internet Connection, Center for Teaching Learning and Faculty Development, FSU
10/12/99	"Clinical Application of Gas Exchange", Jeff Johnson
9/21/99	"Cutting Edge Medicine: Where are We Going", Dr. Mehmet Oz
6/19-23/99	Special Summer Faculty Institute, Web CT On-Line Course
1/12/99	Sensitivity Training, Louise Youtz
11/24/98	Chest Radiograph Interpretation, Robert Holihan
11/23/98	CAHS Server Training, Mary Waldron
9/24/98	Are Brain Dead Patients Really Dead?, Dr. Paul J. Reitemeier
3/27/97	Health Education Futures Conference
2/6/97	Dr. Patch Adams
10/25/96	CAHS Faculty Computer Lab Training
8/21/96	Core Curriculum Training
4/16/96	Home Hospice and Respiratory Care
2/15/96	Dr. Elizabeth Allen, American Heart Association Speaker
11/3/95	Grant Writing
9/95	High Frequency Jet Ventilation, Donna McCauley, R.N.
8/23/95	Team Building Workshop
6/1-5/95	Structured Learning Assistance Course Training
2/22/95	Interactive Video
1/19/95	Judith Javorek, Holland Hospital CEO
11/7/94	VIP Bird Lecture, John Clauson, R.R.T.
9/16/93	Partest Software Workshop
8/24-25/93	Critical Thinking Workshop
4/16/93	VIP Bird Lecture, John Clauson, R.R.T.
2/5/93	Servo 900C Ventilator Workshop, Butterworth Hospital
1/26/93	Long Distance Learning Workshop
4/16/91	Critical Thinking Lecture
9/20/91	Dr. Novello
8/29/90	ECMO – Kris Brish, B.S., R.R.T.

1/20/87	Substance Abuse Lecture
11/11/86	Pneumocardiogram and Apnea Monitoring, Steven Clement, R.R.T.
9/30/86	AIDS
5/6/86	Creative Problem Solving
4/25/86	Assertiveness Training
2/6/86	PC File
1/3186	Lotus 1-2-3
3/29/86	High Frequency Ventilation
10/27/82	Stabilization and Transport of Neonate, John Hoppough, R.R.T.
10/20/82	Stress Management Class
9/16/82	Labor and Delivery, Betsy Workman, R.N.

VIII. COMMITTEES

Ferris State University Committees:

2000 - 2002	Member, Student Judicial Services, Conduct Review Committee
1998 – 2001	Member, Substance Abuse Committee
1998 – 99	Member, Mentoring Committee
1996 – 97	Member, Student Affairs Committee
1995	Member, Image Committee
1993	Member, Academic Senate Election Committee
1992 – 95	Member, University Retention Committee
1992 – 94	CAHS Senator, Academic Senate
1986 – 88	Member, Student Health Advisory Committee
1986 – 87	Member, Student Activities Budget Advisory Committee
1985 – 86	Member, Student Publications Advisory Committee
1985 – 86	Member, Gerholz Institute for Lifelong Learning (GILL) Advisory Committee

College of Allied Health Sciences Committees:

2001 – 2002	Member, Strategic Planning Committee
1999 – 2002	Member, Faculty Affairs Committee
1998 – 99	Member, CCHS 102 Committee
1998 – 00	Member, CCHS 103 Committee
1996 – 97	Member, Core Curriculum Committee
1994 – 97	Member, Computer Advisory Committee
1994 – 96	Member, Planning Committee
1994 – 95	Member, Dean's Student Advisory Committee
1993 – 94	Member, Tech Prep Committee
1990 – 91	Member, Library Committee
1989 – 92	Member, Curriculum Committee
1985 – 87	Member, Faculty Staff Development Committee
1985 – 86	Editor, School of Allied Health Alumni Newsletter
1984 – 86	Member, Health Career Committee
1984 – 85	Member, Clinical Education Committee
1984 – 86	Member, Alumni Association Board of Directors, Ferris State College
1984 – 86	Member, Alumni Association Board of Directors, School of Allied Health
1985	President, Alumni Association Board of Directors, School of Allied Health

Health Related Department Committees:

2002	Member, Nuclear Medicine Program Clinical Coordinator Search Committee
2001 - 02	Mentor, Shela Evans (Diagnostic Medical Sonography Program)
2001	Member, Diagnostic Medical Sonography Program Coordinator Search Committee

2000 - 02	Mentor, Jamie Brady
2000 – 02	Member, Program Coordinators Committee
2000 - 02	Member, Debra Garza Tenure Committee
2000 – 02	Co-Mentor, Debra Garza (Nuclear Medicine Program)
2000	Member, Nuclear Medicine Program Clinical Coordinator Search Committee
1998 – 01	Member, Jamie Brady Tenure Committee
1995 – 98	Member, Sheila Squicciarini Tenure Committee
1996 – 97	Member, Radiography Program Clinical Coordinator Search Committee
1994 – 98	Co-Mentor, Sheila Squicciarini
1992	Member, Hospital Related Programs Tenure Committee

Respiratory Care Program Committees and Activities:

2001 - 02	Chair, Brian & Grace Brown Scholarship Committee
2001 - 02	Member, Respiratory Care Program Review Panel
2001 - 02	Member, Respiratory Care Program Accreditation Committee
1998 – 01	Member, Respiratory Care Program B.S. Degree Development Committee
1998 – 00	Chair, Respiratory Care Program Curriculum Revision Committee
1998 – 00	Chair, Respiratory Care Program Reunion 2000 Committee
1981 – 02	Member, Respiratory Care Program Advisory Committee
1998 – 02	Chair, David Zobeck Tenure Committee
1998 – 02	Mentor, David Zobeck
1998	Member, Respiratory Care Program Clinical Coordinator Search Committee
1998 – 99	Advisor, Respiratory Care Student Organization
1998 – 02	Mentor, Dawn Easter (SLA Instructor)
1996 – 97	Chair, Respiratory Care Program Review Panel
1996 – 97	Advisor, Respiratory Care Student Organization
1996 – 97	Mentor, Laura Pontz (SLA Instructor)
1995 – 97	Member, Respiratory Care Program Accreditation Visit Committee
1995 – 96	Mentor, Annette Strader (SLA Instructor)
1995 – 96	Advisor, Respiratory Care Student Organization
1995	Member, Ann Flint Tenure Committee
1993 – 94	Mentor, Karen Kain
1993 – 94	Mentor, Bonnie Connelly
1993	Member, Respiratory Care Program B.S. Degree Development Committee
1992 – 96	Advisor, FSU Dual Degree (Respiratory Care & Nursing) Option Students
1992	Member, Respiratory Care Program Review Panel
1992	Chair, Respiratory Care Program Semester Conversion Committee
1991	Member, Respiratory Care Program Accreditation Site Visit Committee
1991	Member, Respiratory Care Program Director Search
1989	Member, Respiratory Care Program Review Panel
1985	Co-Chair, Respiratory Therapy Program Alumni Reunion
1982	Member, Respiratory Care Program B.S. Degree Development Committee

IX. SPECIAL PROJECTS

Guest Speaking:

2002	New to Ferris Faculty Transition Session, Panel Discussion, FSU Faculty Development
2002	PHAR , "Respiratory Care Durable Medical Equipment"
2002	CCHS 103, "Pulse Oximetry and Case Study Overview"
2001	Faculty Panel Discussion, FSU Board of Trustees, Academic Affairs Sub-Committee
2001	New to Ferris Faculty Orientation Session, Panel Discussion, FSU Faculty Development

2001	Distinguished Faculty Finalist Panel, Best Practices, FSU Faculty Development Day
2001	NURS 114 - "Respiratory Care of the High Risk Neonate"
1998, 2000	MRIS 101 – "Respiratory Care and its Equipment"
1997	CAHS 100 – "Respiratory Care as a Career"
1994	FSU IEHM Students – "Pulmonary Function Testing"
1993	CAHS Career Opportunities Class – "Respiratory Care as a Career"
1991	Northwest Michigan Medical Records Association – "Respiratory Care and Coding"
1991	FSU Nursing Students – "Oxygen Administration"
1987	FSU Nuclear Medicine Students – "Exercise Stress Testing"
1986	FSU Nursing Students – "Oxygen Administration"
1985	FSU Nursing Students – "Oxygen Administration"
1985	FSU Nuclear Medicine Students – "Exercise Stress Testing"

Scholarship:

2000	Author, Respiratory Care Program Student Handbook
1999	Author, Respiratory Care Program Curriculum Revision Report
1999	Created a Faculty Web Page and placed RESP 119 Syllabus on the Internet
1996	Author, Respiratory Care Program Review Report
1993 – 96	Reviewer, AARC Clinical Practice Guideline Reviewer
1985	Author (developer), FSU Cardiopulmonary Pharmacology Course

Other:

2001	Established CAHS WebCT User's Group
1999	Post-Tenure Review
1999	Created Peer Evaluation of Faculty Survey for Post-Tenure Process
1999	Co-authored Handwashing, Vital Signs, and Isolation Technique Proficiency Evaluations for CCHS 103
1999	Assisted Respiratory Care Student Organization in attaining SAFAC funding to attend the Michigan Society for Respiratory Care Annual Symposium
1998	Authored, Oxygen Use Protocol for FSU Dental Hygiene Program
1996	Assisted Judy Hooper with the research for a RESP SLA Abstract
1995	Redesigned the Respiratory Care Program Graduation Certificates
1995	Assisted Respiratory Care Student Organization in attaining SAFAC funding to attend the Michigan Society for Respiratory Care Annual Symposium
1995	Coordinated the redesign and production of the Respiratory Care Program Pins
1995	Creator, CAHS Ride Board
1993 – 97	Facilitator, Student Case Study Review Group
1993	Participated in research for Librarian Maureen Watson's article "A Comparison of CINAHL and MEDLINE CD-ROM in Four Allied Health Areas"
1987	Established the Ferris State University Chapter of the Lambda Beta Honor Society
1986	Lecture Moderator, Michigan Society for Respiratory Care Annual Symposium
1981 – 99	Chair, Respiratory Care Week Activities

X. CURRICULUM DEVELOPMENT ACTIVITIES

2002	Developer, Virtual Structured Learning Assistance Workshop for RESP 119
2001-2002	Developer, RESP 119 as a total web-based course
1998 – 2000	Chair, Respiratory Care Program Curriculum Revision Committee
1990 – 00	Authored, Respiratory Care Program Curriculum Revision Report

1999	Co-authored Handwashing, Vital Signs, and Isolation Technique Proficiency Evaluations for CCHS 103
1999	Authored Handwashing, Vital Signs, and Isolation Technique Theory and Proficiency Objectives for CCHS 103
1998 – 00	Member, Respiratory Care Program B.S. Degree Development Committee
1998 – 00	Member, College of Allied Health Sciences CCHS 103 Committee
1998 – 99	Member, College of Allied Health Sciences CCHS 102 Committee
1996 – 97	Member, College of Allied Health Sciences Core Curriculum Committee
1996	Redesigned RESP 156, Cardiopulmonary Pharmacology into SLA format
1995	Redesigned RESP 119, Cardiopulmonary Anatomy and Physiology into SLA format
1993	Member, Respiratory Care Program B.S. Degree Development Committee
1992	Chair, Respiratory Care Program Semester Conversion Committee
1985	Author, RESP 156, Cardiopulmonary Pharmacology Course
1982	Member, Respiratory Care Program B.S. Degree Development Committee

XI. ALUMNI ACTIVITIES

2002	Author, College of Allied Health Sciences Spring Newsletter, Respiratory Care Program Article
2001	Nominator, FSU Alumnus of the Year
2001	Table Display, Alumni Affairs Donaters Dinner
2001	Author, College of Allied Health Sciences Spring Newsletter, Friend of CAHS Article
2001	Author, College of Allied Health Sciences Spring Newsletter, Respiratory Care Program Article
2000	Chair, Respiratory Care Program Alumni Reunion 2000
2000	Co-Author, College of Allied Health Sciences Spring Newsletter, Respiratory Care Program Article
1999	Author, College of Allied Health Sciences Spring Newsletter, Respiratory Care Program Article
1999 – 01	Member, Ferris State University Alumni Association
1999 – 00	Member, Respiratory Care Program Alumni Reunion 2000 Committee
1985	Co-Chair, Respiratory Care Program Alumni Reunion Committee
1985	President Alumni Association Board of Directors, School of Allied Health
1985	Editor, School of Allied Health Alumni Newsletter
1984 – 86	Member, Alumni Association Board of Directors, School of Allied Health
1984 – 86	Member, Alumni Association Board of Directors, Ferris State University
1985, 83, 82	Participant in Allied Health Phon-a-thon activities

XII. STUDENT RECRUITMENT ACTIVITIES

2001 - 02	Educational Career Counselors Pathways Presentations (2)
2000 – 02	Open Lab Tours for Junior High and High School Students
2000 – 02	CAHS Dawg Days
2001, 99,98, 96	Autumn Adventure
1996, 93	Tech Prep
1994, 92, 90, 86, 84	Parent's Day Open House
1987, 84	Allied Health Open House
1986	Open House for Mecosta/Osceola Health Occupations Students
1984, 82	Recruitment Day

XIII. STUDENT RETENTION ACTIVITIES

2000 – 02	Meet Your Program Advisor Event
2001	Spaghetti Supper for all RESP students
1996	Redesigned RESP 156 in SLA format
1995	Redesigned RESP 119 in SLA format
1992 – 95	Member, FSU University Retention Committee
1981 – 2002	Tutoring of individual students
1987, 86, 85	Best Foot Forward
1986	New Student Open House

XIV. YEARLY RESPIRATORY CARE PROGRAM RESPONSIBILITIES

- Manager for the Respiratory Care Program Laboratory (maintains inventory, order supplies, coordinate any part-time supplemental faculty; maintain security of the laboratory)
- Coordinate Respiratory Care Week Activities (i.e., Open House, etc.)
- Coordinate Respiratory Care Program Graduation Ceremony (programs, flowers, etc.)
- Author of the yearly Respiratory Care Graduation Ceremony Program Handout
- Coordinate the lettering or printing of the Respiratory Care Program Graduation Certificates of Completion
- Coordinate and order first year Respiratory Care Program student name tags, scrubs, and lab coats
- Coordinate the taking and proofing of the Respiratory Care Program Composite Picture
- Coordinate the ordering of Respiratory Care Pins for second year students
- Participate in the early and late registration of Respiratory Care Program students

XV. COMMUNITY SERVICE

Professionally Related Community Service Activities:

American Heart Association, Mecosta County Division Board of Directors

1997	Member, Annual Meeting Committee
1996	Chair, Annual Meeting
1995 – 96	Vice President
1994 – 97	Volunteer, Jump Rope for Heart
1994 – 96	MIAHA Annual Meeting Delegate
1994 – 95	Member, Communications Committee
1995 & 96	Volunteer, Super CPR Saturday
1995 – 96	Member, Dr. Elizabeth Allen Committee (Guest Speaker)
1993 & 96	Member, Nominations Committee, Chair, 1994-95
1992 – 97	Member, Board of Directors
1992 – 96	Volunteer, Heartwalk
1992 – 96	Captain, RESP Heartwalk Team
1984 – 87	Chair and Volunteer, Cystic Fibrosis Foundation Bike-a-Thon

