WSU Five-Year Program Review Self-Study

Department/Program: Respiratory Therapy

Semester Submitted: Fall 2013

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A. Brief Introductory Statement

The Respiratory Therapy program (REST) at Weber State University is a state, regional, and national leader in respiratory care curriculum and education. The program maintains continuing accreditation by the <u>Commission on Accreditation</u> for <u>Respiratory Care</u> (CoARC). Annual reporting is conducted for program outcomes pertaining to four student co-horts located in Ogden, WSU-Davis, Intermountain SLC, and in Provo, Utah at Utah Valley Regional Hospital. These outcomes include data on enrollment, graduation, credentialing success statistics, employer and graduate satisfaction, and attrition. The program meets or exceeds national threshold standards in every measurable category reported in three year running averages i.e., last reported for the academic year in 2010, 2011 and 2012. A CoARC "report of current status" (RCS 2012) for 2010, 2011 & 2012 is included (see "annual report" pdf) for review as well as annual school summary credentialing reports from the <u>National Board for Respiratory Care</u> (NBRC).

In July 2013, the WSU Department of Respiratory Therapy was recognized in the Orlando, Florida Summer Forum for superior RRT credentialing success (the professional advanced-practice credential) awarded to fewer than twenty programs from over 400 schools in the nation.

Respiratory Therapy. An art and a science concerned with promoting and restoring health in evaluating, monitoring, and rehabilitation of patients with cardiopulmonary dysfunction. Respiratory therapists provide care for patients throughout the lifespan from pre-term and newborn infants to pediatric and geriatric populations. Respiratory therapists assess, diagnose, manage, evaluate and treat human responses to actual or potential health problems and they provide CPR and life-support to the dying. A holistic respiratory therapy perspective is enhanced by recognition of environmental factors effecting health and anticipating human needs. The use of skilled communication facilitates all aspects of providing effective respiratory care. All respiratory therapists are responsible and accountable for maintaining safe and comfortable environment within their scope of practice. <u>Curriculum Design</u>. The Respiratory Care curriculum uses a competency-based approach to learning. The learning objectives are carried out in 65 credit hours (minimum) of professional coursework evaluated in three phases (cognitive, psychomotor, affective domains of learning) that integrate individual course and curricular objectives. These are outlined by the national accreditation commission (CoARC) as educational essentials in didactic course work, laboratory exercises, and in clinical practices throughout the program.

B. Mission Statement

The mission of WSU Department of Respiratory Therapy is to prepare graduates for the practice of respiratory therapy in a variety of health care settings. The program offers career mobility through an articulated ladder approach to respiratory therapy education. WSU respiratory therapy faculty provides respiratory therapy education to a diverse population of students residing in urban and rural areas, building a foundation for life-long personal and professional learning. The stated goals of the Department of Respiratory Therapy at Weber State University are to 1) prepare competent pre-professional and baccalaureate respiratory therapists (national credential eligible upon program completion) through traditional and satellite educational models. 2) Ensure credentialing success and to 3) demonstrate professionalism in respiratory care practices. The program utilizes rigorous selection criteria to admit students who have the technical and behavioral characteristics to succeed in the program. Continuous advising and mentoring procedures are in place to graduate appropriate numbers of practitioners to match employment needs in Utah and the region.

C. Curriculum

<u>Curriculum Map</u>

| | | Depar | rtment/ | Program L | earning | Outcomes | |
|---|---------------------|-----------------------|---------------------|---|---------------------|--------------------------------|--|
| Core Courses in Department/Program | Cognitive Skills | Psychomotor Skills | Affective Skills | Credential Success CRT <mark>(>80%)</mark> | Attrition (<40%) | Student Placement (>70%) | |
| Pre-Professional Level | | | | | | | |
| REST 2140 ; Basic Therapeutic Modalities Lab (3 Cr.) | | Х | Х | | | | |
| REST 2160; REST Modalities Lab (3 Cr.) | | Х | Х | | | | |
| REST 2210 ; Cardiopulm. A&P (3 Cr.) | Х | | | | | | |
| REST 2230; Introductory Cardiopulm. Patho. (2 Cr.) | Х | | | | | | |
| REST 2250; Basic Pt. Assessment (2 Cr.) | Х | | | | | | |
| REST 2300; REST Modalities I (3 Cr.) | Х | | | | | | |
| REST 2310; REST Modalities II (3 Cr.) | Х | | | | | | |
| REST 2270 ; Application of Cardiopulm. Diag. (4 Cr.) | Х | | | | | | |
| REST 2320; Mechanical Ventilation (2 Cr.) | Х | | | | | | |
| REST 2330; Entry-Level Review (1 Cr.) | Х | | | | | | |
| REST 2520; Cardiopulmonary Pharmacology (2 Cr.) | Х | | | | | | |
| REST 2700; Clinical Practice (4 Cr.) | | Х | Х | | | | |
| REST 2710; Clinical Practice (1 Cr.) | | Х | Х | | | | |
| REST 2720; Clinical Practice (3 Cr.) | | Х | Х | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| | | Depai | rtment/ | Program L | earning | Outcomes | |
|--|---------------------|-----------------------|---------------------|---|---------------------|--------------------------------|--|
| Core Courses in Department/Program | Cognitive Skills | Psychomotor Skills | Affective Skills | Credential Success CRT <mark>(>80%)</mark> | Attrition (<40%) | Student Placement (>70%) | |
| Baccalaureate Level | | | | | | | |
| REST 3210; Advanced Cardiopulmonary A&P (2 Cr.) | Х | | | | | | |
| REST 3220; Advanced Cardiopulmonary Patho (2 Cr.) | Х | | | | | | |
| REST 3230 ; Cardiopulmonary Diagnostics (2 Cr.) | Х | | | | | | |
| REST 3260 ; Neonatal/Pediatric Care (2 Cr.) | Х | | | | | | |
| REST 3270; Adult Critical Care (2 Cr.) | Х | | | | | | |
| REST 3280; Continuum of Care (3 Cr.) | Х | | | | | | |
| REST 3760; Clinical Practice/ Neonatal (4 Cr.) | | Х | Х | | | | |
| REST 3770 ; Clinical Practice/Adult Critical Care (4 Cr.) | | Х | Х | | | | |
| REST 3780 ; Clinical Practice/Continuum of Care (2 Cr.) | | Х | Х | | | | |
| REST 3900 ; Clinical Simulation Seminar (3 Cr.) | Х | | | | | | |
| REST 4610 ; Advanced Patient Assessment (1-2 Cr.) | | Х | Х | | | | |
| REST 4620; Health Promotions (1-2 Cr.) | | Х | Х | | | | |
| REST 4630 ; Continuous Quality Improvement (1-2 Cr.) | | Х | Х | | | | |
| REST 4850 ; Study Abroad (1-6 Cr.) | | Х | Х | | | | |
| | | | | | | | |
| Total: 2012 CoARC Report of Current Status (RCS) statistics | | | | 100% | 2% | 94% | |

