Characteristics of Successful Respiratory Care Programs: Achieving Excellence in Respiratory Care Education



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Summer forum



Dr. H. Fred Helmholz, Jr., MD Education Lecture Series

H. Fred Helmholz, Jr., MD 1911-2012







"It's like déjà vu all over again."



Commission on Accreditation for Respiratory Care

Dr. H. Fred Helmholz, Jr., MD 16th Annual Education Lecture – July 2012

Bill Galvin, MSEd, RRT, CPFT, AE-C, FAARC

"Excellence in Respiratory Care Education: Creating an Exemplary RC Program"





Commission on Accreditation for Respiratory Care

Dr. H. Fred Helmholz, Jr., MD 26th Annual Education Lecture – July 2022

Bill Galvin, MSEd, RRT, CPFT, AE-C, FAARC

"Characteristics of Successful Respiratory Care Programs: Achieving Excellence in RC Education"

Conflict of Interest

I have no real or perceived conflict of interest that relates to this presentation. I have published book chapters, articles, presentations, and/or webcasts for W.B. Saunders, Draeger, Elsevier, Delmar/Thompson Learning, F.A. Davis, Jones and Bartlett Publishers, Massimo, Monaghan Medical, Theravance, BioPharm, Mylan Specialty and the AARC. Am a Member of the CoARC Board of Commissioners and this presentation does not represent the views or opinions of the CoARC. Any use of brand names is not in any way meant to be an endorsement of a specific product, but to merely illustrate a point of emphasis.

Learning Objectives

- List and explain 3 key variables that shape/ impact program development, design, and evaluation
- Recognize and identify the characteristics of the RC programs receiving CoARC 2022 President's Award for Credentialing Success
- Discuss elements of success and commonly cited variables leading to program excellence

Dr. H. Fred Helmholz MD Lecturers (1997-2021)

- H. Fred Helmholz Jr., MD
- Shelley Mishoe, PhD, RRT
- Jon Nilsestuen, PhD, RRT, Marilyn Childers, PhD, RRT, & Stephen Fracek, PhD
- William Turner, PhD
- Robert Wilkins, PhD, RRT
- Garry Kauffman, MPA, RRT
- Thomas Johnson, MS, RRT & Mike Nazarro, MPH, RRT
- Sal Sanders, MS, RRT
- Erna Boone, MEd, RRT & Bob DeLorme, MS, RRT
- Viva Jo Siddall, MS, RRT
- David Shelledy, PhD, RRT
- Jeff Ward, MEd, RRT

• Joseph Sorbello, MS, RRT

- Mark Taylor, MSW, EdD
- David Vines, MHS, RRT & Thomas Jones, MEd, RRT
- William F. (Bill) Galvin, MSEd, RRT, CPFT, AE-C, FAARC
- Susan P. Pilbeam, MEd, RRT, FAARC
- Toni L. Rodriguez Ed.D, RRT FAARC
- Kerry George, MEd, RRT, FAARC
- Gary White, MEd, RRT, FAARC
- Joseph P. Coyle, MD, FCCP and Shane Keene, DHSc, RRT-NPS, FAARC
- Dennis R. Wissing, PhD, RRT, AE-C, CPFT, FAARC
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And finally, a Thank You to AARC Program Committee

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American Association for Respiratory Care 2022 Summer Forum – Palm Springs, CA Thursday, July 28, 2022 – 9:40-10:40

The Distinguished H.Fred Helmholz, MD Education Lecture Sponsored by Committee on Accreditation for Respiratory Care

Characteristics of Successful Respiratory Care Programs: Achieving Excellence in Respiratory Care Education – A Sequel

Bill Galvin, MSEd, RRT,CPFT, AE-C,FAARC Professor Emeritus & Adjunct Faculty, Frances Maguire, School of Nursing and Health Professions Former Program Director, Respiratory Care Program Administrative/ Teaching Faculty, TIPS Program Gwynedd Mercy University

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Summer Meetings 2022



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an obvious starting point is ... a "Systems Approach" to Education*



Point: simply a conceptual way of viewing organizations, a management theory for administering and controlling education programs

*DeLapp GT. The Systems Approach for Administration of Respiratory Therapy Education Programs. Respiratory Care. June 1979; vol 24. No.6, 514-520.

A "Systems Approach" to Education



Inputs

- The characteristics, traits, skills, talents, abilities, experiences and capabilities the students bring to the program
- Student inputs are generally assessed during the admissions process where high school and/or previous college academic performance, and life experiences are evaluated in form of:
 - High school/ college transcripts
 - Overall GPA
 - Science GPA
 - SATs/ACTs
 - previous life/work experiences
 - family commitments
 - work requirements, etc.