Other Community Service Related Activities:

2001	Lock-Up, Muscular Dystrophy Association, FSU
2000	Bell Ringer, Salvation Army of Big Rapids
1991 – Present	Member, Master Investment Club of Big Rapids Presiding Partner, 1993 – 1995 Vice Presiding Partner, 1995 – Present
1999 – 2000	Member, Wesley Foundation of Big Rapids Board of Directors
1995 – 96	Member, Ferris State University Wesley House Building Committee
2000	Member, Big Rapids United Methodist Church Parish Landscaping

	Committee
1999 – 00	Lay Leader, Paris United Methodist Church
1999 – 00	Member, Pastor Parish Relations Committee, Big Rapids United Methodist Parish
1999 – 00	Member, Parsonage Committee, Big Rapids United Methodist Parish
1996 – 97, 98 – 00	Administrative Council Chair, Paris United Methodist Church
1995 – 02	Certified Lay Speaker (Preacher), Big Rapids United Methodist Parish
1995 – 00	Administrative Board Member, Paris United Methodist Church
1994 – 02	Liturgist, Paris United Methodist Church & Big Rapids United Methodist Parish
1991 – 02	Member, Paris United Methodist Church
1997 – 99	Central District Lay Representative to West Michigan, United Methodist Church Annual Conference
August 2, 1997	Volunteer, Big Rapids Special Olympics Golf Tournament
Sept. 7, 1996	Volunteer, Big Rapids Special Olympics Golf Tournament
1988 – 97	Member, VFW Auxiliary 4102 Webster Koehn Post
1985 – 90	Member, Big Rapids Area Jaycees, Member Cystic Fibrosis Bike-A-Thon, Co-Chair, 1985-87, 1989 Chair, Returnable Cans for Project Starburst, October, 1985-86 Chair, Care for Share – Receipts for Cystic Fibrosis Foundation, September, 1990 Volunteer, 4th of July Parade, 1985-87 Volunteer, 4th of July Fireworks, 1985-87

XVI. HONORS/AWARDS

April, 2002	Nominated for CASE U.S. Professor of the Year
October, 2001	Outstanding Student Affairs Partner Honoree, FSU
May, 2001	Distinguished Teacher Finalist, FSU
May, 1997	Outstanding Service and Leadership Award, American Heart Association Board of Directors, Mecosta County Division
April, 1996	Faculty Member of Lambda Beta – National Respiratory Care Honor Society
May, 1986	Distinguished Alumnus Award, Ferris State College, School of Allied Health Alumni Board of Directors
May, 1994	Outstanding Service Award, American Heart Association Board of Directors, Mecosta County Division
May, 1987	Jaycee of the Month

DAVID L. ZOBECK, MM RRT CPFT

1715 Broadview Dr Jenison, Michigan 49428 (616) 457-4262

Curriculum Vitae

EDUCATION

AQUINAS COLLEGE, GRAND RAPIDS, MI
Masters Management *1995*
Major concentration: Marketing.

GRAND VALLEY STATE UNIVERSITY, ALLENDALE, MI
Bachelors of Applied Studies 1985
Technical Management.

FERRIS STATE UNIVERSITY, BIG RAPIDS, MI
Associates Degree *1976*
Respiratory Therapy.

EXPERIENCE

FERRIS STATE UNIVERSITY, BIG RAPIDS MI
Assistant Professor of Respiratory Care *1998-present*

- Director of Clinical Education
- Education Committee Chairperson of Michigan Society of Respiratory Care
- Senator to Academic Senate
- Instructor for 2-3 courses per semester plus clinical coordination
- Advisor for approximately half of the Respiratory Care students
- Development and implementation of Respiratory curriculum
- Development of online Respiratory course - RESP100
- Development of "one plus FSU RC" for programmatic marketing and recruitment
- Local and State speaker on "palms in RC" and "online education"

BLODGETT MEMORIAL MEDICAL CENTER, GRAND RAPIDS, MI
Director of Respiratory Care *1972-1998*

- Hiring, training and supervising 30-40 full and part time therapists
- Budget, resource and allocation
- Maintained clinical skills by occasional work in critical care
- Maintained pulmonary function skills by periodic work in the area
- Participated and chaired several clinical and non-clinical committees
- Held positions of RC technician, therapist, supervisor, assistant director and director

BLODGETT CREDIT UNION, GRAND RAPIDS, MI
Board President *1980-1998*

- Held position in Credit Committee
- Chairperson for Supervisory Committee
- Marketing/Advertising Committees.

MED-EQUIP PLUS, INC., GRAND RAPIDS, MI
Secretary/Treasurer *1991-1995*
- A hospital owned for-profit durable medical equipment company.

UNITED WAY - WEST MICHIGAN, GRAND RAPIDS, MI
Loaned Executive *1992*
- Account Executive
- Yearly involvement with Blodgett campaign.

FERRIS STATE UNIVERSITY, BIG RAPIDS, MI
Adjunct Instructor *1990 - 1998*
- Coordination for Respiratory Care program at Blodgett.

JUNIOR ACHIEVEMENT, GRAND RAPIDS, MI
Instructor for Project Business *1989 -1995*
- East Grand Rapids Middle School, Grand Rapids
- Jenison Christian Middle School, Jenison
- Burton Heights Middle School, Grand Rapids
- Iroquios Middle School, Grand Rapids

ACCOMPLISHMENTS

MEDICAL SURGICAL TEAM TO HONDURAS
Train local medical staff 1989-1994

GLOBAL EDUCATION TO EL SALVADOR
Personal intercultural experience 1994

ART AND ARCHITECTURE OF ROME, ITALY 2002
Summer educational trip through Western Seminary, Holland Michigan

TECHNOLOGY APPLICATIONS

HEMODYNAMICS 2002
Designer/Devloper of Palm OS medical reference program hosted at Palmblvd.com

VENTILATOR WAVEFORMS 2002
Designe/Developer of Palm OS medical reference program hosted at Palmblvd.com

RESP100 INTRODUCTION TO RESPIRATORY CARE 2002
Designer/Developer of WebCT course utilizing Tegrity

WEB DESIGNER AND ADMINISTRATOR OF 2NDCHURCH.COM 2002
Second Congregational UCC, Grand Rapids

PROFESSIONAL CREDENTIALS

CERTIFIED RESPIRATORY THERAPIST	1974
REGISTERED RESPIRATORY THERAPIST	1978
CERTIFIED PULMONARY FUNCTION TECHNOLOGIST	2002

CONTINUING EDUCATION

MSRC ANNUAL SPRING CONFERENCE — APRIL 28-30, 1999
Topics on Tabacco settlement, ARDS, Ultrahigh Frequency ventilation, protocols, JCAHO

PRONE POSITION — JULY 26, 1999
Presentation by Richard Albert, MD, St Mary's Hospital, Grand Rapids

SLEEP STUDY TESTING — OCTOBER 5, 1999
Presentation by Bob Bonifiglo, RRT

CLINICAL APPLICATION OF GAS EXCHANGE — OCTOBER 12, 1999
Presentation by Jeff Johnson, Spectrum Health

CUTTING EDGE MEDICINE: WHERE ARE WE GOING — SEPTEMBER 29, 1999
Presentation by Mehmet C Oz, MD

CTLFD INTERNET/WEBCT SEVEN WORKSHOPS — AUG 1999-APRIL 2000
Topics on internet communication, online testing, 2-way TV, organizing content, using Frontpage

MOUNT CLEMENS GENERAL HOSPITAL VENTILATOR WORKSHOP — MARCH 10, 2000

LERN: TEACHING ON LINE — FALL, 2000
How to teach Online courses

MSRC DISTRICT II FALL CONFERENCE — OCTOBER 27, 2000
Topics on ventilators, airway clearance, pharmacology, recredentialling

MSRC ANNUAL SPRING CONFERENCE — APRIL, 2001
Topics on Respiratory Care related presentations

SPARROW HOSPTIAL, LANSING — MAY-AUGUST, 2001
Respiratory Therapist in Medical, Surgical, Neuro Critical Cares and Med-Surg units

MSRC ACUTE CARE CONFERENCE — SEPTEMBER 25, 2001
Topics on MDI Administration, ACLS update, Waveform Interps, IntraHospital Transport

WEBCT: PREPARING FOR YOUR FIRST SEMESTER — SEPT-NOV 2001
CTLFD program

FALL SEMESTER VENTILATOR PRESENTATIONS — JAN-MAY 2002
Equipment presentations on Respironix BiPAP, Drager , PB 840, and High Freq Ventilators

MEDICAL GRAPHICS PULMONARY FUNCTION — FEBRUARY 2002
Presentation on MG Plethymography and Indirect Calorimetry

NEONATAL /PEDIATRIC VENTILATORS: WHAT'S THE DIFFERENCE — SUMMER, 2002
2002 Professor Rounds Video Presentation at Sparrow Hospital

MSRC ANNUAL SPRING CONFERENCE — APRIL 9, 2002
Topics on Professional RT, NETT Project, Asthma Management, RT as Teacher

CERTIFIED PULMONARY FUNCTION THERAPIST — JUNE 17, 2002
Obtained Credential after passing national test

PUBLICATIONS

"RESPIRATORY CARE IN HONDURAS"
Michigan Society for Respiratory Care, Summer 1991

"WHO SAYS THE WORKPLACE IS DULL"
Advance for Respiratory Care Practitioners, Sept 26, 1994

"COST EFFECTIVENESS OF PULMONARY REHABILITATION"
Masters paper, Aquinas College, 1994

"BACHELOR OF RESPIRATORY CARE?" SURVEY
MSRC Messenger Newsletter, April 1999

"BS IN RC: A PERSONAL PERSPECTIVE"
MSRC Messenger Newsletter, Nov 1999

"POCKET INHALERS: MDI OR DPI"
themestreme.com Dec 2000

"INHALED MEDICINES FOR BEGINNERS"
themestream.com Dec 2000

"BREATHING LIFE INTO MEDICINE"
themestream.com Jan 2001

"BIOTERRO INFO FOR RESPIRATORY CARE " SELECTION OF STUDENT/INSTRUCTOR ARTICLES
michiganrc.com, Nov 2001

"1+FSU: A RESPIRATORY PROGRAM AT YOUR COMMUNITY COLLEGE"
FSU Community College News, Nov 2001

"PALM PILOTS HOLD PROMISE FOR RTS"
Advance for Respiratory Care Practitioners, March 25, 2002

"FERRIS REVAMPS RESPIRATORY CARE PROGRAM"
Careerwise: newsletter of Michigan Department of Career Development, May 2002

COMMUNITY SERVICE

WEST MICHIGAN PEDIATRIC ASTHMA NETWORK 1996- PRESENT
Previous Board Member/Associate education member

MICHIGAN SOCIETY FOR RESPIRATORY CARE 1996-PRESENT
District Representative, Chair of Educators Committee

WEB DESIGNER AND ADMINISTRATOR OF 2NDCHURCH.COM 2002
Second Congregational UCC, Grand Rapids

EDUCATION COMMITTEE 2002
Second Congregational UCC, Grand Rapids

LECTURES AND PRESENTATIONS

BASIC CHEST XRAY — FALL 2001
MSRC Acute Care Conference, Frankenmuth

PALMS IN BEDSIDE CARE — SPRING 2002
College of Allied Health Sciences Alumni Day, Big Rapids

ONLINE EDUCATION WITH WEB CT — SUMMER 2002
Clinical Adjunct Education Program, Big Rapids

PDAS TO IMPROVE RESPIRATORY CARE — FALL 2002 (SCHEDULED SPEAKER)
MSRC Acute Care Conference, Frankenmuth

PROFESSIONAL ORGANIZATIONS

WEST MICHIGAN PEDIATRIC ASTHMA NETWORK — 1996-PRESENT
Previously Board member
Current Associate educational member

MICHIGAN SOCIETY OF RESPIRATORY CARE — 1997-PRESENT
District IV Representative – 1997
Education Committee Chair- 1998, 1999, 2002
Member since 1980

AMERICAN ASSOCIATION OF RESPIRATORY CARE — 1973-PRESENT

UNIVERSITY COMMITTEES

ACADEMIC SENATE	2001-PRESENT
LIBRARY, HISTORICAL AND ARCHIVES COMMITTEE	1999-PRESENT
PROGRAMMATIC MARKETING COMMITTEE	2002

COLLEGE COMMITTEES

NURSING FACULTY SEARCH COMMITTEE	2001
CIRRICULUM ASSESSMENT PLANNING	2001-PRESENT
CAHS WEBCT SUPPORT GROUP	2002-PRESENT
CAHS DEAN'S FACULTY ADVISORY COUNCIL	2001-PRESENT

DEPARTMENT COMMITTEES

HRP CLINICAL COORDINATORS COMMITTEE	2001-PRESENT
RESPIRATORY CARE CLUB ADVISOR	2001-PRESENT
RESPIRATORY CARE PROGRAM REVIEW (CHAIR)	2002-PRESENT
RESPIRATORY CARE MARKETING/RECRUITMENT	1999
B.S. DEGREE DEVELOPMENT COMMITTEE	2000

Ferris State University

Associate Applied Science in Respiratory Care

The need for trained Respiratory Care personnel has always been significant. But now it is even greater as more individuals are being diagnosed with breathing problems.

Ferris's new **three approach educational option for Respiratory Care** will make it easier for students to become a Respiratory Therapist.

Approach # 1
Traditional On Campus Program

The first approach is the **2 year program at the FSU** campus in Big Rapids. In this approach a student may meet entrance requirements in two ways.

Immediately from High School: Must have HS GPA of 2.5, 1 yr Biology and Chemistry minimum grade of B and Math ACT of 19 or better. Student not meeting these entry requirements can demonstrate ability by meeting college requirements. **College GPA of 2.5, college Biology, Chemistry, and Math (110) of C or better.**

Ferris's Respiratory Care program is 2 full years of training which includes both summer semesters. In the Fall Semester of the second year, student will be prepared for a 6 week Basic Respiratory Care Clinical Internship in a hospital. This starts in early November. They will return to campus for the Winter Semester for critical care courses. This is followed by a 12 week Critical Care Respiratory Clinical Internship during the Summer Semester.

Many students are able to reduce room and board expenses by living at home during the clinical internships. Ferris Respiratory Care program has clinical affiliations with hospital through out Michigan.

Approach # 2
One Plus FSU = RRT

Here students take their biology, chemistry and other general education courses **at their local community college** during the first two semesters. The student must also take one on-line FSU Respiratory Care course each semester. Then transfer to FSU in the Summer Semester and begin the Respiratory Care program. From this point the student has **only 15 months** and part of that time is in clinical internships. Courses must be transferable into the Respiratory program and the student must meet the same program entry requirements.

Before beginning this process the student must **contact FSU Respiratory Care** to insure transferable credits are available from their local community college.

Approach # 3
BS Degree to RRT eligible

This approach is suited for individuals with a Bachelor of Science degree and would like to become a Respiratory Therapist. The BS graduate would need to take the two on-line FSU Respiratory Care courses and have met the general education requirements with their degree. Once admitted into the program, they can **begin in the Summer Semester and finish 15 months later.**

On Line Respiratory Courses

Fall 2002, the Respiratory Care program will begin offering the first **two courses on-line**. RESP 100: Intro to Respiratory Care and RESP 119: Cardiopulmonary A&P. These internet courses gives Ferris a unique opportunity to allow the three options to entering the program.