Note^a: Define words, letters or symbols used and their interpretation; i.e. 1= introduced, 2 = emphasized, 3 = mastered or I = Introduced, E = Emphasized, U = Utilized, A = Assessed Comprehensively; these are examples, departmental choice of letters/numbers may differ

Note^b: Rows and columns may be transposed as required to meet the needs of each individual department

Summary Information: Within health science programs in institutions of higher learning, outcomes have been identified and are measured in three specific domains (see, Kacmerak et al. 2013, p. 1269-72). Specific functions are regularly discussed in advisory meetings with employers (managers, directors, physicians, community members) in Utah and articulated to meet employment needs in the state and region. <u>Cognitive skills</u> (problem solving) are facts and concepts that respiratory therapist must know and apply in practice. In didactic courses, learning objectives are evaluated in traditional methods and through face-to-face interactions or in on-line formats using "virtual labs" and in clinical scenarios. Learning objectives include words like discuss or explain a particular patient care concept. Psychomotor skills (task competency) are performance based activities encountered in laboratory and/or clinical settings. Simple re-demonstration of skills is rarely sufficient as a learning outcome but repeatedly practiced in peer-to-peer practices, instructor pass-offs, and with clinical preceptors at the bedside. Learning objectives include action words like analyze, apply, or compute data presented in patient care pathologies. Affective skills (attitude) are measured in attitudes or motivations of students in exhibition of favorable behavioral traits and in developing empathy for patients. These behavioral traits are evaluated by clinical preceptors for arriving "on time," being prepared and/or showing interest in activities scheduled for the day. These can be viewed as employee characteristics that include statements like, "would you hire this student" at the conclusion of a clinical day. Clinical preceptors file daily evaluations (and students evaluate clinical preceptors for reciprocity) as feedback on these performances and in achieving the stated learning objectives. Graduation satisfaction surveys are completed at the conclusion of the curriculum by graduate surveys. Additionally, cognitive, psychomotor, and affective skills are annually measured by employer surveys completed within 6 months of program completion and reported to our accreditation commission (CoARC) which remain on-file for a period of three years. (see "RCS 2012" folder, employer and graduate survey or URL link below).

Kacmerak, RM, Stoller, JK, Heuer, AJ, et al. (2013). *Egan's Fundamentals of Respiratory Care*, 10th Ed. Elsevier/Mosby: St. Louis, MO.



CoARC Graduate Survey 06.21.2011.doc.URL



CoARC Employer Survey 11.13.09.doc.URL

D. Student Learning Outcomes and Assessment

Measureable Learning Outcomes

For students enrolled in the Respiratory Therapy program at WSU, the program will:

1. Prepare competent Respiratory Therapy practitioners meeting *cognitive* employer expectations (\geq 3 on a 1-5 Likert scale).

2. Prepare competent Respiratory Therapy practitioners meeting *psychomotor* employer expectations (\geq 3 on a 1-5 Likert scale).

3. Prepare competent Respiratory Therapy practitioners meeting *affective skills* as expected by employers (≥3 on a 1-5 Likert scale).

4. Successfully credential 80% of graduating students at CRT level per CoARC threshold standards.

5. Retain 60% of students selected into the Respiratory Therapy program per CoARC threshold standards.

6. Place 70% of students within 6 months of program completion per CoARC threshold standards.

Summary Information: The Weber State University respiratory therapy (REST) program ensures learning outcomes are achieved in a secure national credentialing self-assessment examination that evaluates the summative skills and attributes necessary to function as a certified (CRT) respiratory therapist measured after the "pre-professional level" (36 credit hours beyond prerequisites) and as a registered (RRT) respiratory therapist after the "baccalaureate-level" (29 credit hours beyond pre-professional level) curriculum. Evidence of learning is provided by censured results from the self-assessment examinations and by National Board (NBRC) examinations outlining credentialing success for graduates of the program. Program graduation requires a minimum passing score (95/140 for CRT and 68/100 for RRT examinations) to advance to credentialing candidacy. Directed feedback from these examinations documents student strengths and weaknesses for preparation on NBRC credentialing examinations. Self-assessment examinations ("2011-12 CRT RRT SAE results" and "SAE results" folders) are included for review for each graduate in 2011, 2012 & 2013 (see example below and "NBRC annual school summary" for last three years).