Processes

- Represent the sum total of all components that make up or support the teaching/learning activities, to include:
 - Curriculum
 - Didactic/clinical faculty
 - RC Lab
 - Clinical affiliates/ resources
 - Library
 - Student services
 - Computer/learning lab
 - Operating budget
- Processes hold a central role or pivotal position in the system

Outcomes

- The teaching/learning activities represented by the curriculum, faculty, lab, clinical, etc. (the process) transforms the student (input) into a caring, compassionate, and competent RC professional (outcome)
- Outcomes can generally be measured by attainment of certain standards or desired results, such as:
 - meaningful, discipline-specific employment
 - professional credentialing exams
 - a well-rounded liberal arts education
 - service
 - civic responsibility
 - a contributing member of society



- Components are interrelated
- System is impacted by the external environment (receiving constant feedback)
- It is dynamic (constantly subject to change)
- It exists for transforming inputs into some altered form that leaves the system as outputs



But, I thought ... Why don't we ask the programs that demonstrate success ...

Allow me to recognize two very special groups of programs: #1 -the 96 RC programs in the country that received the "Distinguished RRT Success Award" and #2 the 23 highly coveted and prestigious programs awarded the CoARC's "President's RRT Success Award"

CoARC Credwntialing Success -award criteria-

- Results from 2018, 2019 and 2020 cohort years
- A "clean" RCS no citations or progress reports
- 90+% pass rate on NBRC Exams for "Distinguished RRT Award"
- 100% pass rate on NBRC Exams for "President's Award for RRT Success"

Successful RC Programs 2021 CoARC Presidents RRT Credentialing Success Awardees (23)

- American River College Sacramento, CA
- Delaware Technical and Community College Wilmington, DE
- Durham Technical Community College Durham, NC
- Elizabeth Community College, Elizabethtown, KY
- Florida Southwestern College, Fort Myers, FL
- Georgia State University, Atlanta, GA
- Indian River State College , Fort Pierce, FL
- Kettering College, Kettering, OH
- Lakeland Community College Kirkland, OH
- Mansfield University, Sayre, PA
- Mayo Clinic College of Med/ Mayo School Rochester, MN
- Midlands Technical College Columbia, SC

- Monument Health Rapid City/South Dakota State University-Satellite -Rapid City, SD
- Mt. San Antonio College Walnut, CA
- Newman University Wichita, KS
- Pennsylvania College of Health Sciences -
- Roane State Community College Knoxville, TN
- St. Johns River State College St. Augustine, FL
- The Ohio State University Columbus, OH
- University of Arkansas for Medical Science -Little Rock, AK
- University of Missouri at Mercy Hospital -St. Louis, MO
- Weatherford College Weatherford, TX
- Wilkes Community College -Wilkesboro, NC

Survey of 23 Programs with 100% Success on RRT

- 1st Congratulations!
- 2nd Thank You!
- 3rd Share results (descriptive not evaluative)
- Suggestion view data from perspective that this is what the 20 of the 23 reported out and how does the data compare with my program
- What gems can I garner from the survey results to aid me in making improvements in my own program?

Successful RC Programs -Survey Results of Select Variables-

Institutional Data

- Type of Degree
- Institution Type
- Institutional Control/Funding
- Geographic Location
- Program Inception Date



*one of the programs identified itself as having both a BS and MS

Successful RC Programs Institutional Type N-23



Successful RC Programs Institutional Control/Funding N=23



Successful RC Programs Geographic Location



Successful RC Programs Geographic Location n=23



Successful RC Programs Program Inception Date



Successful RC Programs -survey results of select variables-

Student Demographics*

- Number applicants per year
- Maximum annual enrollment (capacity/year)
- Number enrolled per year
- Number graduates per year
- Per cent retention
- * in a typical year

Successful RC Programs Number of Applicants/ Yr


Successful RC Programs Maximum Annual Enrollment (capacity/year)



Successful RC Programs Number Enrolled/ Yr



Successful RC Programs Number of Graduates



Successful RC Programs Percent Retention



Successful RC Programs -survey results of select variables-

Student Characteristics/Profile*

- Admission criteria
- Age at program entry
- Educational level at time of program entry
- Personal experiences with health care

•* In a typical year for majority of students

Successful RC Programs Admission Criteria



Successful RC Programs Age at Program Entry



Successful RC Programs Educational Level at Program Entry



Successful RC Programs Personal HC Experience Motivation to Enter RC



Successful RC Programs -survey results of select variables-

<u>Curriculum</u>

- Total college credits
- College credits in RC
- College credits in math/ natural science
- On-line option

Successful RC Programs Total College, RC Credits, Math& Science Credits

<u>Total Credits</u>

- For AS range was 62-83 total
- For BS degree

 range was
 120-137 total
 credits

<u>RC Credits</u>

- For AS degree range was 36-59
- For BS degree range was 62-72 RC course credits



- For AS degree range was 8-29
- For BS degree range was 23-39 total math & scince credits

