Final Abbreviated Report

ATRA Higher Education Task Force

April 28, 2018

ATRA Higher Education Committee Co-Chairs:
Fran Stavola Daly, Ed.D., CTRS, FDRT, Kean University
Kelly Ramella, M.S., CTRS, Arizona State University

ATRA Higher Education Task Force Co-Chairs:
Marcia Jean Carter, Re.D., FDRT, CTRS, CPRP
Brent Hawkins, Ph.D., LRT/CTRS, Clemson University

Members:
Lynn Anderson, Ph.D., CTRS, CPRP, State University of New York at Cortland
Candy Ashton, Ph.D., CTRS/ LRT, FDRT, University of North Carolina Wilmington
Patti Craig, Ph.D., CTRS/L, University of New Hampshire
Tracey Crawford, CTRS, CPRP, Northwest Special Recreation Association
Lilli Shine, MSA, CTRS, Louis Stokes Cleveland VA Medical Center

Ex Officio Members:
Deborah Hutchins, Ed.D., CTRS, FDRT, CARTE
Anne Richard, M.S., LRT/CTRS, NCTRC
Anne-Marie Sullivan, Ph.D., CTRS, Canadian Therapeutic Recreation Association

ATRA Board Liaison:
Jo-Ellen Ross, Ph.D., CTRS, FDRT, Temple University

THE CHARGE

The charge of the ATRA Higher Education Task Force was to systematically examine education requirements for entry-level practice and make recommendations to the ATRA Board of Directors.

Action Plan

Our work followed three broad goals for the approximately 18-month life of this task force.

Goals

1. Determine stakeholders and develop a communication plan to inform stakeholders of task force's purpose, activities, and study.
2. Develop systematic approach for the data collection process and engage stakeholders (educator, students, practitioners, and credentialing & accrediting bodies) in the process.
    a. Identify competencies needed for current and future preparation and practice;
    b. Design surveys and focus group tools; and
    c. Conduct surveys and focus groups with stakeholders.
3. Develop and deliver to ATRA a position paper with recommendations for entry-level degree requirements.

Progress on Goal 1

While at the initial retreat (April, 2017), Goal 1 was accomplished with the identification of stakeholders and communication processes. Four primary groups were identified to participate in the data collection process described in Goal 2. These included:

- **Practitioners:** CTRSs who are employed in therapeutic recreation service settings across the U.S. and Canada.
- **Educators:** Faculty members at academic institutions from across the U.S. and Canada who provide undergraduate and graduate education in therapeutic recreation (TR) and recreational therapy (RT).
- S**tudents:** Undergraduate and graduate students who are enrolled in RT and TR programs across the U.S. and Canada.
- **Credentialing and accrediting bodies:** Board members of the National Council for Therapeutic Recreation Certification (NCTRC), the Committee on Accreditation of Recreational Therapy Education (CARTE), state licensure bodies (Utah, North Carolina, New Hampshire, Oklahoma), ATRA-NCTRC Joint Task Force for Licensure, and the Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COAPRT).

The task force members identified other stakeholder groups that are effected by TR and RT curricula (e.g., clients, families, employers, policy makers); it determined that due to limited resources (e.g., time, money, access, expertise), only the primary stakeholders as noted above would be studied at this time.

Progress on Goal 2

A multiphase mixed methods design involving focus groups (face-to-face and online) and electronic surveys was employed to gather data from practitioners, educators, and students and through interviews with credentialing and accreditation bodies. The questions driving the design of the survey, focus group, and interview protocols were outlined during the initial retreat. The survey questions were refined and finalized using initial focus group results. All data were stored and shared with task force members in a cloud-based Dropbox. All data collection tools and procedures were approved by the ATRA research committee.

Focus groups. Task force members facilitated one-hour focus groups with educators (N=10 groups, 49 individuals), students (N=17 groups, 222 individuals), and practitioners (N=25 groups, 257 individuals) at 19 state and regional conferences and meetings and four online focus groups from October 2017-April 2018. Focus groups were audio recorded and field notes were taken. Data were then thematically analyzed by task force members. See Appendix A for a map demonstrating geographic reach of data collection.