The courses are structured to **insure quality learning**, especially the RESP 119 which will have an remedial learning component called SLA.

The hands on labs and clinical portions will not be offered as an on line program.

Clinical Internships

The Respiratory Care program is designed to help students keep their cost low by offering courses through their local community college. Additionally, students may **live at home** or with other family members or friends during their clinical internships. In most cases, Ferris has a clinical affiliate within 60 miles of their home area, often within their own town.

Students find this is an excellent opportunity to excel and often are offered part time positions after their basic clinical internship. Some hospital provide **tuition scholarships** before graduation or sign on bonuses to help pay college expenses.

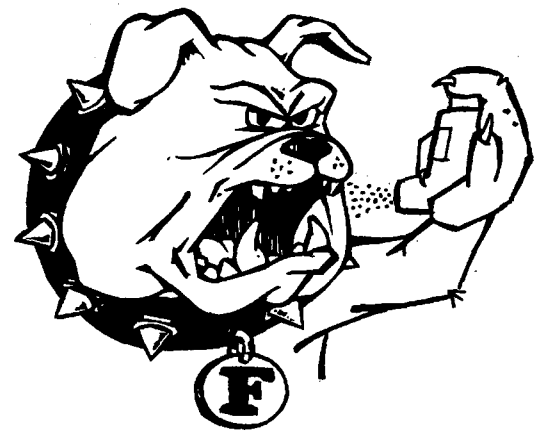
For More Information

This brochure is intended to give you a brief overview of the three approaches to Respiratory Care education. Some information needs to be explained in greater detail.

A complete explanation is available from Ferris's Respiratory Care program. Evaluation of high school or college transcripts can be done to assess entry into the program. **Contact the program prior to taking any courses** at a local community college. Not all courses will be transferable to the Respiratory program.

Please call
Julian Easter at 231-591-2261.
Director of Respiratory Care Program

Ferris State University



Respiratory Care

1+FSU
A Respiratory Program at Your College

There is a nationwide shortage of trained Respiratory Therapists to treat the increasing number of patients with breathing problems. The local community college may be in a position to offer a Respiratory Care Program by participating with Ferris State University. Students can take the first two semesters of transferrable English, Biology, Chemistry, Math and other general education courses at the community college. At the same time, they will have to take one on-line Respiratory Care course each semester.

Then, providing the student meet entrance requirements, they can transfer to FSU in the summer semester and begin 15 months of on campus Respiratory Care course work and clinical internships.

All a college needs to do is to:

1. Call FSU Respiratory Care program to see if the community college has the transferable courses the students will need.
2. Be willing to include 1+FSU Respiratory Care literature in the college catalog, on the website, and in other promotional materials.
3. Promote the program by placing posters in key location (supplied by FSU)
4. Assign an individual for the students and FSU RC to contact regarding the program

Whether a community college has one student or ten, they can offer them another health care career opportunity without the expense of personnel and equipment. Plus the student can stay near home and take the "first year" of courses at their community college.

For more information on this unique program opportunity, call Julian Easter, MS RRT at (231) 591- 2263

Not using your BS degree? Become a Respiratory Therapist in 15 months*.

Many graduates with a Bachelors of Science degree may be qualified to attend Ferris State University's Respiratory Care Program. If your degree has transferrable English, Biology, Chemistry, Math and other general education courses, you may be able to enter the program. Two prerequisite Respiratory Care courses are now being offered on-line as internet course that can be taken at home or at local college before coming to FSU.

You must meet entrance requirements before you can transfer into Ferris State University's program in the summer semester to begin 15 months of on campus Respiratory Care and clinical internships.

What do you need to do?

Simply the following:

1. Call FSU Respiratory program at 231-591-2261.
2. You must have the following to be accepted into the program
   -College GPA = 2.5
   -"C" or better in Math, Biology, Chemistry
   -contact FSU for specific course requirement
3. Complete required general education course.
   -caution course must be transferrable to program requirements
4. Meet with an FSU Respiratory program advisor.
5. Register for courses including FSU online RC

These online courses must be taken before attending on campus courses. Then you can transfer to Ferris to complete the on campus classroom course and clinical internships. Many students are able to attend clinical internship in a hospital near their home area.

For more information on this unique program, call Julian Easter, FSU Respiratory Care Program Director (231) 591- 2261

*must meet entrance requirements that include 2 on-line FSU RESP courses.

Tuition Scholarship:
How to Get Them First.

The current shortage of Respiratory Therapists has hospital considering methods of increasing their chances of filling vacant positions. Ferris State University's Respiratory Care program would like to encourage the Tuition Scholarship.

Much like a "sign on bonus," the Tuition Scholarship offers selected students a financial incentive. In turn, the student agrees to work as an employee for the hospital for a period of time after graduation. If they do not, the student must pay the amount back.

FSU's Respiratory program recommends the following:

1. ***Determine amount of the scholarship and how long of a work agreement.***
   - Usually same as "sign on bonus" rates in the area
   - Commit to scholarships for at least several years
2. ***Develop a formal agreement***
   - Include dollar amount, work length, and a back out clause
   - Back out clause allows the individual to pay back the amount if they choose to work some where else.
   - If the hospital is not able hire the student, the back out clause will not expect the scholarship to be paid back.
   - State how it will be paid – to the individual, reimbursed, to the college.
3. ***Determine when to offer the scholarship***
   - Unless this student has a employment history with the hospital, it may be best to offer it after the first year
4. ***Interview process***
   - Use an application
   - Select candidates for the scholarship by interview same as in a hiring process since they will eventually become an employee
5. ***Promote the scholarship***
   - Visit the college and discuss the benefits of your hospital
   - Visit local high schools and the availability of the scholarship for qualified individuals

Ferris State University's Respiratory Care program is willing to assist hospitals offering scholarships by informing students of there availability and providing applications. FSU's Respiratory program can not share progress or grades of any student without permission. Additionally, it is the hospital's responsibility to select candidates for the scholarship and development of their program.

For more information or to establish a Tuition Scholarship program, call Julian Easter, FSU Respiratory Care Program Director, phone: **231-591-2261.**

SECTION VI: PROGRAM PRODUCTIVITY COSTS

The productivity and costs data below is derived from documentation provided from the FSU 1996-2000 Productivity Report, and is the most current data available. As the enrollment and retention rates of the Respiratory Care program dropped slightly, so did the number of student credit hours generated.

We as a program have been concerned that all respiratory care students are not included in the data generated below. Many of our students are dual degree students pursuing B.S. or Nursing degrees in conjunction with their Respiratory Care degrees. These students are not usually recognized in the computation of respiratory care data even though they take our courses and utilize our resources because they are recognized as B.S. degree or other health care program students.

Student Credit Hours

Year	Summer	Fall	Winter	F and W
1996-97	264	275	358	633
1997-98	266	276	335	611
1998-99	166	202	297	499
1999-00	168	235	301	535

Student Credit Hours/ FTEF

Year	Summer	Fall	Winter	F and W
1996-97	251.43	137.50	179.00	316.50
1997-98	436.07	138.00	335.00	407.33
1998-99	90.22	101.00	148.50	279.50
1999-00	168.00	117.00	150.50	267.50

Personnel

	1997	1998	1999	2000	2001
Tenure Track FTE	2	2	2	2	2
Overload/Supplemental FTEF	0.5	0	0	0	0
Adjunct/Clinical FTEF (unpaid)	15	15	15	15	15

The program has maintained two full-time faculty members and a program director since 1978. The combined professional experience of the faculty is 70+ years of which more than two-thirds is in education. All full-time faculty have graduate degrees. To varying extents all are involved in local, state and national professional associations as noted in their respective curriculum vitae in Appendix C.

The program has been very fortunate to have an average of 15 unpaid adjunct clinical instructors working with our students each semester. This is significant in light of the fact that all of the community colleges in Michigan that have respiratory care programs pay between $.50 and $1.50 per hour per student to have a student in a clinical site at a hospital. We have been able to compete for clinical sites by preparing a more highly qualified student in our hands-on laboratory courses to be ready to assume some respiratory care duties after a brief orientation to the hospital and unit.

Whereas the community college programs require clinical adjunct faculty (staff) to provide a great deal of didactic and clinical instruction of each student they send to a hospital.

In contrast, FSU faculty/Clinical Coordinator make two clinical visits a semester. These visits are for assessing the progress of our students in the patient care environment. This assessment involves one to two hour process of utilizing a written checklist, observation of care and discussion of didactic knowledge. Several hospitals have expressed concern that the number of our student visits may be insufficient. With many of the local hospitals a shorter "check up" visit is possible to insure the student is doing well at the clinical site. In recent years, these "check up" visits have helped us identify student problems before the Respiratory Department's administration was notified.

Financial

Expenditures*	FY97	FY98	FY99	FY00	FY01
Supply & Expense	$17,463	$9,135	$11,256	$11,754	$12,097
Equipment					
Voc Ed	$23,888		$ 1,412	$ 8,786	
General Fund					$858

As a profession whose responsibilities are associated with sophisticated life support and monitoring equipment, there is a clear need to provide student exposure and procedural competence in a wide range of medical instrumentation. The program has employed a number of strategies to assure a comprehensive laboratory environment. In order to assure the availability of relatively current technology to students, the program has used a mixture of purchase, rental and loan arrangements.

In order to reduce institutional costs, the program has opted to rely more on the short term (monthly) rental of ventilators than the purchase of them. When they are purchased the program has uniformly purchased demonstration units, which are less expensive than new units. In addition, the program has secured the donation of some ventilators and other equipment from hospitals it affiliates with when the hospitals are upgrading their equipment. On occasion, the program has been loaned equipment from vendors for a short time frame (one-week to one month). This often includes demonstration of the equipment to help the student understand its use and operation. The capital equipment purchased by the program is carefully selected and limited to that which is considered "standard" or easily updated. Recently, one vendor has promised to donate a percussive vest system valued at approximately $2,000.

The Respiratory Care Program supply and expense budget has declined since the 1996 program review process. The program has maintained the high quality of instruction through the utilization of borrowed or donated equipment and supplies and funding through the Vocational Education grants and alumni contributions. For the past 20 years, the program has received an annual contribution of $200 from the family of a graduate. The Ford Motor Company matched this financial contribution yearly. In 2001 the RESP Program lost its annual alumni contribution of $400 due to the death of the contributor. The family of the graduate have decided to create a $1000 scholarship entity for the next 10 years in lieu of the $200 annual contribution.

Review of instructional supply needs of the program suggests the need to continue to expand the availability of instructional and testing computer software for student use. Current software is out of date and needs to be updated.

SECTION VII: STUDENT PERCEPTIONS OF THE PROGRAM

The Respiratory Care Program is scheduled to submit its self-study this year in preparation for an onsite accreditation visit by CoARC (Committee on the Accreditation of Respiratory Care Programs) in 2004. To provide information for both the Program Review and Self-Study/Accreditation Process the Respiratory Care Program faculty chose to utilize the CoARC Student Program Resource Survey. The survey evaluated six areas based on a 1-5 scale with the option of a N/A (not applicable). 1 = Strongly Disagree, 2 = Generally Disagree, 3 = Normal (acceptable), 4 = Generally Agree, 5 = Strongly Agree. The survey provided an opportunity for students to provide an evaluation and comments on the following areas:

I. Personnel Resources
II. Physical Resources
III. Learning Resources
IV. Clinical Resources
V. Physician Interaction
VI. Overall Rating of the quality of the resources supporting the program

During the Winter Semester of 2001 and 2002, the CoARC Student Program Resource Survey was administered to the second year Respiratory Care Program students. The decision to survey only second year students was made after a review of the first year student surveys from past years. First year students frequently had minimal to no experience with the content of the questions being asked so their evaluations weren't useful. The surveys were completed during class time and collected by a faculty member. Students were verbally instructed to be honest and helpful in their evaluation of program resources. 15 students in 2001 and 8 students completed the survey in 2002. The student responses to each question on the survey were averaged and put on a survey.

At the conclusion of the survey students were asked to rate the overall quality of the resources supporting the Respiratory Care Program. The scale they were to use was 5= Excellent, 4= Very Good, 3= Good, 2= Fair, 1= Fair. **The Class of 2002 students rated the overall quality of the resources supporting the program at a 5 or excellent, while the Class of 2001 gave an overall rating of 4.06 or a very good.**

Responses to all questions on the Class of 2002 survey averaged **4.00 (very good)** or better with a majority of questions being rated at a **4.8 or better**. Only three questions averaged between 4.0 and 4.5.

Responses to all questions on the Class of 2001 survey averaged **3.3 (3.0 = good)** or better. Students rated 37 of 48 questions on the survey above a **4.0 average (very good).**

Three questions were posed at the very end of the survey. Student comments are provided to these questions.

1. Based on your experience, which program resources provided you with the most support?

The Class of 2002 almost unanimously stated the laboratory setting was the program resource providing them the most support during their two years in the RESP Program. The reasons they gave were: Lab - gives you hands on experience and you get to work with the equipment. Lab - is almost a set aside one on one time with your instructor.

The Class of 2001 gave the following responses to the question. Professors - they are great teachers who know how to get a point across. Lectures supplied me with the information I needed. Labs showed me how to apply information I learned. The clinical - going out into the field of Respiratory really helped me practice what I've been taught; Giving treatment instructions; Books and teacher interaction; Computer lab - to type papers and do Internet research; the clinical preceptors-they can take you step by step with equipment and Respiratory theory; Laboratory data and instruction - the exercises done in lab really helped me in the clinical setting; Structured Learning Assistance Workshops helped review for tests.

2. Based on your experience, which program resources could be improved?

The Class of 2002 offered the following suggestions for improving program resources. Some respiratory classes should be offered on the computer. New equipment - some of the equipment could be replaced or updated to keep up with new technology.

The Class of 2001 made the following comments regarding program resources that could use improvement. We need more experience with certain equipment (jets and oscillators) and newer ventilators. Update procedural evaluations to reflect current therapeutic methods and equipment.

3. Please provide comments and suggestions that would help to improve the program's overall resources.

The Class of 2002 provided the following suggestions that would help to improve the program's overall resources. New carpet and equipment. With this program requiring summer semesters it makes obtaining financial aid much more difficult. It would benefit many if it were not a year round requirement.

The Class of 2001 provided the following comments and suggestions to improve the program's overall resource. Wonderful all around experiences; More experience with certain equipment; More resources so more than one person can practice vents at one time; not as much tedious paperwork during clinical.

CLASS OF 2001
SECOND YEAR STUDENT
PROGRAM RESOURCE SURVEY

Ferris State University
RESPIRATORY CARE PROGRAM

The purpose of this survey instrument is to evaluate our program resources. The data compiled will aid the program in an ongoing process of program improvement.