Successful RC Programs On-Line Option



Successful RC Programs -survey results of select variables-

Characteristics/ Profile of Faculty & Key Program Personnel

- Number of full time
- Number of part time
- Highest degree of PD/DCE
- Years as PD/DCE at this program
- Years as PD/DCE at other institutions
- Years of experience in RC education for PD/DEC
- Years of experience for PD/DCE in all phases of RC

Successful RC Programs -number of program faculty-



Successful RC Programs Highest Academic Degree of Program Director and Director of Clinical Education





Successful RC Programs Years PD at Current Institution



Successful RC Programs

Total Years Experience of PD in RC Education and in All Phases of RC

Total Years in RC Education

Total Years in RC



Successful RC Programs Total Years DCE at Current Institution



Successful RC Programs

Total Years Exp of DCE in RC Education and in All Phases of RC



Successful RC Programs -survey results of select variables-

Laboratory Resources

- Dedicated laboratory
- Open lab
- Use of lab
- Square footage
- Simulation technology

Successful RC Programs Dedicated Lab- Open Lab - Usage of Lab



Successful RC Programs Lab Space (best estimate of square footage)



Simulation Technology



Successful RC Programs -survey results of select variables-

<u>Clinical Resources</u>

- Number of clinical sites
- Total number of clinical contact hours
- Clinical contact hours by specialty area
- Compensation of clinical faculty

Successful RC Programs Number of Clinical Sites



Successful RC Programs Total Number of Clinical Contact Hours



Successful RC Programs Per Cent of Clinical Contact Hours in Routine Care/Procedures



Successful RC Programs Per Cent of Clinical Contact Hours in Critical Care



Successful RC Programs Per Cent of Clinical Contact Hours in Diagnostics



Successful RC Programs Per Cent of Clinical Contact Hours in Neonatal/ Pediatrics



Successful RC Programs Per Cent of Clinical Contact Hours in Physician Interaction





Does your sponsor pay clinical faculty?



Successful RC Programs - survey results of select variables -

<u>Medical Director</u>

- Contractual academic appointment
- Compensation

Successful RC Programs

Does Medical Director have a contract and/or hold an academic appointment, Do you pay your Medical Director, If yes, how much?



Successful RC Programs -survey results of select variables-

Advisory Board

- Number
- Frequency of meetings

Successful RC Programs Number of Advisory Board Members and Frequency of Meetings


Successful RC Programs -survey results of select variables-

Budget

- Annual capital budget
- Annual operating budget

Successful RC Programs Annual Capital and Operating Budgets



Annual Operating Budget



Successful RC Programs - survey results of select variables -

<u>Participation in Credentialing Process and</u> <u>Membership in Profession</u>

- Employer mandated credential
- Program mandated membership

Successful RC Programs Employer Mandates RRT as Requirement for Employment



Successful RC Programs Program's Position Regarding Professional Membership (AARC or State Society) N=16



Final objective

Elements of Success

Ok ... So let's return to that magic question again, what was the relative importance of select program factors leading to your success

Elements of Success Relative Importance of Program Factors





... and the Top 5 Answers on the Board Question: Name the most important factors that led to your RRT Success ?

- #5 Laboratory
- #4 Program Administration (PD & DCE)
- #3 Curriculum
- #2 Clinical Sites
- #1 ?????



- Listed 3 key variables that shape program development, design and evaluation
- Recognized 97 and 23 "RRT Success Programs"
- Identified some of the characteristics of successful program (encourage you to view these from the perspective of your own program)
- Closing thoughts on Success/Excellence

Closing thoughts Excellence ...

- ... means striving to be the very best we can be in everything we do - not because some institutional administrator or accrediting body or other "authority" figure pushes us to do so, but because we can not imagine functioning in any other way
- ... means setting high standards for ourselves and the groups in which we are involved, holding ourselves to those standards despite challenges or pressures to reduce or lower them and not being satisfied with anything less than the very best
- ... means not accepting the status quo, it's being all you can be

Closing thoughts Excellence* ...

- "Can be attained if you care more than others think is wise, risk more than others think is safe, dream more than others think is practical, and expect more than others think is possible"
- *Valiga, T & Grossman S. The New Leadership Challenge: Creating the Future of Nursing, 2000, FA Davis.

Key ingredients to program and professional success 3 Elements of Excellence*

 Skepticism - keeping a proper distance from the truth, not accepting everything blindly, keeping our mind open to new ideas & approaches

• Perseverance - continually striving to fulfill a goal or realize a vision

 Passion - being "inflamed" by your work - passion is "the essence of excellence"

*Diers, D & Evans, DL (1980) Excellence in Nursing [Editorial] Image, 12, 27-30.

THANK YOU for the privilege and honor of presenting the 2022 Dr. H. Fred Helmholz, MD Education Lecture