Individual Scores: Comprehensive CRT Self-Assessment Examination Student ID 872130462 On 11/29/2011 at 12:35:36 PM

| Objective | Points Earned |
|--------------------------------------|---------------|
| I. PATIENT DATA EVALUATION | 26 of 26 |
| A. Review Data in the Patient Record | 4 of 4 |
| B. Collect and Evaluate | 18 of 18 |
| C. Recommend Procedures to Obtain | 4 of 4 |
| II. EQUIPMENT MANIPULATION, | 26 of 29 |
| A. Manipulate Equipment by Order | 22 of 22 |
| B. Ensure Infection Control | 1 of 3 |
| C. Perform Quality Control | 3 of 4 |
| III. INITIATION AND MODIFICATION | 74 of 85 |
| A. Maintain Records and | 4 of 5 |
| B. Maintain a Patent Airway | 7 of 7 |
| C. Remove Bronchopulmonary | 4 of 4 |
| D. Achieve Adequate Respiratory | 6 of 8 |
| E. Evaluate and Monitor Patient's | 13 of 15 |
| F. Independently Modify | 14 of 18 |
| G. Recommend Modifications in the | 15 of 17 |
| H. Determine the Appropriateness | 4 of 4 |
| I. Initiate, Conduct, or Modify | 3 of 3 |
| J. Act as an Assistant to the | 2 of 2 |
| K. Initiate and Conduct Pulmonary | 2 of 2 |
| Summary: | 126 of 140 |

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NBRC Annual School Summary Report as of 6/30/2011

WEBER STATE UNIV - 200127

| Exam: CRT Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|------------------------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2011 | 1 | | 100% | - | 100% | - | 0% |
| 2009 | 1 | 1 | 100% | 1 | 100% | 0 | 0% |
| 2007 | 2 | 2 | 100% | 2 | 100% | 0 | 0% |
| 2006 | 2 | 2 | 100% | 2 | 100% | 0 | 0% |
| 2005 | 1 | 1 | 100% | 1 | 100% | 0 | 0% |

Exam: CSE

| Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|-----------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2011 | 9 | 9 | 100% | 7 | 77.8% | 2 | 22.2% |
| 2010 | 30 | 28 | 93.3% | 24 | 80% | 4 | 13.3% |
| 2009 | 30 | 29 | 96.7% | 25 | 83.3% | 4 | 13.3% |
| 2008 | 32 | 31 | 96.9% | 23 | 71.9% | 8 | 25% |
| 2007 | 44 | 44 | 100% | 36 | 81.8% | 8 | 18.2% |
| 2006 | 35 | 35 | 100% | 28 | 80% | 7 | 20% |
| 2005 | 16 | 16 | 100% | 13 | 81.2% | 3 | 18.8% |

Exam: WRRT

| Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|-----------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2011 | 10 | 10 | 100% | 10 | 100% | 0 | 0% |
| 2010 | 30 | 30 | 100% | 28 | 93.3% | 2 | 6.7% |
| 2009 | 31 | 29 | 93.5% | 26 | 83.9% | 3 | 9.7% |
| 2008 | 32 | 32 | 100% | 27 | 84.4% | 5 | 15.6% |
| 2007 | 45 | 45 | 100% | 38 | 84.4% | 7 | 15.6% |
| 2006 | 36 | 36 | 100% | 34 | 94.4% | 2 | 5.6% |
| 2005 | 16 | 16 | 100% | 14 | 87.5% | 2 | 12.5% |

| GRADUATION YEAR | CRT | RRT |
|-----------------|-----|-----|
| 2011 | 0 | 9 |
| 2010 | 1 | 28 |
| 2009 | 1 | 30 |
| 2008 | 2 | 32 |
| 2007 | 2 | 47 |
| 2006 | 2 | 35 |
| 2005 | 1 | 16 |

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NBRC Annual School Summary

Report as of 6/06/2012

WEBER STATE UNIV - 200127

Exam: CRT

| Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|-----------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2011 | 3 | 3 | 100% | 3 | 100% | 0 | 0% |
| 2009 | 1 | 1 | 100% | 1 | 100% | 0 | 0% |
| 2006 | 3 | 3 | 100% | 3 | 100% | 0 | 0% |

Exam: CSE

| Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|-----------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2012 | 2 | 2 | 100% | 2 | 100% | 0 | 0% |
| 2011 | 19 | 19 | 100% | 14 | 73.7% | 5 | 26.3% |
| 2010 | 22 | 22 | 100% | 18 | 81.8% | 4 | 18.2% |
| 2009 | 30 | 29 | 96.7% | 25 | 83.3% | 4 | 13.3% |
| 2008 | 22 | 21 | 95.5% | 15 | 68.2% | 6 | 27.3% |
| 2007 | 45 | 45 | 100% | 36 | 80% | 9 | 20% |
| 2006 | 36 | 36 | 100% | 29 | 80.6% | 7 | 19.4% |

Exam: WRRT

| Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|-----------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2012 | 6 | 6 | 100% | 6 | 100% | 0 | 0% |
| 2011 | 19 | 19 | 100% | 18 | 94.7% | 1 | 5.3% |
| 2010 | 22 | 22 | 100% | 20 | 90.9% | 2 | 9.1% |
| 2009 | 30 | 29 | 96.7% | 26 | 86.7% | 3 | 10% |
| 2008 | 22 | 22 | 100% | 19 | 86.4% | 3 | 13.6% |
| 2007 | 46 | 46 | 100% | 39 | 84.8% | 7 | 15.2% |
| 2006 | 37 | 37 | 100% | 35 | 94.6% | 2 | 5.4% |

| GRADUATION YEAR | CRT | RRT |
|-----------------|-----|-----|
| 2012 | 0 | 2 |
| 2011 | 3 | 19 |
| 2010 | 0 | 22 |
| 2009 | 1 | 29 |
| 2008 | 0 | 22 |
| 2007 | 0 | 47 |
| 2006 | 3 | 36 |