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. PERSONNEL RESOURCES (PROGRAM FACULTY)

		AVERAGE	No.	NA
A.	**FACULTY TEACH EFFECTIVELY:**			
1.	In the classroom	4.4	15	0
2.	In the laboratory	4.4	15	0
3.	In the clinical area	4.2	15	0
B.	**INSTRUCTION IS BASED ON CLEARLY STATED OBJECTIVES.**	4.4	15	0
C.	**FACULTY NUMBER IS ADEQUATE:**			
1.	In the classroom	4.5	15	0
2.	In the laboratory	4.2	15	0
3.	In the clinical area	4.4	14	1
D.	**FACULTY MEMBERS HAVE GOOD RAPPORT WITH STUDENTS.**	4.8	15	0
E.	**FACULTY MEMBERS ARE WILLING TO HELP STUDENTS WITH ACADEMIC NEEDS.**	4.9	15	0
F.	**FACULTY ENSURE STUDENT REPRESENTATION ON THE ADVISORY COMMITTEE.**	4.1	14	1

Comments: The faculty was wonderful and was truly interested in student needs.

II. PHYSICAL RESOURCES

A.	**INSTRUCTIONAL RESOURCES: CLASSROOM**			
1	Are adequate in size.	4.3	15	0
2.	Have adequate lighting.	4.7	15	0
3.	Contain adequate seating.	4.3	15	0
4.	Have adequate ventilation.	4.3	15	0
5.	Are provided with appropriate equipment to support effective instruction.	3.7	15	0
B.	**INSTRUCTIONAL RESOURCES: LABORATORY**			
1.	Is adequate in size	4.3	15	0
2.	Has adequate lighting	4.7	15	0
3.	Has adequate seating	4.3	15	0
4.	Has adequate ventilation	4.2	15	0
5.	Is accessible to students outside regularly scheduled class times.	4.3	15	0
C.	**INSTRUCTIONAL RESOURCES: LABORATORY EQUIPMENT**			
1.	The amount of equipment is sufficient for student	3.5	15	0

	performance of required laboratory exercises.			
2.	The variety of equipment is sufficient for student performance of required laboratory exercises.	3.3	15	0
3.	The amount of supplies is sufficient for student performance of required laboratory exercises.	3.7	15	0
4.	The variety of supplies is sufficient for student performance of required laboratory exercises.	3.5	15	0
5.	Laboratory activities prepare the student to perform effectively in the clinical setting.	3.8	15	0

Comments: The ventilators we are provided are out of date to what is in our clinical field.

III. LEARNING RESOURCES

A. LIBRARIES (SCHOOL AND CLINICAL AFFILIATES LIBRARIES)

1.	The program faculty and/or the library personnel offer orientation and demonstration of the library services.	3.7	12	3
2.	The institutional library personnel provide assistance to the students when needed.	3.9	13	2
3.	The library hours are convenient to student schedules.	4.0	13	2
4.	The libraries provide sufficient materials to support classroom assignments.	4.0	12	3
5.	Program assignments require the use of library resources.	3.7	12	3

B. STUDENT INSTRUCTIONAL SUPPORT SERVICES (TUTORS, COMPUTER LAB. ETC.)

1	Tutorial assistance is available when needed.	4.0	14	1
2.	Audiovisual and computer equipment are available to students for class assignments and activities.	4.7	14	1
3.	Computer resources are adequate to support the curriculum.	4.3	14	1
4.	Institutional Student Instructional Support Services are equally accessible to all students.	4.6	12	3

Comments: No student comments.

IV. CLINICAL RESOURCES

A. CLINICAL ROTATIONS

1.	Facilities			
	a. The clinical facilities offer an adequate number of procedures for the student to meet clinical objectives.	4.5	15	0
	b. The clinical facilities offer an adequate variety of procedures for the student to meet clinical objectives.	4.5	15	0
	c. The clinical facilities provide adequate exposure to current equipment.	4.4	15	0
2.	Experiences			
	a. Each clinical rotation is of sufficient length to enable the student to complete clinical objectives.	4.2	15	0
	b. Clinical rotations provide overall equivalent experience for all students.	3.9	15	0
	c. Sufficient classroom and laboratory instruction was provided prior to clinical activity.	4.4	15	0

B. CLINICAL INSTRUCTION

1.	Students are adequately oriented to assigned clinical areas, and procedures.	4.2	15	0
2.	Clinical instructors are sufficiently knowledgeable to provide student instruction.	4.0	15	0

3.	Clinical instructors provide appropriate supervision of students during performance of assigned activities.	4.3		15	0
4.	Clinical instructors are consistent in their evaluation of student performance.	4.1		15	0
5.	Clinical instructors are readily available to assist students when needed.	4.1	15	0	

Comments: Clinical for me was very good. Staff was wonderful and helpful. Staff was always willing to help and work with me. I was exposed to many good experiences and would recommend to anyone in the area; Adult rotation is too long and Peds is too short; Had some therapists from hell; Neo/Peds rotation could be a week longer to adequately meet all of the objectives.

V. PHYSICIAN INTERACTION

A.	Physician/student interaction is sufficient to facilitate development of effective communication skills between physicians and students.	3.8		15	0
B.	Physician Contact is sufficient to provide the student with a physician perspective of patient care.	3.8		15	0
C.	Overall student exposure to physicians in the program is adequate.	4.0	15	0	

Comments: Depends on the hospital.;

VI. ADDITIONAL COMMENTS

How long have you been a student in the program? 2 years

Please rate the OVERALL quality of the resources supporting the program. **OVERALL RATING: 4.06**

5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

Based on your experience, which program resources provided you with the most support?

The staff; Lectures and labs. Lectures supplied me with the information I needed. Labs showed me how to apply information I learned; Professors - they are great teachers who know how to get a point across; Teachers; The clinical - going out into the field of Respiratory really helped me practice what I've been taught; Giving treatment instructions; Books and teacher interaction; Computer lab - to type papers and do Internet research; The clinical preceptors-they can take you step by step with equipment and Respiratory theory; Laboratory data and instruction - the exercises done in lab really helped me in the clinical setting; Structured Learning Assistance Workshops helped review for tests.

Based on your experience, which program resources could be improved?

Ventilators we use are out of date; More experience with certain equipment; More jets and oscillators; Newer technology available to students; Update procedural evaluations; Learn current methods and equipment;

Please provide comments and suggestions that would help to improve the program's overall resources.

Wonderful all around experiences; More experience with certain equipment; More resources so more than one person can practice ventilators at one time; Not as much tedious paperwork during clinical.

Completion Date: Winter Semester 2001

Revised: 6-1-2000

CLASS OF 2002
SECOND YEAR STUDENT
PROGRAM RESOURCE SURVEY

Ferris State University
RESPIRATORY CARE PROGRAM

The purpose of this survey instrument is to evaluate our program resources. The data compiled will aid the program in an ongoing process of program improvement.

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. PERSONNEL RESOURCES (PROGRAM FACULTY)

		AVERAGE	No.	NA
A.	**FACULTY TEACH EFFECTIVELY:**			
1.	In the classroom	5.0	8	0
2.	In the laboratory	5.0	8	0
3.	In the clinical area	5.0	8	0
B.	**INSTRUCTION IS BASED ON CLEARLY STATED OBJECTIVES.**	4.9	8	0
C.	**FACULTY NUMBER IS ADEQUATE:**			
1.	In the classroom	5.0	8	0
2.	In the laboratory	5.0	8	0
3.	In the clinical area	4.9	8	0
D.	**FACULTY MEMBERS HAVE GOOD RAPPORT WITH STUDENTS.**	4.9	8	0
E.	**FACULTY MEMBERS ARE WILLING TO HELP STUDENTS WITH ACADEMIC NEEDS.**	4.9	8	0
F.	**FACULTY ENSURE STUDENT REPRESENTATION ON THE ADVISORY COMMITTEE.**	4.9	8	0

Comments: No student comments

II. PHYSICAL RESOURCES

A.	**INSTRUCTIONAL RESOURCES: CLASSROOM**			
1	Are adequate in size.	4.8	8	0
2.	Have adequate lighting.	4.9	8	0
3.	Contain adequate seating.	4.9	8	0
4.	Have adequate ventilation.	4.5	8	0
5.	Are provided with appropriate equipment to support effective instruction.	4.4	8	0
B.	**INSTRUCTIONAL RESOURCES: LABORATORY**			
1.	Is adequate in size	4.9	8	0
2.	Has adequate lighting	5.0	8	0
3.	Has adequate seating	4.9	8	0
4.	Has adequate ventilation	4.9	8	0
5.	Is accessible to students outside regularly scheduled class times.	4.8	8	0

C. INSTRUCTIONAL RESOURCES: LABORATORY EQUIPMENT

1.	The amount of equipment is sufficient for student performance of required laboratory exercises.	4.5	8	0
2.	The variety of equipment is sufficient for student performance of required laboratory exercises.	4.7	8	0
3.	The amount of supplies is sufficient for student performance of required laboratory exercises.	4.5	8	0
4.	The variety of supplies is sufficient for student performance of required laboratory exercises.	4.7	8	0
5.	Laboratory activities prepare the student to perform effectively in the clinical setting.	4.9	8	0

Comments: some of the equipment needs to be updated

III. LEARNING RESOURCES

A. LIBRARIES (SCHOOL AND CLINICAL AFFILIATES LIBRARIES)

1.	The program faculty and/or the library personnel offer orientation and demonstration of the library services.	4.3	8	0
2.	The institutional library personnel provide assistance to the students when needed.	4.5	8	0
3.	The library hours are convenient to student schedules.	4.8	8	0
4.	The libraries provide sufficient materials to support classroom assignments.	4.5	8	0
5.	Program assignments require the use of library resources.	4.0	8	0

B. STUDENT INSTRUCTIONAL SUPPORT SERVICES (TUTORS, COMPUTER LAB, ETC.)

1	Tutorial assistance is available when needed.	4.5	8	0
2.	Audiovisual and computer equipment are available to students for class assignments and activities.	4.8	8	0
3.	Computer resources are adequate to support the curriculum.	4.8	8	0
4.	Institutional Student Instructional Support Services are equally accessible to all students.	4.7	8	0

Comments: No student comments.

IV. CLINICAL RESOURCES

A. CLINICAL ROTATIONS

1.	Facilities			
	a. The clinical facilities offer an adequate number of procedures for the student to meet clinical objectives.	4.9	8	0
	b. The clinical facilities offer an adequate variety of procedures for the student to meet clinical objectives.	5.0	8	0
	c. The clinical facilities provide adequate exposure to current equipment.	4.8	8	0
2.	Experiences			
	a. Each clinical rotation is of sufficient length to enable the student to complete clinical objectives.	4.8	8	0
	b. Clinical rotations provide overall equivalent experience for all students.	4.8	8	0
	c. Sufficient classroom and laboratory instruction was provided prior to clinical activity.	4.8	8	0

B. CLINICAL INSTRUCTION

1.	Students are adequately oriented to assigned clinical areas, and procedures.	4.9	8	0
2.	Clinical instructors are sufficiently knowledgeable to provide student instruction.	4.8	8	0
3.	Clinical instructors provide appropriate supervision of students during performance of assigned activities.	4.9	8	0
4.	Clinical instructors are consistent in their evaluation of student performance.	4.8	8	0
5.	Clinical instructors are readily available to assist students when needed.	4.8	8	0

Comments: No student comments.

V. PHYSICIAN INTERACTION

A.	Physician/student interaction is sufficient to facilitate development of effective communication skills between physicians and students.	4.7	8	0
B.	Physician Contact is sufficient to provide the student with a physician perspective of patient care.	4.5	8	0
C.	Overall student exposure to physicians in the program is adequate.	4.6	8	0

Comments: No student comments.

VI. ADDITIONAL COMMENTS

How long have you been a student in the program? 2 years

OVERALL RATING:

Please rate the OVERALL quality of the resources supporting the program.

5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

Based on your experience, which program resources provided you with the most support?

Lab - gives you hands on experience. Lab - getting to work with the equipment. Lab - get a hands on approach and almost a set aside one on one time with your instructor.

Based on your experience, which program resources could be improved?

Equipment - need new and updated equipment. Some respiratory classes should be offered on the computer.

Please provide comments and suggestions that would help to improve the program's overall resources.

New carpet and equipment. With this program requiring summer semesters it makes obtaining financial aid much more difficult. It would benefit many if it were not a year round requirement.

Completion Date: Winter Semester 2002

Revised: 6-1-2000

SECTION VIII: FACULTY PERCEPTIONS OF THE PROGRAM

The Respiratory Care program employs two full time faculty with administrative overview by a Department Head as well as one part time Structure Learning Assistance instructor. All four individuals are trained Respiratory Therapists. Three are Registered Respiratory Therapists and the SLA instructor is a Certified Respiratory Therapist. All four were sent surveys but the SLA instructor declined to participate due to the infrequent involvement in the actual adminstration of the program.

The survey was developed by the Academic Program Review and was utilized in the previous program review for Respiratory Care. As compared to five years ago the survey responses from the faculty have improved. Comparison between the two surveys is not given since there has been a change in faculty.

Faculty were requested to respond to the topics on the survey as they relate to the Respiratory Care program. Responses where marked in columns labeled E, G, A, BE, P or DK. Each response column was given a point value to allow numerical averaging.

E = Excellent (5)
G = Good (4)
A = Acceptable (3)
BE = Below Expectations (2)
P = Poor (1)
DK = Don't know (0)

All survey topics rated an average score of 4 or better which indicates the faculty see the program between Good and Excellent.

Areas of Highest Rating

Participation in Development of the Program was given a **4.7 average rating.** Demonstrating that this program is driven by group consensus and not by one individual. Faculty and administration strive hard to insure a high quality program by utilizing the strengths of each individual.

Course Objective was also given a **4.7 average rating** since there are clear, written and agreed upon objectives for each course. The objectives are designed to meet the NBRC educational matrix. Additions to the course objectives are easily made and changed when the need in the field is recognized.

All faculty was in full agreement and give a **5 or excellent rating** in the areas of Use of CoARC Standards, Provision for Work Experience/Internship, Efforts to Achieve a Bias Free Enviroment, Provision for Program Advisement, and Provision for Career Planning and Guidance. The faculty actively advises Respiratory students each semester and helps the determine their career direction. Sometimes this includes recommendation of the Health Care Management program for a B.S. degree or continuing into a nursing degree program. Advising does not always include educational direction. Many students are

offered part time positions prior to graduation. Faculty often need to discuss the impact working part-time can have on a students ability to maintain academic success.

Areas of Lowest Rating

Although the following areas are listed as having the lowest rating they still were given an **average score of 4 or Good**. Use of Student Follow Up Information could be better but it is often difficult to track students after they have left the program for any length of time. Address and name changes are the biggest difficulties in ascertaining follow-up information.

Relevance of Supportive Courses also received an **average rating of 4** since the specific nature of Respiratory Care. It is acknowledged that students need a well-rounded education but some general educational courses could be redesigned more toward the needs of Allied Health. Other comments are made in Section II: Curriculum Evaluation.

Use of Advisory Committee also received an **average rating of 4** since the distance and frequency of meetings is seen as an impediment in this area. Yet, both faculty and Advisory Committee work in a complimentary relationship.

Perception of Student Who Go On for a BS Degree received an **average 4 rating** since the program is unable to offer its own BS degree student must be directed into a program that could eventually remove them from the Respiratory Care field. This is most noted in student's obtaining a degree in nursing. The faculty are naturally hesitant to embrace this direction.