Surveys. An electronic survey method was used to gather demographic data and assess educator, practitioner (i.e., primarily NCTRC certificants), and student perceptions of higher education trends and forces, competencies for practice, educational delivery models, and opinions related to the entry-level degree in RT/TR. A survey was developed for each stakeholder group and approved by the ATRA Research Committee and Board, and the NCTRC Research Committee. The surveys were distributed through NCTRC to educators and practitioners who were active certificants, shared on ATRA communication channels and social media, and emailed to academic program directors for undergraduate and graduate student distribution. Final number of responses (complete and incomplete) per stakeholder group included 483 students, 1,663 practitioners (97% CTRS), and 141 educators.

Interviews. An interview protocol developed at the initial retreat was shared with the leadership of the respective credentialing and accreditation bodies with direction to respond individually (if desired) and with a response statement representing the respective groups. The responses (N=6 bodies out of 8 invited) were synthesized and thematically analyzed, then shared with task force members.

Selected data-based results can be viewed in Appendix B.

Progress on Goal 3

To accomplish this goal (i.e., provide recommendations for entry-level degree requirements), findings from the literature and resource review (e.g., review of other therapeutic disciplines, consideration of public policy), qualitative reporting of the data from the focus groups and interviews, and quantitative analyses of the three surveys were reviewed by task force members. During the April 2018 retreat, task force teams summarized respective data sets into salient findings. Together the task force integrated findings of the respective data sets (literature reviews, focus groups, surveys, interviews with credentialing bodies and key informants from related professions) then developed data-driven recommendations to address the overall task force charge. This abbreviated report will be developed into a full white paper to be delivered to the ATRA Board by July 1, 2018. Prior to July 1, additional data-based results are available upon request. We recommend that the ATRA Board disseminate the white paper and its accompanying infographic to the profession, given the high level of interest in the study findings from research participants across the U.S. and Canada. See Appendix C for a recommended dissemination plan.

THE FINDING

Data suggests that the most current and pressing need in higher education is to improve the quality and consistency of the bachelor's degree.

THE RECOMMENDATIONS

The following include recommendations to improve RT education and practice:

Recommendation 1
Entry-level education should be the bachelor's degree with increased and improved fieldwork experiences across curricula.

Recommendation 2
Require all RT curricula to show consistency in learning outcomes that reflect entry-level competencies in the field.

Recommendation 3
Incorporate new and increasing levels of competencies into bachelor's and master's curricula.

Recommendation 4
Improve the infrastructure for a graduated progression of quality fieldwork experiences.

Recommendation 5
Determine effective models that will ensure quality, consistency, access and affordability in graduate education to advance practice and the profession.

Recommendations and Strategies

The following strategies provide a framework for implementing the recommendations:

Recommendation #1
Entry-level education should be the bachelor's degree with increased and improved fieldwork experiences across RT curricula.

Strategies:

- Current bachelor's degree programs should improve their structured, outcome-driven fieldwork experiences.
    - Determine evidence-based practices for RT fieldwork within the curricula. Practices may include:
        - Placing students to sites that provide TR or RT services;
        - Placing students to non-RT/TR sites, but with TR/RT supervisors hired through university;
        - Establishing learning labs within courses (practice embedded within course);
        - Interprofessional experiences in practice sites; and/or
        - Multiple exposure-based volunteer experiences across multiple settings/populations.

Recommendation #2
Require all RT/TR curricula to show consistency in learning outcomes that reflect entry-level competencies in the field.