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Exam: CRT

| Graduation Year | Graduates Tested | Total | Passing % | Passing | First Time % | Passing | Repeaters % |
|------------------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2012 | 17 | 17 | 100% | 15 | 88.2% | 2 | 11.8% |
| 2011 | 3 | 3 | 100% | 3 | 100% | 0 | 0% |
| 2009 | 1 | 1 | 100% | 1 | 100% | 0 | 0% |

| Graduation Year | Graduates Tested | Total | Pasaing % | Passing | First Time % | Passing | Repeaters % |
|-----------------|-------------------------|-------|-----------|---------|--------------|---------|-------------|
| 2013 | 1 | 1 | 100% | 1 | 100% | 0 | 0% |
| 2012 | 27 | 24 | 88.9% | 21 | 77.8% | 3 | 11.1% |
| 2011 | 23 | 22 | 95.7% | 16 | 69.6% | 6 | 26.1% |
| 2010 | 22 | 22 | 100% | 18 | 81.8% | 4 | 18.2% |
| 2009 | 30 | 29 | 96.7% | 25 | 83.3% | 4 | 13.3% |
| 2008 | 22 | 21 | 95.5% | 15 | 68.2% | 6 | 27.3% |
| 2007 | 45 | 45 | 100% | 36 | 80% | 9 | 20% |

Exam: WRRT

| Graduation Year | Graduatos Tested | Total | Passing % | Passing | First Time % | Passing | Repeators % |
|-----------------|------------------|-------|-----------|---------|--------------|---------|-------------|
| 2013 | 1 | 1 | 100% | 1 | 100% | 0 | 0% |
| 2012 | 33 | 31 | 93.9% | 31 | 93.9% | 0 | 0% |
| 2011 | 23 | 23 | 100% | 21 | 91.3% | 2 | 8.7% |
| 2010 | 22 | 22 | 100% | 20 | 90.9% | 2 | 9.1% |
| 2009 | 30 | 29 | 96.7% | 26 | 85.7% | 3 | 10% |
| 2008 | 22 | 22 | 100% | 19 | 88.4% | 3 | 13.6% |
| 2007 | 46 | 46 | 100% | 39 | 84.8% | 7 | 15.2% |

| RRT | CRT | GRADUATION YEAR |
|-----|-----|-----------------|
| 1 | 0 | 2013 |
| 24 | 17 | 2012 |
| 22 | 3 | 2011 |
| 22 | 0 | 2010 |
| 25 | 18 | 2009 |
| 20 | 0 | 2008 |
| 46 | 0 | 2007 |

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Version Date: Oct 2011

Evidence of Learning: General Education Courses

| | | Evidence of Learning: Ge | eneral Education Courses | | |
|-----------------------|-----------------------|--------------------------|--------------------------|------------------------|-------------------------|
| Program Learning Goal | Measurable Learning | Method of | Findings Linked to | Interpretation of | Action Plan/Use of |
| | Outcome | Measurement | Learning Outcomes | Findings | Results |
| Students will | | | | | |
| | Students will | Direct and Indirect | | | |
| | | Measures* | | | |
| Goal 1: | Learning Outcome 1.A: | Measure 1: (Ex. A set | Measure 1: (Ex. 93% of | Measure 1: (Ex. | Measure 1: (Ex. No |
| | | of 10 multiple choice | students scored 80% | Students successfully | curricular or |
| | | questions from Exam | or better on 10 | demonstrated | pedagogical changes |
| | | 1) | questions) | interpretation skills) | needed at this time) |
| | | Measure 2: | Measure 2: | Measure 2: | Measure 2: |
| Goal 2: | Learning Outcome 2.A: | Measure 1: (Ex. | Measure 1: (Ex. 90% of | Measure 1: (Ex. | Measure 1: (Ex. |
| | | Results of | students scored above | Students successfully | Faculty agree to |
| | | standardized test) | national average) | demonstrated | include review of |
| | | | | competence; lowest | transfer in all related |
| | | | | average score was in | courses; this outcome |
| | | | | transfer of knowledge, | will be reassessed |
| | | | | where only 69% of | during next review |
| | | | | questions were | |
| | | | | answered correctly | |
| | | Measure 2: | Measure 2: | Measure 2: | Measure 2: |

Note: Include General Education Courses table only if applicable. If no general education courses exist for program, remove table.

*At least one measure per objective must be a direct measure. Indirect measures may be used to supplement evidence provided via the direct measures.

Summary Information: No respiratory therapy (REST) courses are included in the general education curriculum.