Discussion

Faculty responses to this survey displayed enthusiasm and dedication to the Respiratory Care program and its students. The Program bases its curriculum on the accreditation standards from the Committee for Accreditation of Respiratory Care. There are good opportunities for students to gain clinical experience before graduation. Most graduates find employment before they complete the program.

Standards for entry into the program and placement in courses are well defined and applied without bias. Each student is assigned a faculty advisor to monitor his/her academic progress. Students have additional access to Ferris State University Career Services for career guidance.

Aspects of the program that call for minor improvement also include using information about labor markets, use of student follow up information, and adequacy of instructional facilities and equipment. None of these issues elicity highly critical responses. They simply indicate the faculty are aware of the programs strengths and weaknesses, and have a definite and sound idea about how it can be improved.

2002
FACULTY PERCEPTIONS
FERRIS STATE UNIVERSITY
RESPIRATORY CARE PROGRAM

INSTRUCTIONS: Rate each item using the following guide along with the explanations accompanying each question:

E = EXCELLENT (5)
G = GOOD (4)
A = ACCEPTABLE (3)
BE = BELOW EXPECTATIONS (2)
P = POOR (1)
DK = Don't know

A comment column has been provided if you wish to explain your rating.

Please Rate Each Item Below	Average	Responses	Faculty Comments
1. Participation in Development of Program *Excellent*- Administrators and others involved in developing and revising the college plan for this occupational program seek and respond to faculty, student and community input. *Poor*- Development of the program does not take into consideration needs or requirements outside of the immediate programmatic needs.	4.7	3	
2. Course Objectives *Excellent*- Objectives have been developed for the courses in the Respiratory Care Program and are used to plan and organize instruction. *Poor*- No objectives have been developed for the courses in the Respiratory Care program.	4.7	3	Some minor updating may be needed in a few courses.
3. Use of Information on Labor Market Needs: *Excellent*- Current data on labor market needs and emerging trends in the job market are used in developing and evaluating this program. *Poor*- Labor market data is not used in planning or evaluation.	4.3	3	
4. Use of Joint Review Committee Standards *Excellent*- JRCRTE standards are used in planning and evaluating this program and content of its courses. *Poor*- No recognition is given to JRCRTE standards in planning and evaluating this program and content of its courses.	5.0	3	

Please Rate Each Item Below	Average	Responses	Comments
5. Use of Student Follow- Up Information *Excellent*- Current follow-up on graduates and those who do not complete all of the program are consistently used in evaluating this program. *Poor*- Student follow-up information has not been used in evaluating this program.	4.0	3	Could be better.
6. Relevance of Supportive Courses *Excellent*- Applicable supportive courses (such as medical terminology, microbiology, etc.) are relevant to program goals and current to the needs of students. *Poor*- Supportive course content reflects no planned approach to meeting needs of students in this program.	4.0	3	
7. Provision for Work Experience/ Internship *Excellent*- Ample opportunities are provided for related work experience is available for students. *Poor*- Few opportunities are provided to students for related work experiences.	5.0	3	
8. Program Availability and Accessibility *Excellent*- Students and potential students desiring enrollment in this program are identified through recruitment activities, treated equally in enrollment selection, and not discouraged by unrealistic prerequisites. The program is readily available and accessible at convenient times and locations. *Poor*- The program is not available or accessible to most students seeking enrollment. Improper discriminatory selection procedures are practiced.	4.7	3	Changes in program will hopefully, make it even more accessible.
9. Efforts to Achieve a Bias Free Environment *Excellent*- Emphasis is given to assuring that no illegal or improper bias (whether it be sex, race, or other) occurs in this program. *Poor*- Improper bias appears to be the norm.	5.0	3	
10. Provision for Program Advisement *Excellent*- Instructors in the program advise students on program and couse selection. Registration procedures facilitate course selection and sequencing. *Poor*- Instructors make no provision for advising students on couse and program selection.	5.0	3	Advising training occurs.
11. Provision for Career Planning and Guidance *Excellent*- Students in this program have ready access to career planning and guidance services. *Poor*- Little or no provision is made for career planning and guidance services for students enrolled in this program.	5.0	3	Most have jobs before graduation.

Please Rate Each Item Below	Average	Responses	Comments
12. Adequacy of Instructional Facilities *Excellent*- Instructional facilities and equipment meet the program objectives and student needs. *Poor*- Facilities and equipment for this program generally are restrictive, dysfunctional, or overcrowded.	4.2	3	Carpet could be replaced.
13. Use of Advisory Committees *Excellent*- The advisory committee for this program is active and representative of the occupation. *Poor*- The advisory committee for this program is not representative of the occupation and is not functional.	4.0	3	Meeting could be more regular.
14. Perception of Students Who Go On for a B.S. Degree *Excellent*- Respiratory Care students going on for a B. S. degree Degree are some of the better students in C.A. H.S. *Poor*- Respiratory Care students going for a B.S. degree are generally poor students	4.0	3	Need a degree in Respiratory Care (BS).

SECTION IX: NBRC CREDENTIALING EXAMINATION SCORES

There are no mandatory licensure examinations for respiratory care practitioners within the state of Michigan. However, there are national credentialing examinations administered by the National Board for Respiratory Care (NBRC). Respiratory care program graduates are eligible to sit for the Entry Level Certification Examination immediately after graduation. Successful candidates are awarded the title Certified Respiratory Therapist (CRT). Graduates from two year or more programs are eligible for a higher professional credential after they pass the Entry Level Certification Examination. This higher credential is the Registered Respiratory Therapist (RRT) credential. This consists of two distinct examinations, which may be taken on the same day, or on separate examination dates. The first examination is a 100 multiple choice examination testing both applicable theory and clinical knowledge and is called the Written Registry Examination. The second examination consists of a series of ten branching logic Clinical Simulations that assesses clinical knowledge, safety and practice. A graduate must successfully pass both examinations prior to the awarding of the RRT credential by the National Board for Respiratory Care. All examinations administered by the NBRC have been validated based upon the NBRC Job Analysis Surveys conducted every five years. The NBRC is one of very few national credentialing organizations, which conducts such examination validations.

Over the course of most of this review period, NBRC credentialing examinations were held at specific dates and times. This made the tracking of graduate scores easy. However, in 2000, the NBRC implemented a computerized testing system, which allow individuals to take the credentialing exams throughout the year. Tracking graduates and retake exams has become nearly impossible. Student exam retakes are identified by the year of graduation. So information on class participation and pass rates has become very confusing.

% of Graduates At or Above the NBRC Cut Score

NBRC Examination	1996	1997	1998	1999	2000
Entry Level Practitioner (CRT)	100%	69%	93%	69%	73%
Written Registry (RRT)	73%	78%	100%	100%	100%
Clinical Simulation (RRT)	63%	67%	80%	100%	100%

The cut score of each examination varies from year to year and is set by the NBRC. Results from all but the last set of examination scores of graduates indicate the curriculum does well in meeting the advanced competency goal for RRT, and is above the national average in preparing graduates in the theoretical and clinical realms. The graduates seem to have some difficulty in the basic CRT pass rates. This is an area that the program is addressing with increased review of the entry-level test information.

Many employers, especially those in licensed states, do not demand the RRT credential. This results in the low attempt rates on the Written Registry and Clinical Simulation exams by most graduates. Some employers, many in Michigan, do not require CRT credential since, at this time, there is no licensing of respiratory care personnel.

Results of each credentialing examination are provided to the program. While individual graduates are not identified by name on the examination report, individual scores are provided. The performance of FSU graduates on the three national examinations (Entry Level Certification, Written Registry and Clinical Simulation Exam) are provided above.
The RESP program started heavily emphasizing critical thinking and problem solving skills in all of its courses over the past few years. Clinical case study reviews, in class discussion of CRT and RRT level sample credentialing questions have been incorporated into RESP courses to assist students in developing or honing their problem solving and clinical decision making skills.

Included in the facilities and equipment section is a list of the computer programs (tutorials, computer aided instruction packages and teaching/testing clinical simulations) utilized in the various courses throughout the respiratory care program. These computer programs have assisted students and graduates in preparation and review for the national credentialing examinations. Initially, these computer simulations are used in a group setting where discussion is utilized to help students understand the process and rationale in selecting correct answers. After the group completes several computerized clinical simulations together, students are required to complete several simulations independently of the group.

The program is also evaluating the use of examinations review textbooks, which are designed in the same method as credentialing tests. However, these examinations have questions separated into categories, which allow the student to focus on specific area(s) of weakness.

SECTION X : GRADUATE SURVEYS

The Respiratory Care Program has been conducting graduate surveys since 1981. The current survey instrument is one the Committee on Accreditation of Respiratory Care Programs created and requires. Since the program is beginning the accreditation review process the Program Review Panel thought the currently used CoARC survey would provide the data necessary for both reviews without sending graduates a second survey.

Respiratory Care Program graduates are sent a survey based on the National Board for Respiratory Care Job Analysis Matrix approximately six months post graduation. The graduate survey utilized is 101 questions in length and allows for graduate self-reporting of cognitive skills, clinical competence and professional behavioral traits. It is included at the end of this section.

	1996	1997	1998	1999	2000
Number of Graduates	23	17	18	16	14
Number of Graduates responding to survey	8	8	8	8	6
% of Graduates At or Above the NBRC Cut Score	100%	100%	45%	100%	100%

Graduates rate themselves **above** the cut score of 3 on a scale of 1-5 as set by the NBRC. The following areas were surveyed:

a. Affective Domain - Students upon completion of the program will demonstrate personal and professional behaviors consistent with those expected of the advanced respiratory care practitioner. Survey results indicate our graduates are well prepared in this area.

b. Psychomotor Domain - Students upon completion of the program will demonstrate the technical proficiency in all skills necessary to fulfill the role as advanced level respiratory care practitioner. Results indicate our graduates are well prepared in this area.

c. Cognitive Domain - Students upon completion of the program will demonstrate the ability to comprehend, apply, and evaluate information relevant to their roles as advanced respiratory care practitioners. All graduates indicated satisfaction or above in this area.

Overall, graduates viewed themselves as highly professional and adequately prepared for employment in the field of respiratory care. Overall graduates express satisfaction with their job performance.

Faculty work to improve return rates of the graduate surveys mailed out each year through tracking graduates' places of employment and home addresses to maintain a current graduate database. Keeping track of alumni is a very difficult task. Telephone call follow up reminders after the graduate surveys are mailed might improve the rate of return of those surveys as desired by the program faculty.

2001
GRADUATE SURVEY
COLLEGE OF ALLIED HEALTH SCIENCES
RESPIRATORY CARE PROGRAM

CoARC Accredited Program #200108

The primary goal of a Respiratory Care Education program is to prepare the graduate to function as a competent Respiratory Care Practitioner. This survey is designed to help the program faculty determine the strengths and areas for improvement for our program. All data will be kept confidential and will be used for program evaluation purposes only.

BACKGROUND INFORMATION:

Job Title:_____ Current Salary (optional)_____

Length of employment at time of evaluation:_____ years and _____ months.

Name (if different from that on the cover):_____

Eligibility/Credential Status *(check all that apply)*:

☐ CRT eligible	☒ CRT 4	☐ CPFT	☐ RPFT
☐ RRT eligible	☒ RRT 2	☐ Perinatal/Ped	☐ Other_____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.

5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. KNOWLEDGE BASE (Cognitive Domain)

THE PROGRAM:		AVERAGE
A.	Helped me acquire the respiratory care knowledge (appropriate) to my level of training) which is necessary to function in the healthcare setting.	4.6
B.	Helped me acquire the general medical knowledge base necessary to function in the healthcare setting.	4.8
C.	Prepared me to collect pertinent data from charts and patients accurately and efficiently.	4.7
D.	Prepared me to interpret patient data effectively.	4.4
E.	Prepared me to recommend appropriate diagnostic and therapeutic procedures using patient data from laboratory and physical examinations.	4.4
F.	Trained me to use sound judgment while functioning in the healthcare setting.	4.3

Comments:_____

_____

_____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

II. CLINICAL PROFICIENCY (Psychomotor Domain)

THE PROGRAM:		AVERAGE
A.	Prepared me to perform all clinical skills appropriate to my level of training.	4.8
B.	Prepared me to perform accurate and efficient patient assessment.	4.5
C.	Prepared me to perform/utilize all therapeutic procedures/modalities appropriate to my level of training.	4.5
D.	Prepared me to perform and interpret all diagnostic procedures appropriate to my level of training.	4.3

Comments:_____

_____

_____

III. BEHAVIORAL SKILLS (Affective Domain)

THE PROGRAM:		AVERAGE
A.	Prepared me to communicate effectively in the healthcare setting.	4.8
B.	Prepared me to conduct myself in an ethical and professional manner.	4.9
C.	Taught me to manage my time efficiently while functioning in the healthcare setting.	4.5

Comments:_____

_____

_____

IV. GENERAL INFORMATION *(Affective Domain) (Check yes or no)*

A.	I have actively pursued attaining my NBRC respiratory care credential(s).	6 ☒ YES	☐ NO
B.	I am a member of a state respiratory care professional association.	2 ☒ YES	4 ☒ NO
C.	I am a member of a national respiratory care professional association.	☐ YES	6 ☒ NO
D.	I actively participate in continuing education activities.	4 ☒ YES	2 ☒ NO

Comments:_____

_____

_____

V. ADDITIONAL COMMENTS

OVERALL RATING:
Please rate and comment on the OVERALL quality of your preparation as a therapist: ***(Please circle one)***

4.8 5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

Comments:_____

_____

_____

Based on your work experience, please identify two or three strengths of the program.

Dedicated faculty

Clinical Affiliates

_____

_____

Based on your work experience, please make two or three suggestions to further strengthen the program.

Emphasize diagnostics

Spend more time on decision making skills

_____

_____

What qualities/skills were expected of you upon employment that were not included in the program?

_____

_____

_____

_____

Please provide comments and suggestions that would help to better prepare future graduates.

Incorporate a longer board exam review before taking the self assessment exams.

_____

_____

Thank You! **Date:**_____

GRADUATE SURVEY

FERRIS STATE UNIVERSITY
RESPIRATORY CARE PROGRAM

CoARC Accredited Program #200108

The primary goal of a Respiratory Care Education program is to prepare the graduate to function as competent Respiratory Care Practitioner. This survey is designed to help the program faculty determine t strengths and areas for improvement for our program. All data will be kept confidential and will be used f program evaluation purposes only.

BACKGROUND INFORMATION:

Job Title: _____ Current Salary (optional) _____

Length of employment at time of evaluation: _____ years and _____ months.

Name (if different from that on the cover): _____

Eligibility/Credential Status (*check all that apply*):

☐ CRT eligible ☐ CRT ☐ CPFT ☐ RPFT

☐ RRT eligible ☐ RRT ☐ Perinatal/Ped ☐ Other _____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.