Strategies:

- Program accreditation (CARTE or COAPRT) that meets CHEA recognition standards:
    - Based on student learning outcomes and performance (not prescribed curricula);
    - Based on emerging practice in the field (settings, competencies, populations);
    - Based on autonomous and independent processes (e.g., independent from professional associations, political biases, etc.) and clear communication with professional entities (e.g., NCTRC, ATRA, etc.);
    - Educate the profession on what accreditation is and its relationship to consist entry-level practice; and/or
    - Be able to review and accredit international RT/TR programs (e.g., New Zealand, Australia, Canada, South Africa) and be culturally relevant (e.g., language, norms, models of care).

- Strengthen programs and faculty in TR/RT:
    - Accreditation bodies develop mentorship programs to assist in pursuing and gaining accreditation.
    - ATRA to provide support and resources to assist TR/RT curricula to strengthen their course offerings and field-based learning (e.g., educator institutes at professional conferences, intern supervisor training, updated competency guidelines developed by ATRA).
    - ATRA to provide a method for educators to network, dialogue, share, mentor, etc. (i.e., educator community of practice).
    - Faculty development in TR/RT (e.g., professional associations [e.g., ATRA, The Academy of Leisure Sciences, National Academy of Recreational Therapists], higher education offerings, externships, post-docs, research and teaching institutes).
    - Support increased research opportunities, research competencies and research dissemination (e.g., publication avenues, research symposia, research collaboratives, funding sources [e.g., ATRA, Recreational Therapy Foundation funds]).
    - Provide mechanism and support for engagement in interdisciplinary research and practice groups (e.g., IPEC, disability groups, allied health and human service alliances, public health).
    - Value, recognize and reward educators within professional structures and ATRA.
    - Actively engage practitioners in the education process and curricula through various mechanisms (e.g., advisory boards, communication methods, speakers bureaus, web-based resources, ATRA conducts routine practitioner focus groups across the U.S. and Canada).
    - NCTRC provides ongoing communication on important performance and competency data to educators.

- Strengthen integration of education and practice
    - Improved field-based learning in RT/TR education.
    - Practitioner voice and input into student learning outcome development
    - Competency review and dialogue on an ongoing, structured basis (e.g., professional conference sessions, listening sessions, etc.).
    - Ongoing communication of the shared responsibility by the field for the education of our future professionals (e.g., field-based learning, other integrative learning activities, continuing education.
    - Continually monitor and strengthen linkages between education and practice through professional associations, webinars, literature, etc.

Recommendation #3

Incorporate new and increasing levels of competencies into bachelor's and master's RT/TR curricula.

Strategies:

- ATRA to conduct a collaborative and systematic study to affirm, validate, and explore current and emerging competencies relevant to future practice by updating the West, R.E., Kinney, T., & Witman, J. (2008) *Guidelines for*

competency assessment and curriculum planning for recreational therapy practice. Hattiesburg, MS: ATRA. To ensure outcomes of the study are comprehensive and collaborative, the study team includes a representative from each of the stakeholder groups: ATRA, CTRA, NCTRC, CARTE, COAPRT, practitioner, student, educator, and employer.
- ATRA to reach out to principal investigators of any competency related studies to triangulate results to design documents defining the ideal level of preparation for entry-level practice. The document would include an international list of competencies for entry-level practice.