Evidence of Learning: Courses within the Major

| Outcome | Assessment(s) | Frequency/ calendar | Outcome(s) | Plan |
|--|---|---|---|---|
| | credentialing examination (C.R.T. & RRT). | 1. Examinations are administered via the Internet throughout the year (graduates are now eligible within 2 weeks of graduation). | | 1. Continue to modify curriculum as necessary to preserve acceptable pass-rate on national examination. |
| Prepare competent respiratory therapists who meet-the cognitive | | | 2. 98% of WSU BS degree graduates (18/19) passed the NBRC advanced-level RRT examination (national average 57%). | |
| (knowledge) expectations of employers. | returned for at least 50% of program graduates | | 3. Employer survey return rate is over 70%; employers report satisfaction with level of knowledge of new graduates. | 2. Continue to utilize Employer surveys; actively seek additional feedback through Advisory Committee. |
| | | | | |

Respiratory Therapy Program (B.S.) 2012-13

| Prepare competent | 3. Students must return- demonstrate a random selection of previously learned skills. | 3. This assessment is done within 6 weeks of program completion. | 4. Students have been successful in retaining skills by re-demonstration lab at the end of semester. | 3. This system was implemented at the suggestion of the Advisory committee and has been very useful. |
|--|--|---|---|--|
| maat the nevenamotor | 4. Employer satisfaction surveys. | 4. Employer surveys are distributed within 9 months of program completion. | 5. Employers report satisfaction with graduate skills and knowledge regarding equipment- related job requirements. | 4. Continue to utilize and monitor. |
| Prepare competent | 5. Faculty summative evaluations. | 5. Faculty completes a summary assessment within 3 months of program completion. | Faculty is generally satisfied with student behaviors by reporting 100% ≥ 3 on 1-5 Likert scale | 5. Continue to mentor and help students develop appropriate professional behavioral skills. |
| respiratory therapists who meet the affective skills expected of employers. | 6. Employer satisfaction surveys. | 6. Employer surveys are distributed within 9 months of program completion. | 7. Employers report 100% satisfaction with work habits, communication skills, i.e., 100% ≥ 3 on 1-5 Likert scale exhibited by new graduates. | 6. Continue to monitor. |

| Retain 60% (CoARC Standard) of students selected to enter the | 7. Program retention records. | 7. Annually. | 8. Attrition 2012-13 (44 students) was (2.2%); I other student completed remuneration efforts. | 7. We are now using the DCHP Admission and Advising department to improve the selection process. |
|---|-------------------------------|--------------|---|--|
| program; place 80% of program graduates within 6 months of program completion. | 8. Program placement records. | 8. Annually. | 9. 38/44 (91%) graduates were employed in the field within 6 months of graduation while 3 are interviewing or continuing education at the graduate level. | 8. Continue to match graduate numbers with available employment opportunities. |

Summary Information: All respiratory therapy (REST) courses require 75% or above on a comprehensive final and all courses require a C grade or better to progress through the curriculum. This requirement is outlined in the "student handbook" advising policy and procedure upheld throughout the program. Additionally, the course of study requires summative evaluations at the pre-professional and baccalaureate levels ensuring adequate preparation for the national (NBRC) credentialing examinations requisite for licensure and practice.

Evidence of Learning: High Impact or Service Learning

| | | Evidence of Learning: Hig | h Impact Service Learning | | |
|--|--|--|--|---|--|
| Program Course | Learning Outcome | Method of Measurement | Findings Linked to Learning Outcomes | Interpretation of Findings | Action Plan/Use of Results |
| REST 4610 : Advanced Patient Assessment Students will | Students will evaluate assessments performed by physicians/health practitioners (35 hrs). | Journal of activities Log of time spent 5-6 page paper explaining how it is integrated into practice | 1)Identify/explain strategies that proved useful when making a diagnosis. | 1)Compare specialties 2)Evaluate gender differences 3)differentiate training | 1)Professional practice such that strategies identified are implemented. |
| REST 4620 : Health Promotion Students will | Students will engage in a health promotion activity and teach the strategy to an appropriate audience. | 1)Study and learn a health skill, e.g. CPR, smoking cessation, asthma educator, etc. | 1)Obtain a CPR card, etc. | 1) Students successfully teach health strategy with class evaluation measured as an outcome. | 1)Perform CPR in life-saving situation in practice at hospital or clinic. |
| REST 4630 : Continuous Quality Improvement Students will | Students will evaluate a process for improvement. | 1)Evaluate process and engage in treatment/communication to make process better. | 1)Evaluate results after treatment/communication for before/after outcome. | 1)Written report in evaluation of the project. | 1)Report on findings at hospital staff meeting. |

*At least one measure per objective must be a direct measure. Indirect measures may be used to supplement evidence provided via the direct measures.

Summary Information: Respiratory therapy courses designated as high impact or service learning (**CEL**) include clinical practice courses (REST 2700 [4 cr. hrs], 2710 [1 cr. hr], 2720 [3 cr. hrs], 3760 [2 cr.hrs], 3770 [2 cr. hrs], 3780[3 cr. hrs]) and the baccalaureate courses advanced patient assessment (REST 4610), health promotion (REST 4620), and continuous quality improvement (REST 4630). Stated goals include behaviors, activities, and skills that integrate the practice of respiratory care into the work environment. (See course objectives in attachments for individual clinical courses [REST 2700, 2710, 2720, 3760, 3770 & 3780]).

Additionally, high impact learning is demonstrated for a "continuum of care" course (REST 3280), where students devise, plan, coordinate, implement, and complete a project benefiting the <u>American Respiratory Care Foundation</u> (ARCF). Proceeds benefit local scholars, fund service projects, and provide awareness campaigns for better breathing in the US. (see, vent 5 K MPG-4 file).

E. Academic Advising

Advising Strategy and Process

Services for students are provided by WSU Academic Advisement and Counseling Center (off-campus advisors are posted on a departmental website), the Dumke College of Health Professions admissions and advising office, and an assigned faculty advisor by the first letter of student's last name. This is listed in the student handbook introduced during a program orientation prior to the beginning of each co-hort.