5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. KNOWLEDGE BASE (Cognitive Domain)

THE PROGRAM:

A.	Helped me acquire the respiratory care knowledge (appropriate to my level of training) which is necessary to function in the healthcare setting.	5	4	3	2	1	N/A
B.	Helped me acquire the general medical knowledge base necessary to function in the healthcare setting.	5	4	3	2	1	N/A
C.	Prepared me to collect pertinent data from charts and patients accurately and efficiently.	5	4	3	2	1	N/A
D.	Prepared me to interpret patient data effectively.	5	4	3	2	1	N/A
E.	Prepared me to recommend appropriate diagnostic and therapeutic procedures using patient data from laboratory and physical evaluations.	5	4	3	2	1	N/A
F.	Trained me to use sound judgment while functioning in the healthcare setting.	5	4	3	2	1	N/A

Comments: _____

_____

_____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that

indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

II. CLINICAL PROFICIENCY (Psychomotor Domain)

THE PROGRAM:

G.	Prepared me to perform all clinical skills appropriate to my level of training.	5	4	3	2	1	N/A
H.	Prepared me to perform accurate and efficient patient assessment.	5	4	3	2	1	N/A
I.	Prepared me to perform/utilize all therapeutic procedures/modalities appropriate to my level of training.	5	4	3	2	1	N/A
J.	Prepared me to perform and interpret all diagnostic procedures appropriate to my level of training.	5	4	3	2	1	N/A

Comments: _____

_____

_____

III. BEHAVIORAL SKILLS (Affective Domain)

THE PROGRAM:

K.	Prepared me to communicate effectively in the healthcare setting.	5	4	3	2	1	N/A
L.	Prepared me to conduct myself in an ethical and professional manner.	5	4	3	2	1	N/A
M.	Taught me to manage my time efficiently while functioning in the healthcare setting.	5	4	3	2	1	N/A

Comments: _____

_____

_____

IV. GENERAL INFORMATION *(Affective Domain)* *(Check yes or no)*

A.	I have actively pursued attaining my NBRC respiratory care credential(s).	☐ YES	☐ NO
B.	I am a member of a state respiratory care professional association.	☐ YES	☐ NO
C.	I am a member of a national respiratory care professional association.	☐ YES	☐ NO
D.	I actively participate in continuing education activities.	☐ YES	☐ NO

Comments: _____

_____

_____

V. ADDITIONAL COMMENTS

OVERALL RATING:

Please rate and comment on the OVERALL quality of your preparation as a therapist:

5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

Comments:

_____

_____

_____

Based on your work experience, please identify two or three strengths of the program.

_____

_____

_____

_____

_____

Based on your work experience, please make two or three suggestions to further strengthen the program.

_____

_____

_____

_____

_____

What qualities/skills were expected of you upon employment that were not included in the program?

_____

_____

_____

_____

Please provide comments and suggestions that would help to better prepare future graduates.

_____

_____

_____

Thank You!

Date: _____

SECTION XI: EMPLOYER SURVEYS

The Respiratory Care Program has been conducting employer surveys since 1982. The current survey instrument is one the Committee for the Accreditation of Respiratory Care (CoARC) created and requires. Since the program is beginning the accreditation review process the Program Review Panel thought the currently used CoARC survey would provide the data necessary for both reviews without sending employers a second survey.

The employer surveys are based on the National Board for Respiratory Care Job Analysis Matrix. These surveys are mailed to employers of recent graduates approximately six months after graduation. The employer survey is consistent in length and comprehensiveness to the survey completed by the graduates. It is included at the end of this section.

% of Graduates At or Above the NBRC Cut Score

	1996	1997	1998	1999	2000
Number of Graduates	23	17	18	16	14
Total Job Placement	19	17	18	16	14
% of Graduates At or Above the NBRC Cut Score	100%	100%	100%	100%	100%

Graduates were consistently rated by employers **above** the cut score of 3 on a scale of 1-5 as set by the NBRC in the following areas:

a. Affective Domain - Students upon completion of the program will demonstrate personal and professional behaviors consistent with those expected of the advanced respiratory care practitioner. Survey results indicate satisfaction with our graduates in this area.

b. Psychomotor Domain - Students upon completion of the program will demonstrate the technical proficiency in all skills necessary to fulfill the role as advanced level respiratory care practitioner. Surveys indicate satisfaction with our graduates in this area.

c. Cognitive Domain - Students upon completion of the program will demonstrate the ability to comprehend, apply, and evaluate information relevant to their roles as advanced respiratory care practitioners. Employer ratings indicate satisfaction with graduates' job performance.

The reliability of the survey data could be impacted by rater inconsistency. It may be difficult for any supervisor to adequately assess the knowledge of a graduate by observation.

We continue to obtain excellent feedback by having one-on-one discussions with the employers of our graduates. The expectation of the employers to have adequately prepared employees was well documented by the returned survey data. This indicates that the program is meeting its basic competency goal.

The faculty continuously work to improve the return rates of the employer completed surveys. We plan to follow up survey mailings with telephone calls to try to motivate employers to return the surveys.

2001
EMPLOYER SURVEY
COLLEGE OF ALLIED HEALTH SCIENCES
RESPIRATORY CARE PROGRAM

CoARC Accredited Program #200108

The primary goal of a Respiratory Care Education program is to prepare the graduate to function as a competent Respiratory Care Practitioner. This survey is designed to help the program faculty determine the strengths and areas for improvement for our program. All data will be kept confidential and will be used for program evaluation purposes only. We request that this survey be completed by the graduate's immediate supervisor.

BACKGROUND INFORMATION:

Name of Graduate:_____

Length of employment at time of evaluation:_____ years and _____ months.

Name (if different from that on the cover):_____

Eligibility/Credential Status *(check all that apply)*:

☐ CRT eligible ☐ CRT ☐ CPFT ☐ RPFT

☐ RRT eligible ☐ RRT ☐ Perinatal/Ped ☐ Other_____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.

5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. KNOWLEDGE BASE (Cognitive Domain)

THE PROGRAM:		AVERAGE
A.	Has the respiratory care knowledge (appropriate to his/her level of training) necessary to function in the healthcare setting.	4.8
B.	Has the general medical knowledge necessary to function in the healthcare setting.	4.8
C.	Is able to collect pertinent data accurately and efficiently from charts and patients.	5.0
D.	Is able to interpret patient data effectively.	4.2
E.	Is able to recommend appropriate diagnostic and therapeutic procedures using patient data from laboratory and physical examinations.	4.0
F.	Uses sound judgment while functioning in the healthcare setting.	4.7

Comments:_____

_____

_____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

II. CLINICAL PROFICIENCY (Psychomotor Domain)

THE PROGRAM:		AVERAGE
A.	Has all clinical skills appropriate to his/her level of training.	5.0
B.	Possesses the skills to perform accurate and efficient patient assessment.	4.8
C.	Performs all cardiopulmonary therapeutic procedures and uses all modalities appropriate to his/her level of training.	5.0
D.	Is able to perform and interpret all diagnostic procedures appropriate to his/her level of training.	4.4

Comments:_____

_____

_____

III. BEHAVIORAL SKILLS (Affective Domain)

THE PROGRAM:		AVERAGE
A.	Communicates effectively in the healthcare setting.	4.8
B.	Conducts himself/herself in an ethical and professional manner.	4.8
C.	Functions effectively as a member of the healthcare team.	4.7
D.	Accepts supervision and works effectively with supervisory personnel.	4.8
E.	Is self-directed and responsible for his/her actions.	4.6
F.	Arrives to work prepared and on time.	5.0
G.	Contributes to a positive environment in the department.	4.8

Comments:_____

_____

_____

IV. ADDITIONAL COMMENTS

OVERALL RATING:
Please rate and comment on the OVERALL quality of this program's graduate: ***(Please circle one)***

4.8 5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

Comments:_____

_____

_____

What qualities or skills did you expect of the graduate upon employment that he/she *did not* possess?

_____

_____

_____

_____

Please provide comments and suggestions that would help this program to better prepare future graduates.

_____

_____

_____

_____

What are the strengths of the graduate(s) of this program?

_____

_____

_____

_____

_____ _____ _____

Rater Signature Date Title

Is the above rater the graduate's immediate supervisor? *Circle response* YES / NO

EMPLOYER SURVEY

FERRIS STATE UNIVERSITY
RESPIRATORY CARE PROGRAM

CoARC Accredited Program #200108

The primary goal of a Respiratory Care Education program is to prepare the graduate to function as a competent Respiratory Care Practitioner. This survey is designed to help the program faculty determine the strengths and areas for improvement for our program. All data will be kept confidential and will be used for program evaluation purposes only. We request that this survey be completed by the graduate's immediate supervisor.

BACKGROUND INFORMATION:
Name of Graduate: _____
Length of employment at time of evaluation: _____ years and _____ months.
Name (if different from that on the cover): _____
Eligibility/Credential Status (*check all that apply*):

☐ CRT eligible ☐ CRT ☐ CPFT ☐ RPFT
☐ RRT eligible ☐ RRT ☐ Perinatal/Peds ☐ Other _____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. KNOWLEDGE BASE (Cognitive Domain)

THE GRADUATE:

A.	Has the respiratory care knowledge (appropriate to his/her level of training) necessary to function in the healthcare setting.	5	4	3	2	1	N/A
B.	Has the general medical knowledge necessary to function in the healthcare setting.	5	4	3	2	1	N/A
C.	Is able to collect pertinent data accurately and efficiently from charts and patients.	5	4	3	2	1	N/A
D.	Is able to interpret pertinent patient data effectively.	5	4	3	2	1	N/A
E.	Is able to recommend appropriate diagnostic and therapeutic procedures using patient data from laboratory and physical evaluations.	5	4	3	2	1	N/A
F.	Uses sound judgment while functioning in the healthcare setting	5	4	3	2	1	N/A

Comments: _____

_____

_____

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

II. CLINICAL PROFICIENCY (Psychomotor Domain)

THE GRADUATE:

G. Has all clinical skills appropriate to his/her level of training.	5	4	3	2	1	N/A
H. Possesses the skills to perform accurate and efficient patient assessment.	5	4	3	2	1	N/A
I. Performs all cardio-pulmonary therapeutic procedures and uses all modalities appropriate to his/her level of training.	5	4	3	2	1	N/A
J. Is able to perform and interpret all diagnostic procedures appropriate to his/her level of training.	5	4	3	2	1	N/A

Comments: _____

_____

_____

III. BEHAVIORAL SKILLS (Affective Domain)

THE GRADUATE:

K. Communicates effectively in the healthcare setting.	5	4	3	2	1	N/A
L. Conducts himself/herself in an ethical and professional manner.	5	4	3	2	1	N/A
M. Functions effectively as a member of the healthcare team.	5	4	3	2	1	N/A
N. Accepts supervision and works effectively with supervisory personnel.	5	4	3	2	1	N/A
O. Is self-directed and responsible for his/her actions.	5	4	3	2	1	N/A
P. Arrives to work prepared and on time.	5	4	3	2	1	N/A
Q. Contributes to a positive environment in the department.	5	4	3	2	1	N/A

Comments: _____

_____

_____

IV. ADDITIONAL COMMENTS

OVERALL RATING:

Please rate and comment on the OVERALL quality of this program's graduate:

5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor

Comments:

What qualities or skills did you expect of the graduate upon employment that he/she *did not* possess?

Please provide comments and suggestions that would help this program to better prepare future graduates.

What are strengths of the graduate(s) of this program?

Rater Signature Date Title

Is the above rater the graduate's immediate supervisor? *Circle response*: YES / NO

SECTION XII: ADVISORY COMMITTEE SURVEY

The Respiratory Care Program has an Advisory Committee composed of adjunct faculty from the various clinical affiliates across the State of Michigan, representatives from the sales/home care area, a local resident, and a current RESP student. This committee over the years has provided information, dialogue and counsel on major programmatic areas such as recruitment, retention, scholarship establishment, clinical internship issues and curriculum revisions.

The Committee on Accreditation for Respiratory Care (CoARC) survey was sent to the 10 members of the Advisory Committee and the medical director. Two committee members declined to complete the survey stating they were unfamiliar with the information being asked. Two surveys were not returned even though a faculty member made follow-up telephone calls. The survey asked questions relating to their perceptions on Program Faculty, Facilities, Laboratory and Learning Resources, Financial Resources, Clinical Resources and Physician Interaction.

The survey statements were based on a 5 point Likkert scale with 5 = Strongly agree, 4 = Generally Agree, 3 = Neutral, 3 = Generally Disagree and 1 = Strongly disagree. The results are shown with the average of all responses followed by the number of responses per number, and then the number of responses marked as N/A. The intent of these last two columns is to demonstrate the number of responses which were averaged.

The survey results indicate the advisory committee's perceptions of the Ferris State Respiratory Care Program are as follows:

What are the major strengths of the Respiratory Care Program?

The Advisory Committee members gave the majority of statements between **4 and 5 average rating**. None of the statements rated less than a **3.2 average rating**.

The Advisory Committee rated the program faculty **very high, (4.2 range).** They expressed confidence in the faculty keeping them informed of programmatic matters and to encourage student participation in state and national professional activities. The highest average rating was given in respect to fostering positive relations with the clinical affiliates. Maintaining good relationships with the clinical sites is a key aspect to insuring good clinical rotations for our students.

The Advisory Committee periodically assesses the Respiratory Care Classroom/Laboratory during their campus visits. It is reassuring to be rated high in this area despite the perceived need to update the color scheme and carpeting. Additionally, the Advisory Committee often expresses interest in the program's learning resources with questions regarding the type of equipment and supplies used in the educational process. The **4.2 average rating** indicated they are satisfied with the resources they saw and heard about.

The Advisory Committee has the most direct contact with the program (students and Clinical Coordinator) during Clinical Internship Rotations either from their own personal experience of through comment from their staff. Strengths and weaknesses are easily identified once the student is out of the classroom and at the bedside. Ferris' program has the distinct advantage of being compared to every other Respiratory Care program in the state. This situation occurs because FSU students are placed in hospitals throughout the state where other Respiratory Care program students may be interning or are employed. Members of the Advisory Committee working in clinical settings can do side by side comparison of our students with the students from their local community college Respiratory program. This side by side comparison earned the program its **highest ratings (most between 4.5 and 4.8)** in the entire survey. The program fully prepares students for their clinical internship with extensive hand on laboratory practice and intensive procedural evaluations designed to emulate the clinical setting.

Overall members of the Advisory Committee average rated the resources supporting the program a **4.2 average rating**. They had high regard for the Ferris program. This is reflective of many comments received by the Clinical Coordinator during hospital visits. Most hospitals are impressed with the quality of the Ferris Respiratory Care student and see them better prepared than student from other community college Respiratory programs.

What are the areas in need of improvement in the Respiratory Care Program?

Finding areas that need improvement is difficult when evaluating the survey results. However, a few potential areas can be seen with slightly lower scores.

The distance between the campus base of the Ferris program and its key health centers in which most of our Advisory Committee members are employed presents a communication challenge. The **3.8 average rating** must be taken as an indicator that we could do better job of keeping our Advisory Committee informed of programmatic matters. What is not clear is the type of communication the various committee members want. Therefore, some work needs to be done to ascertain the type of communication wanted before improvements in this area can be made.

Financial Resources and Budget were given an **average rating of 3.2**. This rating is based on the lack of information being shared in this area by the program. Half of the Advisory committee chooses to use N/A in this area. This rating indicates a need for the sharing of budgetary and financial resource information with the Advisory Committee.

Physician Interaction was rated lower than Clinical Rotations. The **3.5 average rating** indicates average exposure of students to physicians. Quality physician contact while on campus due to Ferris location to major medical centers is minimal. Most of the physician contact comes when the student is in Clinical Rotations. Over the past few years, more emphasis has been placed on students seeking interactions with physician. Time and

fiscal constraints of physicians is lessening their contact with all health care students and professionals in the health care environment of today.

Regarding Written Comments

At the end of the survey Advisory Committee members were given an opportunity to add their personal comments. The initial comment seems to indicate the Clinical Coordinator is an important source of support for the hospitals as well as the students. At least one, Advisory member indicated the difficulty of rating a program as distant as Ferris. Yet, the end result is well prepared students that are ready to be in the hospital setting. Another Advisory member rates the faculty as outstanding.

Written comments regarding areas to improve include distance learning. This topic came up in an Advisory Committee meeting previous to the survey in which the hospitals would like to utilize Ferris educational resources through distance learning formats. The direction Ferris Respiratory Care is taking with Internet based classes could assist hospital Respiratory Care departments in meeting the continuing education needs of their staff.

Written comments also note that updating equipment would be beneficial for our students. In recent years this concern has been addressed by utilizing rental equipment. The program also utilizes vendor demonstrations, however, these are difficult to control and insure they fit in the objective of the course.

ADVISORY COMMITTEE
PROGRAM RESOURCE SURVEY

Ferris State University
RESPIRATORY CARE PROGRAM

CoARC Accredited Program #

The purpose of this survey instrument is to evaluate our program resources. The data compiled will aid the program in an ongoing process of program improvement. Unless specified, all sections should be completed by program faculty, Medical Director, and Advisory Committee.

INSTRUCTIONS: Consider each item separately and rate each item independently of all others. Circle the rating that indicates the extent to which you agree with each statement. Please do not skip any rating. If you do not know about a particular area, please circle N/A.
5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree N/A = Not Applicable

I. PERSONNEL RESOURCES

A. PROGRAM FACULTY *(Completed by Medical Directors & Advisory Committee Members)*

	Average	No.	NA
1. Faculty keep the Advisory Committee informed of program status.	**3.8**	6	
2. Faculty encourage and utilize input from the advisory board/communities of interest.	**4.2**	6	
3. Faculty foster positive relations with clinical affiliates.	**4.7**	6	
4. Faculty encourage student participation in professional activities.	**4.3**	6	
Faculty request annual review of goals and standards by the Advisory Committee.	**4.2**	6	

B. MEDICAL DIRECTOR(S) *(Completed by Program Faculty and Advisory Committee)*

1. Medical Director(s) assist(s) the program faculty to provide physician interaction opportunities for students.	**3.9**	4	2
2. Medical Director(s) participate(s) in curriculum design modification to ensure appropriate scope and accuracy of medical content.	**3.7**	4	2

II. FACILITIES

1. Classrooms	**4.3**	4	2
a. Are adequate in size			
b. Have adequate lighting			
c. Contain adequate seating.			
d. Have adequate ventilation.			
e. Are provided with appropriate equipment to support effective instruction.			
2. Laboratory	**4.2**	4	2
a. Is adequate in size			
b. Has adequate lighting			
c. Contains adequate seating			
d. Has adequate ventilation			
e. Is accessible to students outside regularly scheduled class times.			

III. LABORATORY EQUIPMENT

	Average	No.	NA
	4.1	4	2

1. The amount of equipment is sufficient for student performance of required laboratory exercises.
2. The variety of equipment is sufficient for student performance of required laboratory exercises.
3. Supplies are sufficient for student performance of required laboratory exercises.
4 .Laboratory activities prepare the student to perform effectively in the clinical setting.

IV. LEARNING RESOURCES

		Average	No.	NA
1.	Libraries (school and hospital/affiliate)			
	a. Program assignments require the use of library resources	**4.2**	5	1
	b. The libraries provide sufficient materials to support assignments.	**4.6**	5	1
2.	Computer resources are adequate to support the curriculum.	**4.5**	4	2
3.	Learning resources are available outside regular classroom hours.	**4.5**	4	2

Comment: I have no way to judge II-IV

V. PROGRAM SUPPORT PERSONNEL

SECRETARIAL SUPPORT	**3.7**	3	3

The secretarial staff is adequate to meet the clerical needs of the program

VI. FINANCIAL RESOURCES

A. INSTITUTIONAL BUDGET The institutional budget provides the Respiratory Care program with equal access to all financial resources available to all other instructional programs.	**3.2**	3	3
B. PROGRAM BUDGET	**3.8**	2	4

1. Provides for sufficient access to functioning and up-to-date equipment to achieve classroom and laboratory competencies.
2. Provides for supply purchases necessary to achieve the program's classroom and laboratory competencies.
3. Provides for a sufficient number of faculty for didactic (classroom) instruction.
4. Provides for a sufficient number of faculty for laboratory and clinical instruction.
5. Provides for adequate continuing professional development of full-time faculty.

Comment: I am to far removed from on-campus operations to judge any of this family

VII. CLINICAL RESOURCES

	Average	No.	NA
A. CLINICAL ROTATIONS			
1. Facilities			
a. The clinical facilities offer an adequate number of procedures for the student to meet clinical objectives.	**4.5**	6	
b. The clinical facilities offer an adequate variety of procedures for the student to meet clinical objectives.	**4.7**	6	
c. The clinical facilities provide adequate exposure to current equipment	**4.5**	6	
2. Experiences			
a. Each clinical rotation is of sufficient length to enable the student to complete clinical objectives.	**4.5**	6	
B. CLINICAL INSTRUCTION ***(To be completed by clinical instructors only)***			
1. Students are adequately prepared to perform scheduled exercises in the clinical setting.	**4.5**	6	
2. Clinical activity is sequential to laboratory and didactic instruction.	**4.5**	6	
3. Students are prepared to behave in a professional manner in the clinical setting.	**4.7**	6	
4. Clinical instructors feel adequately prepared for each group of students.	**4.7**	6	
5. There is a sufficient number of instructors for the number of assigned students.	**4.7**	6	
6. Students are adequately oriented to the clinical setting.	**4.5**	6	
C. CLINICAL INSTRUCTION (To be completed by key personnel)			
1. Clinical instructors are sufficiently knowledgeable to provide student instruction.	**4.8**	6	
2. Clinical instructors work with the students to complete the assigned objectives.	**4.5**	6	
3. Clinical instructors are consistent in their evaluation of student performance.	**4.3**	6	
4. Clinical instructors are readily available to assist students when needed.	**4.2**	6	

Comments: I can only speak for my own clinical site

VIII. PHYSICIAN INTERACTION

A. Physician/student interaction is sufficient to facilitate development of effective communication skills between physicians and students.	**3.7**	6	
B. Physician Contact is sufficient to provide the student with a physician perspective of patient care.	**3.7**	6	
C. Overall student exposure to physicians in the program is adequate.	**3.5**	6	

Comments: Again, my hospital only

IX. ADDITIONAL COMMENTS

What position do you hold with this program? Adjunct faculty – clinical site

OVERALL RATING:	Average	No.	NA
Please rate the OVERALL quality of the resources supporting the program.	**4.2**	6	

5 = Excellent 4 = Very Good 3 = Good 2 =Fair 1 = Poor

Based on your experience, which program resources provide students with the most support?

Campus based coordinator/director/instructor

Why?

#1: they provide information that is critical in hospital based operation

#2: being so far removed from the day to day operation on-campus, it is hard for me to render meaningful judgements for much of the above. I do know that the students I have seen come to me are well prepared to participate in clinical education

#3 Hands on –especially equipment related.

Based on your experience, which program resources could be improved?

Distance learning (in process?)

How?

#1 Post graduate classes for students/faculty at clinical affiliates

#2 some modules are outdated

#3 more exposure to diagnostics

#4 The faculty of this program is outstanding! The instructors are willing to help you and accommodate whatever is necessary.

Please provide comments and suggestions that would help to improve the program's overall resources.

#1 doing a very good job

#2 would be nice if students could intergrate clinical rotations with didactic sessions instead of waiting until end of lecture

#3 New and update equipment would go along way in facilitating a better learning and understanding of key concepts

SECTION XIII: CONCLUSIONS

1. Graduate and Employer Surveys:

   The follow-up surveys returned by graduates between 1996 and 2001 and the employers of graduates during the same years appear to identify a high quality entry level Respiratory Care Practitioner as prepared in the FSU Respiratory Care Program. No weaknesses are noted in the cognitive skills, clinical competency or professional traits of Ferris State University's Respiratory Care Program graduates as self-reported by graduates and their employers.

2. Student Perceptions of the Program:

   The student perceptions survey indicated students were very pleased with their Respiratory Care and FSU education. The majority of students rate the knowledge of Respiratory Care instructors, availability of help and course work/clinical experience very high.

   Students expressed concerns with the CCHS 101 and 103 courses. RESP Program faculty will continue to address students concerns with the CAHS Core Curriculum Committee and Coordinator.

3. Enrollment Trends:

   The program faculty has been intensively working to improve enrollment numbers through extensive recruitment efforts such as Open Lab tours, DAWG Days and Autumn Adventure events, inclusion of RESP 100 into the curriculum, multiple entry points into the curriculum, joint ventures with community colleges, 1 + FSU option, BS degree student option, and tuition scholarship opportunities through hospitals.

   The program faculty is aggressively addressing student retention rates through efforts such as SLA workshops in two RESP courses, intrusive student advising, and personal tutoring of students by faculty in their RESP courses.

   The expectation of the program faculty is that enrollment numbers will continue to increase particularly with their extensive recruitment activities and the downturn in the economy. Program faculty expects attrition rates to decline due to the aggressive retention efforts they currently have in place.

4. Faculty Perceptions of the Program:

   Program faculty have the perception that they and the numerous clinical adjunct faculty located around the state is truly dedicated to the goals and objectives of FSU and the respiratory care profession. Clinical sites are sufficient in quantity to provide excellent internship experiences for students at locations closer to their permanent

residences.

There is very strong support for the program by students, graduates, employers, faculty, and clinical affiliates both verbally and financially. They also offer input into program changes.

Review of these surveys suggests the perception of a very strong program, which needs to continue exploring alternative delivery systems, as well as the B.S. degree in Respiratory Care.

5. Advisory Committee Perceptions of the Program:

The overall impressions of the various members of the program's advisory committee were quite high with concurrence on the need for the program. The quality of the program and the continuation of the demand for the program's graduates both as a consequence of human resource shortages and the program's reputation among potential employers. When compared to other programs in the State, the Advisory Committee members often rate our students as better prepared .

The advisory committee needs to continue meeting on a more regular basis so that advice on the changes in health care that impact the program in the future can be discussed.

6. Graduate Credentialing Examination Scores:

Review of FSU Respiratory Care program graduate scores on nationally validated credentialing examinations suggests that our graduates are above the national average in their theoretical and clinical preparation. FSU should be proud of the excellent performance of its graduates on these examinations.

7. Labor Market Analysis:

Evidence suggests that the respiratory care profession is continuing to grow and Those positions as a result of both growth and turnover will increase the demand for graduates in Michigan and nationwide. Loss of several community college Respiratory Care programs has increased the demand for the FSU Respiratory Care graduate.

There is direct evidence that the quality of the Ferris program has led to the preferential and active recruitment of its graduates over the graduates of the ten other programs within this state.

The closure of the North Central Michigan College respiratory care program in the Spring of 1990 continues to leave Ferris State University as the only regional program Providing respiratory therapists to the Upper Peninsula, the northern lower peninsula,

and West Central Michigan. Northern Michigan communities, Marquette, Alpena, and others, have affiliated with the FSU Respiratory Care Program to connect with students (potential employees) to meet staffing needs.

It is clear that there are excellent employment and career advancement opportunities for respiratory care program graduates. The salary range of $ 31,000 to $46,000 is within the range of other A.A.S. healthcare graduates.

8. Evaluation of Program Resources:

The supply and expense budget has declined over the past five years. Faculty has been able to maintain program excellence through additional external sources. Donated or borrowed equipment and supplies, along with equipment purchases with Vocational Education and alumni funds, have assisted the program in adequately meeting student instructional needs from year to year.

There has been strong financial support of the program by graduates, faculty, industry, and clinical affiliates.

The laboratory/classroom available to the program presents an instructionally sound environment for student education and is sufficient to support a high quality program. This area has been updated with video projection equipment to aid in the delivery of course work.. The respiratory care laboratory/classroom and equipment are scheduled in a manner to maximize utilization by students in they're educational endeavors.

Current available data about productivity and costs to educate program graduates is skewed by figures based on low enrollment due to under reported RESP student counts as a result of dual program classification of students. More current and accurate data should reflect a decrease in program costs per student credit hour.

9. Curriculum Evaluation:

The course syllabi and materials were found to be professionally constructed, and clearly document that the Ferris State University Respiratory Care curriculum meets all standards set by the Committee on the Accreditation of Respiratory Care Programs as evidenced by the granting of full accreditation in 1996. All the course syllabi are available, under separate cover, for examination.

Students and faculty found the majority of supportive courses in the curriculum to be relevant to the programs goals and met the current needs of students.

10. Comments:

There are a number of significant activities occurring in the Respiratory Care program, which show a commitment to excellence by the faculty. The activities to be highlighted are as follows:

A. Web Respiratory Care Courses

In creating a unique environment to set Ferris Respiratory Care apart from other programs in community colleges and to service areas of Michigan without a Respiratory program, online courses have been developed. RESP 100 is the first WebCT Respiratory course in Michigan and began in the fall of 2002. In the winter of 2003, Dawn Easter will facilitate the first Virtual SLA workshop that is to be a part of the online RESP119 course taught by Brenda Brown.

B. Support of Other Programs

The faculty has a long history of supporting and assisting other programs and faculty. This is seen with guest lectures in other programs but also in developing concepts that benefit all of Allied Health. In the past year, Brenda Brown created a CAHS WebCT Users Group so that faculty could share skills, ideas, and knowledge in development of WebCT courses. Both program faculties have been actively assisting individuals in the college with their course development. David Zobeck created a Hepatitis B mini-course for the College of Allied Health using elements from his RESP100 course. This mini-course meets a critical training need for the Dental Hygiene, Nursing, Radiography, Nuclear Medicine, and Clinical Laboratory Sciences programs. Additionally, a pre-course PowerPoint/Tegrity tour of how to use WebCT was developed by David Zobeck. UCEL and other CAHS programs have expressed strong interest in using the WebCT tour David created.

Marketing

The faculty willingly and actively participates in the marketing and recruitment for Respiratory Care. This not only includes the Autumn Adventure, DAWG Days, and Open Lab tours but also in developing truly unique marketing concepts. The most significant has been the direction of online courses to allow a 1+FSU Respiratory Care concept. Student can begin the program while a student is in a community college. When they meet program admission requirement, the student can transfer to FSU in the summer semester of the first year. This has resulted in discussion with at least four community colleges that would like to offer Respiratory Care to their students. An even most creative concept was the marketing of the program with an ad placed in the Sunday Grand Rapids Press. As noted earlier it had inexpensively generated interest and student contacts.

Recognition

This past year, her colleagues recognized Brenda Brown with a nomination for Ferris Distinguished Faculty of the Year. The Vice President of Academic Affairs nominated her for US Professor of the Year through the Carnegie Foundation. This demonstrates the confidence her peers as well as administration have in her abilities. The program and college is proud of Brenda's nomination and recognition for excellence in teaching.