Student Recruitment. Recruitment of qualified practitioners has been accomplished by our association with an active Advisory Committee and in participation with regional Area Health Education Center (AHEC) where students participate in health fairs and career guidance with educational programs around the state. All pre-requisite courses for general education degree completion are available at area universities or community colleges to include Weber State University, University of Utah, Utah State University, Utah Valley University, Brigham Young University (BYU), or Salt Lake Community College. Students receive program information and apply for acceptance where applications, selection, interviews, communications, and graduation records are kept and maintained in a central repository on-campus. All professional courses in the curriculum are taught by Weber State University faculty. Clinical schedules are coordinated through the Weber State University Director of Clinical Education by direct communication with clinical educators at each hospital or clinic.

Student Services. Services for students are provided by resources supporting WSU Counseling Services, Women's Services, Office of Disability and Counseling Services, Upward Bound, Student Support Services, and Veterans Upward Bound offices.

Student Retention. Attrition is approximately 2% for students accepted and enrolled into the program. Every effort is made for successful completion of the curriculum.

Student Placement. Over 94% of graduating students are working in their chosen field. Others are pursue graduate education or advanced-practice health professions using Respiratory Therapy as a pre-requisite for program admission i.e., PA school, Dentistry, Ophthalmology, Nurse Anesthetist training, Perfusion schools, etc.

Effectiveness of Advising

Resources provided for student success has been highly effective in implementing procedures aimed at guiding students through a difficult curriculum. The department has utilized services for students with disabilities, women's counseling services, and resources for academic advisement. All students enrolled in the department track graduation requirements using "catracks" program located under the individual student portal and individual advising with specific faculty (based on first initial of the last name). Past Changes and Future Recommendations

The most significant curricular change for the program occurred during the 2009-10 academic year following the scheduled CoARC accreditation site-visit. On the advice of site visitors, Dr. Michael Pruitt (Univ. of Missouri) and Mr. Brad Leidich (Harrisburg [PA]Area Community College), the department reconfigured credit hours to culminate in an AAS degree for "pre-professional" curriculum graduates proceeding to the baccalaureate degree or "professional" curriculum needed for credentialing and licensure in the profession. The change resulted in elimination of the AS degree in favor of fulfilling approximately 15 credit hours to complete the baccalaureate degree. National discussions are under way encouraging programs to consider bachelor and graduate education pathways for advanced-practice professionals and as mid-level physician extenders in the future. The WSU respiratory therapy program has subsequently configured an "advanced-practice" Master's curriculum that was recently approved by WSU Faculty Senate in April 2013 and is preparing a proposal for consideration by WSU Board of Trustees and the Utah Board of Regents at a future date.

F. Faculty

Faculty Demographic Information

Program faculty is representative of the professional community in terms of gender and ethnicity, all have terminal degrees in the field, and are credentialed and licensed (RCP's) as registered respiratory therapist (RRT).

Programmatic/Departmental Teaching Standards

Focusing on teaching excellence (WSU Vision 2030) and consistent with institutional mission and values, the department engages in teaching and learning through personalized experiences and shared inquiry. Course evaluations are conducted for every respiratory therapy course each semester and are reviewed at annual performance interviews.

Faculty Qualifications

Faculty is recognized as state, regional, and national leaders in respiratory therapy. All are licensed to practice in the state of Utah with registered respiratory therapist credentials (RRT). Clinical expertise is documented in adult critical care, neonatal/pediatric, emergency, surgical, medical, rehabilitative, asthma education, and in sleep medicine specialties.

Evidence of Effective Instruction

Course evaluations are conducted via "chitester" surveys (examples provided in "RCS 2012" folder) for every respiratory therapy course each semester and are reviewed at annual faculty performance interviews.

- i. Regular Faculty
- ii. Adjunct Faculty

https://chitester3.weber.edu/evals/report_standard2.cfm?testid=52998§io n=188592&ha=41B683FD7EDAB34600DF6184D89411B2

Mentoring Activities

Faculty has continued learning in their content areas, regularly engage in continuing or in-service learning, and are involved in pedagogical goals at the Master's and/or Doctoral level. Continuing education in local hospitals or clinics is encouraged in practicing content specific skills.

Diversity of Faculty

Faculty is representative of the professional community in terms of gender and ethnicity.

Ongoing Review and Professional Development

Currently, the faculty consists of one tenured, full professor, three tenure track assistant professors, and four non-tenured adjunct teaching faculty. An ongoing review occurs annually at the departmental level. Two tenure-track faculty are at the fifth year of the tenure review process while one completed the third year tenure review last year. Professional development is encouraged with reimbursed expenses made possible by the Marriott Endowment (\$28,000/year) earmarked specifically for professional and faculty development initiatives. Additionally, respiratory therapy faculties have taken advantage of D. Wade Mack educational grants to facilitate continuing faculty development in Master's and Doctoral level programs. Several opportunities to present at annual conferences, poster presentations, and international lectures have enhanced professional files (development for tenure and promotion) for the faculty involved.

G. Support Staff, Administration, Facilities, Equipment, and Library

Adequacy of Staff

Administrative staff is adequate for current needs. Continued growth may facilitate addition of a "work study" or enrollment director in the future in the event a Master's degree curriculum is added. Administrative support coordinates two co-horts of on-campus students (40 students), and two to three cohorts of off-campus (satellite) students (approx. 56 students at WSU-Davis, Intermountain SLC, and in Provo, Utah at Utah Valley Regional Hospital).

i. Ongoing Staff Development

Professional staff has the opportunity to develop administrative skills through a small Marriott Staff Development grant (\$2,000/year) set aside for special projects. On-campus training includes "Training Tracker" through Banner based scheduling on relevant campus topics.

Adequacy of Administrative Support

Annual evaluations of faculty indicate effective clerical support for the program and ensure adequate delivery of educational objectives by administrative staff.