Publications and Presentations

In the past years, David Zobeck has become a frequent contributor to local, state and national publications. Most frequent have been articles in the Michigan Society for Respiratory Care quarterly publication. These have ranged from a therapists responsibility to the profession to online education. This past year he has had articles in a state unemployment office newsletter regarding retraining into Respiratory Care as well as an article in a national professional magazine on the use of Personal Digital Assistants in bedside care. He has even created several health care programs for the PDA in which there has been over a thousand downloads. He has been a presenter at state Respiratory Care conferences, in all of which he is seen as a faculty of Ferris' Respiratory Care Program.

National RC Involvement

Respiratory Care Program director Julian Easter's role as a CoARC Accreditation Site Visitor gives Ferris' Respiratory Program national exposure as well as helping it stay within the CoARC standards. He often is able to compare this program with others he has had to evaluate. This has benefited the program and most likely helps maintain high marks with the clinical sites and Advisory Committee. The program is beginning the CoARC accreditation process this year. Julian's site visitor experiences have made him able to note potential areas of weakness such as assuring clinical adjunct instructors across the state use the proficiency evaluation system in the same way as all other clinical instructors. In response to the need noted, the Clinical Coordinator developed a clinical evaluation training CD ROM to assist in maintaining consistency with student check offs within the multitude of clinical sites the RESP Program uses.

SECTION XIV: RECOMMENDATIONS

After reviewing all the data and discussing the results of the many surveys, the consensus of the PRP is that the Respiratory Care Program at Ferris State University is an excellent educational and professional program that all at FSU can be proud. The many strengths and follow up activities of the program include:

1. Excellent employment and career advancement opportunities exist for the graduates. Continue monitoring the employment trends in the Respiratory Care Profession.

2. Continue monitoring the credentialing examination scores as they are available to ensure program goals are being met.

3. Clinical sites that are sufficient in number and provide excellent internship experiences for students. Pursue alternative clinical internship settings to meet the challenges of the changing healthcare delivery system.

4. The on-campus and clinical faculty are very dedicated to the goals and objectives of FSU and the profession of respiratory care. Continue the use of small laboratory sections, and procedural proficiency evaluations of students prior to and during clinical internships. Continue the surveying of all constituents every semester to ensure the programs goals are being achieved.

5. There is general satisfaction of the students, graduates, employers with the faculty, on campus and clinical experiences. Continue surveying each of the programs constituents annually to ensure the programs goals are being achieved.

6. There is strong support for the program by students, graduates, employers, faculty and clinical affiliates. Continue the surveying of each of the aforementioned constituents annually to ensure the program goals are being achieved.

7. Continue recruitment efforts, the use of SLA course formats, tutoring and intrusive counseling sessions that have yielded a steady increase in enrollment and a dramatic increase in retention rates. Monitor enrollment and retention rates as has occurred for the past sixteen years.

8. Continue the development of the B.S. degree in Respiratory Care which is desired by many in the profession.

9. Improve the collection and utilization of follow-up data on program completers and leavers for program evaluation and planning activities.

10. Begin the accreditation process (self study and site visit) this year. The expectation is the program will once again be granted full accreditation status without qualifications as occurred in 1996.

11. Continue improving the communication between FSU, students and clinical faculty at hospitals throughout the state. Pursue the utilization of the internet in addition to the current use of letters, telephone calls and visits to achieve the effective, timely communication with students and clinical faculty.

The Program Review Panel recommends that the program officials and faculty continue the processes that have resulted in the strengths listed above. We currently find no major program weaknesses.

Respiratory Care
Program Review Panel Evaluation

PRP Panel Average

1. **Student Perception of Instruction** 5 4 3 2 1 **5.0**
   5=currently enrolled students rate instructional effectiveness extremely high
   1=currently enrolled students rate instructional effectiveness below average.

2. **Student Satisfaction with Program** 5 4 3 2 1 **4.75**
   5= currently enrolled students are very satisfied with the program faculty, equipment, facilities and curriculum
   1= currently enrolled students are not satisfied with the program faculty, equipment, facilities and curriculum

3. **Advisory Committee Perception of Program** 5 4 3 2 1 **4.75**
   5= Advisory committee members perceive the program curriculum, facilities and equipment to be of highest quality.
   1= Advisory committee members perceive the program curriculum, facilities and equipment needs improvement

4. **Demand for Graduates** 5 4 3 2 1 **5.0**
   5= Graduates easily find employment in field
   1= Graduates are sometimes forced to find positions out of their field

5. **Use of Information on Labor Market** 5 4 3 2 1 **5.0**
   5=The faculty and administrators use current data on labor market needs and emerging trends in job openings to systematically develop program
   1=The faculty and administrators do not use labor market data in planning or evaluating the program

6. **Use of Profession/Industry Standards** 5 4 3 2 1 **4.75**
   5=Profession/industry standards (such as licensing, certification, accreditation) are consistently used in planning and evaluating this program and content of its courses
   1=Little of no recognition is given to specific profession/industry standard in planning and evaluating this program

7. **Use of Student Follow Up Information** 5 4 3 2 1 **4.0**
   5=Current follow up data on completers and leavers are consistently and systematically used in evaluating this program
   1=Student follow up information has not been collected for use in evaluating this program

8. **Relevance of Supportive Courses** 5 4 3 2 1 **4.3**
   5=Applicable supportive courses are closely coordinated with this program and are kept relevant to program goals and current needs of students
   1=Supportive course content reflects no planned approach to meeting needs of students in this program.

9. **Qualification of Administrators / Supervisors** 5 4 3 2 1 **4.75**
   5=All persons responsible for directing and coordinating this program demonstrate a high level of administrative ability
   1=Persons responsible for directing and coordinating this program have little administrative training and experience

10. Instructional Staffing 5 4 3 2 1 **4.9**

5=Instructional staffing for this program is sufficient to permit optimum program effectiveness
1=Staffing is inadequate to meet the needs of this program effectively

11. Facilities 5 4 3 2 1 **4.1**

5= present facilities are sufficient to support a high quality program
1=present facilities are a major problem for program quality

12. Scheduling of Instructional Facilities 5 4 3 2 1 **5.0**

5=scheduling of facilities and equipment for this program is planned to maximize use and be consistent with quality instruction
1=Facilities and equipment for this program are significantly under or over scheduled

13. Equipment 5 4 3 2 1 **4.4**

5= Present equipment is sufficient to support a high quality program
1=Present equipment is not adequate and represents a threat to program quality

14. Adaptation of Instruction 5 4 3 2 1 **5.0**

5=Instruction in all courses required for this program recognizes and responds to individual student interests, learning styles, skills, and abilities through a variety of instructional methods (such as small group or individualized instruction, laboratory or "hands on" experiences, credit by examination)
1=Instructional approaches in this program do not consider individual student differences

15. Adequate and Availability of Instructional Materials and Supplies 5 4 3 2 1 **4.5**

5=Faculty rate that the instructional materials and supplies as being readily available and in sufficient quantity to support quality instruction
1=Faculty rate that the instructional materials are limited in amount, generally outdated, and lack relevance to program and student needs

Other comments:

1. This is an excellent program.
2. Caring faculty help students succeed.
3. Wide variety of internship sites available.
4. Leasing of equipment is a good option.
5. Orange carpet!
6. Some comments on student satisfaction with equipment.
7. Follow up information on students leaving the program is hard to find.

ADMINISTRATIVE PROGRAM REVIEW: 2001

(final version – 10/24)

Program/Department: Respiratory Care/Health Related Programs Date Submitted: January 4, 2002

Please provide the following information:

Enrollment

	Fall 1997	Fall 1998	Fall 1999	Fall 2000	Fall 2001
Tenure Track FTE	2	2	2	2	2
Overload/Supplemental FTEF	.5	0	0	0	0
Adjunct/Clinical FTEF (unpaid)	15	15	15	15	15
Enrollment on-campus total*	31	26	35	25	14
Freshman	6	6	5	6	1
Sophomore	9	7	13	6	5
Junior	10	6	14	7	7
Senior	6	7	3	6	0
Masters	0	0	0	0	0
Doctoral	0	0	0	0	0
Pre-Professional Students	13	18	10	14	9
Enrollment off-campus*	0	0	0	0	0
Traverse City					
Grand Rapids					
Southwest					
Southeast					

*Use official count (7-day)

If there has been a change in enrollment, explain why:

Capacity:

Estimate program capacity considering current number of faculty, laboratory capacity, current equipment, and current levels of S&E.

50 students

What factors limit program capacity?

Financial

Expenditures*	FY 97	FY 98	FY 99	FY 00	FY 01
Supply & Expense	$17,463	$9,135	$11,256	$11,754	$12,097
Faculty Prof. Development					
General Fund					
Non-General Fund					
UCEL Incentives					
FSU-GR Incentives					
Equipment					
Voc. Ed. Funds	$23,888		$14,121	$8,786	
General Fund					$858
Non-General Fund					
UCEL Incentives					
FSU-GR Incentives					

*Use end of fiscal year expenditures.

ADMINISTRATIVE PROGRAM REVIEW: 2001

If you spent UCEL and FSU-GR incentive money for initiatives/items other than faculty professional development and equipment, what were they? Explain briefly. Please also include amounts spent on each initiative/item.

Revenues	FY 97	FY 98	FY 99	FY 00	FY 01
Net Clinic Revenue					
Scholarship Donations					
Gifts, Grants, & Cash Donations	$482	$702	$300	$580	$1,665
Endowment Earnings					
Institute Programs/Services					
In-Kind					

Other

	AY 96/97	AY 97/98	AY 98/99	AY 99/00	AY 00/01
Number of Graduates* - Total	16	14	13	15	13
- On campus	16	14	13	15	13
- Off campus	0	0	0	0	0
Placement of Graduates	100%	100%	100%	100%	100%
Average Starting Salary	$27,000	$27,500	$29,000	$30,500	
Productivity - Academic Year Average	316	407	249	267	198
- Summer	251	436	90	168	192
Summer Enrollment	21	17	13	18	9

* Use total for full year (S, F, W)

1. a) Areas of Strength:
    1. Faculty willing to try different approaches to teaching, recruiting or retention of students.
    2. Multiple admission points into the program (Fall and Winter for typical AAS, Summer for 1+FSU, BS+1 programs)
    3. Several alternative curriculum paths (typical ASS, 1+FSU, BS degree +1))
    4. Strong preparation of students in the laboratory for clinical internship experience
    5. Diverse basic and advanced Respiratory Care clinical internship sites located throughout the state
    6. Clinical internship sites located close to a students home, saving them money.

b) Areas of Concern and Proposed Action to Address Them:

1. Low enrollment – various entry points, plus a variety of ways to complete program, recruitment plan.
2. Statis or declining budget - disposable and permanent equipment donations, alumni donations
3. Loss of Voc-Ed funding to rent state of the art ventilators – will result in the need to borrow ventilator or use computer simulations.
4. Lab renovation – will submit minor capital improvement request and seek outside sources of funding.

2. Future goals (please give time frame)

1. Put RESP110 and RESP119 fully on line (2002-2003)
2. Increase utilization of online or web enhances courses (2002-2003)
3. Fully utilize CAHS and FSU recruiters to promote the RESP program
4. Recruit hospital staff and alumni to assist with recruitment efforts
5. Actively seek financial and equipment donations or loans from hospitals and vendors.

3. Other Recommendations:

1. Utilize and promote tuition scholarships from hospitals to recruit students (2002-2003)
2. Continue developing tuition scholarships.
3. Continue current recruiting and retention efforts

4. Does the program have an advisory committee? **YES**

a) If yes, when did it last meet? **November 1, 2001**

b) If no, why not? By what other means do faculty receive advice from employers and outside professionals?

c) When were new members last appointed? **November 1, 2001**

d) Are there non-alumni/ae on the committee? How many? **Yes, 10.**

5. Does the program have an internship or other cooperative or experiential learning course? **Yes, 2 internships**

a) If yes, is the internship required or recommended? **Both internships are required**

b) If no, what is the reason for not requiring such an experience?

6. Does the program offer courses through the web? **No**

a) Please list the web-based (fully delivered through the internet) courses the program offered last year?

b) Please list the web-assisted (e.g., WebCT) courses the program offered last year.

7. What is unique about this program?

a) For what distinctive characteristics is it known in the state or nation?
- **It is the only university-based RESP program in the State of Michigan.**
- **Students are thoroughly prepared for the clinical internship in the laboratory through proficiency evaluations.**
- **Well equipped laboratory for hands-on student use.**
- **Students go into the clinical setting and stay in that environment for 6 or 12 weeks depending on the internship. The do not go to class one day and the hospital the next day, which all other RESP programs are doing in Michigan.**

b) What are some strategies that could lead to (greater) recognition?
- **Greater publicity through articles in local and statewide newspapers.**
- **Create opportunities for faculty to present at state and national level.**

8. Questions about Program Outcomes Assessment (attach additional sheets, if necessary):

a) What are the program's learning outcomes?
- **Upon completion of the program, all students will demonstrate the ability to comprehend, apply and evaluate information relevant to their roles as advanced respiratory care practitioners.**
- **Upon completion of the program, students will demonstrate the technical proficiency in all skills necessary to fulfill the role as an advanced respiratory care practitioner.**
- **Upon completion of the program, all students will demonstrate personal and professional behaviors consistent with those expected of the advanced respiratory care practitioner.**

b) What assessment measures are used, both direct and indirect?

- **Direct – Course Comprehensive Examinations, National Board Examination Scores, Graduate Surveys and Employer Surveys**
- **Indirect – Student, faculty and advisory committee perception survey**

c) What are the standards for assessment results?
- **Course Comprehensive Examinations - programmatically established threshold**
- **National Board Examination Scores – nationally established threshold**
- **Graduate & Employer Surveys – programmatically established threshold**
- **Student and Faculty Perception Survey – informational only**
- **CRT Self Assessment Examination – programmatically established threshold**

d) What were the assessment results for 2000-01?
- **Course Comprehensive Examinations**
- **National Board Examination Scores: CRT, Written RRT, and Clinical Simulation RRT, results are pending as students graduated in May and have not taken all the national exams yet.**
- **Graduation Surveys – threshold 50%/ achieved 80%**
- **Employer Surveys – threshold 50%/achieved 80%**
- **CRT Self Assessment Examinations – threshold 50%/achieved 80%**

e) How will / how have the results been used for pedagogical or curricular change?
- **Used for curriculum revision put into place last year**
- **Used to develop alternative program options**
- **Used to keep content current in all RESP courses**

9. Questions about Course Outcomes Assessment:

a) Do all multi-sectioned courses have common outcomes?
Yes, the RESP program has multi-laboratory sectioned courses in the curriculum. The outcomes are the same as all laboratory sections are taught by the same instructor.

b) If not, how do you plan to address discrepancies?

c) Do you keep all course syllabi on file in a central location?
Yes, in the Health Related Program Department Secretary's Office and in CAHS Word Processing Center.

*If you have questions about the outcomes assessment portions of this survey, please contact Laurie Chesley (x2713).

Form Completed by Julian Easter, Department Head, Health Related Programs
Name and Title

Reviewed by Dean_____
Name and Date