Adequacy of Facilities and Equipment

The program regularly surveys students and faculty concerning the adequacy of equipment and supplies that allow sufficient preparation for clinical practice. Budgetary funds are in place to replace and maintain equipment on an ongoing basis. Course evaluations over the last year reveal no comments pertaining to deficient lab equipment.

Adequacy of Library Resources

The Stewart Library provides a broad range of information and resources in support of WSU Department of Respiratory Therapy's (REST) mission and goals. Services are provided at the Stewart Library on-campus and at the WSU-Davis Library/Information commons. Additionally, internet searches can be performed by enrolled students for database searches and other library services in remote sites for off-campus students.

Collections include print, electronic, and audio-visual resources as well as access to an increasingly large number of research databases, full-text journals, and books. Day, evening and weekend hours are maintained to accommodate patron needs on site at both campus locations. The Stewart Library is open 105 hours per week; the WSU-Davis library is open 45 hours per week. Off-campus access to resources and services is available 24/7 through the library website: http://www.library.weber.edu.

To ensure that the library's on-line resources are relevant to curricular needs, a librarian (Brian Francis) is assigned to each college. These subject librarians collaborate with faculty to develop a collection and consult on titles regularly to asses needs in the health professions specifically. In addition to collection management and faculty liaison responsibilities, subject librarians provide course-integrated instruction to help inform students and faculty of library resources and other services available in their areas of interest.

RAM Summary

| | Purpose(s) | Measurement System | Date(s) of Measurement | Results and Analysis | Action Plan and Follow- Up/Reassessment |
|---|---|---|--|---|--|
| Faculty | Provide effective laboratory, classroom and clinical instruction; to be effective examples for students in three domains. | Student - Resource Survey. Program Personnel - Resource Survey. WSU course evaluations. | May 10, 2013. May 10, 2013. Shared with faculty each semester. | All WSU students (46/46) surveyed in 2013 rated the faculty at or above the "cut score" of 3 on a 5 point Likert scale. All WSU faculty (4/4) members surveyed in 2013 rated the number of faculty at or above the "cut score" of 3 on a 5 point Likert scale. | Continue to develop and recruit qualified faculty and encourage opportunities for continuing education to Masters and Doctoral levels. |
| Support Personnel/Services | Provide appropriate and effective clerical support for the program. | 1) WSU personnel evaluations. 2) Program Personnel - Resource Survey. | 1) May 10, 2013. 2) May 10, 2013. | Course evaluations are shared with faculty during semester and year end evaluations. All WSU faculty (4/4) surveyed in 2013 rated the clerical staff at or above the "cut score" of 3 on a 5 point Likert scale. | Monitor and support clerical staff and clinical faculty to ensure adequate delivery of educational objectives of the program. |
| Facilities | Provide adequate classroom, laboratory, and office space to accommodate the program. | Student - Resource Survey. Program Personnel - Resource Survey. | 1) May 10, 2013. 2) May 10, 2013. | 96% of WSU campus students surveyed (44/46) in 2013 rated the classroom facilities at or above the "cut score" of 3 on a 5 point Likert scale. All WSU faculty (4/4) surveyed in 2013 rated the classroom facilities at or above the "cut score" of 3 on a 5 point Likert scale. | Classroom, laboratory and office space are adequate to meet all needs of the program. |
| Laboratory Equipment and Supplies | Provide students with the equipment and supplies sufficient to prepare them for clinical practice. | Student - Resource Survey. Program Personnel - Resource Survey. WSU Course Evaluations. | 1) May 10, 2013. 2) May 10, 2013. 3) Shared with faculty each semester. | All WSU campus students surveyed (46/46) in 2013 rated the laboratory equipment at or above the "cut score" of 3 on a 5 point Likert scale. All WSU faculty (4/4) surveyed in 2013 rated the laboratory equipment at or | Budgetary funds are in place to replace and maintain equipment on an on-going basis. Course evaluations reveal no comments pertaining to deficient lab equipment. |

H. Relationships with External Communities

Description of Role in External Communities

The department is frequently consulted on national and international matters pertaining to curriculum formats and/or professional development of respiratory therapists abroad. Over the past 5 years, the department has engaged in cultural and programmatic development with Xian Medical University and the Affiliated Hospitals of Xian Medical University to gain a context for respiratory therapy professionals to practice in China. Subsequently, the department has hosted twelve physicians or licensed nurses (2 each fall and spring semesters) in learning the art and science of respiratory therapy in the United States.

The department has been actively involved (annually) in "Study Abroad" travel to Ghana, West Africa. Students engage in health promotion activities while studying health care in a rural (3rd world) environment. In this association, the department was asked to consult on a new curriculum to educate respiratory therapists in Ghana, the first new program in the School of Allied Health Professions at the University of Ghana and Korle-Bu Teaching Hospital in Accra.

During the last five years, the department has entertained five international physicians as *American Association for Respiratory Care* (AARC) fellows as a "host" city for the professional association. After applying as fellows, physicians spend one week visits in two American cities before attending the International Congress each fall. The International Council in coordination with the *American Respiratory Care Foundation* (ARCF) coordinates visits and the department has enjoyed showcasing local professional practice for Hong Kong (Fiona Ng), China (Dr. Sheng-yu [Jack] Wang and Dr. Liu Manling), Ghana (Dr. Audry Forson) and Lebanon (Dr. Mohammad Khatib) for the International Council for Respiratory Care (ICRC): http://www.irccouncil.org/newsite/index.cfm

Lisa Trujillo, Subcommittee Chair

http://www.irccouncil.org/newsite/news/2013/09/host cities.cfm

Faculty participates in various service capacities for the state professional association, the *Utah Society for Respiratory Care* (USRC):

http://www.utahsrc.org

Paul Eberle, Director Lisa Trujillo, Director Janelle Gardiner, Delegate Mich Oki, Treasurer Service is also provided in an advisory capacity for national curricular development to "advanced-practice" respiratory therapy practitioners (RCP's) for the *Coalition for Baccalaureate Graduate Respiratory Therapy Education* (CoBGRTE): <u>http://www.cobgrte.org</u>

Paul Eberle, Board of Director

Summary of External Advisory Committee Minutes

I. Results of Previous Program Reviews

| Problem Identified | Action Taken | Progress |
|--------------------|---------------------------------|----------|
| Issue 1 | Previous 5 Year Program Review: | |
| | Year 1 Action Taken: | |
| | Year 2 Action Taken: | |
| | Year 3 Action Taken: | |
| | Year 4 Action taken: | |
| Issue 2 | Previous 5 Year Program Review: | |
| | Year 1 Action Taken: | |
| | Year 2 Action Taken: | |
| | Year 3 Action Taken: | |
| | Year 4 Action taken: | |

J. Action Plan for Ongoing Assessment Based on Current Self Study Findings

| Problem Identified | Action to Be Taken | | | |
|--------------------|--------------------------------|--|--|--|
| Issue 1 | Current 5 Year Program Review: | | | |
| | Year 1 Action to Be Taken: | | | |
| | Year 2 Action to Be Taken: | | | |
| | Year 3 Action to Be Taken: | | | |
| | Year 4 Action to Be Taken: | | | |
| Issue 2 | Current 5 Year Program Review: | | | |
| | Year 1 Action to Be Taken: | | | |
| | Year 2 Action to Be Taken: | | | |
| | Year 3 Action to Be Taken: | | | |
| | Year 4 Action to Be Taken: | | | |

Action Plan for Staff, Administration, or Budgetary Findings

| Problem Identified | Action to Be Taken | | | | |
|--------------------|--------------------------------|--|--|--|--|
| Issue 1 | Current 5 Year Program Review: | | | | |
| | Year 1 Action to Be Taken: | | | | |
| | Year 2 Action to Be Taken: | | | | |
| | Year 3 Action to Be Taken: | | | | |
| | Year 4 Action to Be Taken: | | | | |
| Issue 2 | Current 5 Year Program Review: | | | | |
| | Year 1 Action to Be Taken: | | | | |
| | Year 2 Action to Be Taken: | | | | |
| | Year 3 Action to Be Taken: | | | | |
| | Year 4 Action to Be Taken: | | | | |

K. Summary of Artifact Collection Procedure

| Artifact | Learning Outcome Measured | When/How Collected? | Where Stored? |
|----------------------------------|---------------------------|------------------------|--------------------------|
| (i.e. Final Project Rubric) | | (i.e. end of semester) | (i.e. electronic copies) |
| (i.e. Chi Tester Outcome Report) | | (i.e. 2-3 times per | (i.e. electronic format, |
| | | semester) | chi tester warehouse) |
| | | | |
| | | | |

APPENDICES

Appendix A: Student and Faculty Statistical Summary

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|-----------------------------|---------|---------|---------|---------|---------|
| Student Credit Hours Total | | | | | |
| Student FTE Total | | | | | |
| Student Majors | | | | | |
| Program Graduates | | | | | |
| Student Demographic Profile | | | | | |
| Female | | | | | |
| Male | | | | | |
| Faculty FTE Total | | | | | |
| Adjunct FTE | | | | | |
| Contract FTE | | | | | |
| Student/Faculty Ratio | | | | | |
| | , | 1 | I | 1 | 1 |

Note: Data provided by Institutional Research

Appendix B: Contract/Adjunct Faculty Profile

| Name | Gender | Ethnicity | Rank | Tenure | Highest | Years of | Areas of |
|------------------|--------|-----------|-------|---------|---------|----------|-----------|
| | | | | Status | Degree | Teaching | Expertise |
| Kristine Bowhuis | F | | Instr | non-ten | BS | 2 | Neonatal |
| Tanner Trujillo | М | | Instr | non-ten | BS | 1 | Pediatric |
| Robert Guenter | М | | Instr | non-ten | BS | 26 | |
| Gary Clawson | М | | Instr | non-ten | BS | 26 | |
| | | | | | | | |

Note: Data provided by Institutional Research

Summary Information (as needed)

Appendix C: Staff Profile

| Name | Gender | Ethnicity | Job Title | Years of Employment | Areas of Expertise |
|---------------|--------|-----------|-----------|---------------------|--------------------|
| Alisa Kimball | F | | Sec. II | 2 | Admin. support |
| | | | | | |
| | | | | | |
| | | | | | |

Note: Data provided by Institutional Research

Appendix D: Financial Analysis Summary

| Department | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---------------------|---------|---------|---------|---------|---------|
| Undergraduate | | | | | |
| Instructional Costs | | | | | |
| Support Costs | | | | | |
| Other Costs | | | | | |
| Total Expense | | | | | |
| Graduate | | | | | |
| Instructional Costs | | | | | |
| Support Costs | | | | | |
| Other Costs | | | | | |
| Total Expense | | | | | |

Note: Data provided by Provost's Office

Appendix E: External Community Involvement Names and Organizations

| Name | Organization |
|-----------------|---------------------------------------|
| Kathryn Sneddon | Community member / Advisory Committee |
| | |
| | |
| | |
| | |

Appendix F: External Community Involvement Financial Contributions

| Organization | Amount | Туре |
|--------------|--------|----------|
| | | Grant |
| | | Contract |
| | | Donation |
| | | |