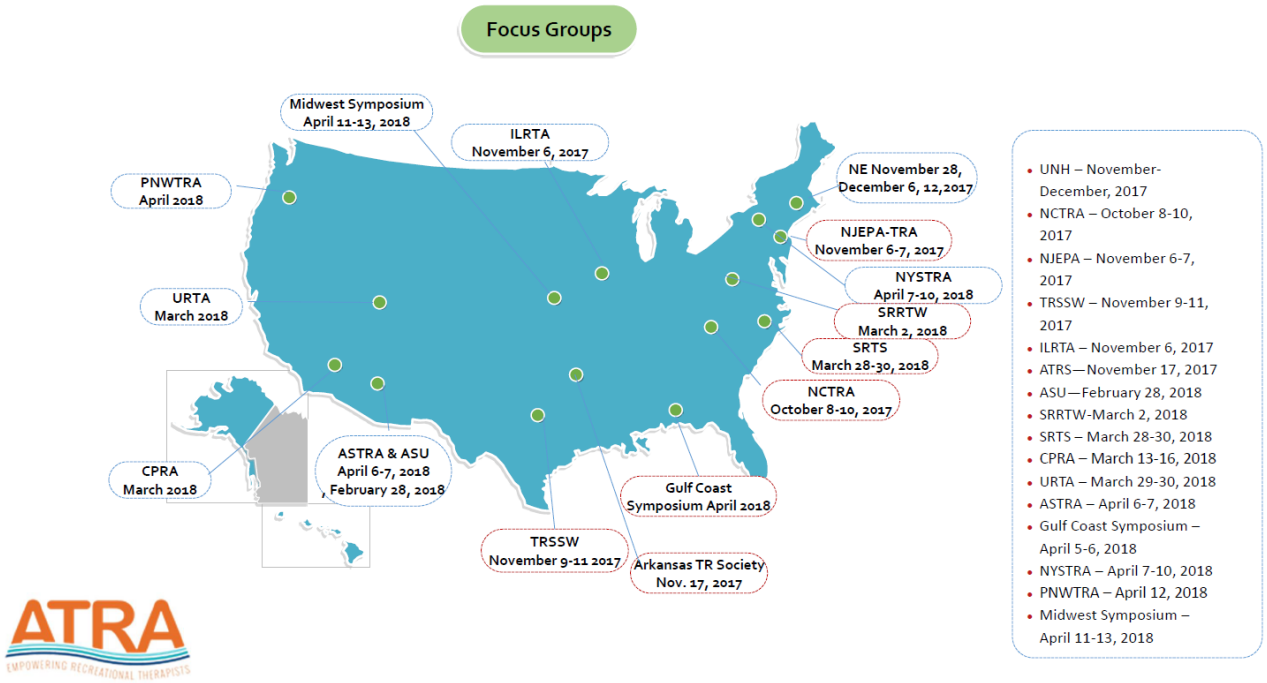
Recommendation #4
Improve the infrastructure for a graduated progression of quality fieldwork experiences.

Strategies:
- Develop basic, intermediate, and advanced, outcome-based fieldwork experiences that allow students opportunities to practice with different populations and in different settings.
- Conduct a national inventory (survey) of different types of fieldwork education delivery models of RT education.
- Develop, implement, and evaluate competency-based internship supervisor training program delivered through a variety of mechanisms, such as pre-conference workshops, webinars, and training manual.
- Develop a database of trained internship supervisors.
- Educate and coordinate with state organizations to update supervisor listings.
- Provide incentives for completion of supervisor training (e.g., CEUs, certificate of recognition).
- Advocate for a standards change/addition for required internship supervisor training with credentialing bodies.

Recommendation #5
Determine effective models that will ensure quality, consistency, access and affordability in graduate education to advance practice and the profession.

Strategies:
- Identify advanced competencies and learning outcomes for graduate education at the master's degree level.
- Evaluate the quality of master's degree programs based on identified competencies and learning outcomes.
- Data revealed the need to study the accelerated master's degree (e.g., 4+1) as an option to negotiate constraints to graduate education (e.g., cost, time, access).
- Investigate the market feasibility for support of master's prepared practitioners.
- Form a coalition of RT professional organizations and accrediting bodies to develop accreditation standards for master's education.

Appendix A
Focus Group Map and Chart
Survey Respondents



REGION	FOCUS GROUPS
Northeast	Springfield College, Springfield, MA November 28, 2017
	Mid-Atlantic NJEPA-Therapeutic Recreation Association Conference, November 6-7, 2017
	New York State Therapeutic Recreation Association Annual Conference, April 7-10, 2018
	Slippery Rock Recreational Therapy Workshop, March 2, 2018
	UNH, Durham, NH, November 28, December 6, and 12, 2017 (students, practitioners, educators)
Midwest	Illinois Recreational Therapy Association Conference, November 6, 2017
	Midwest Symposium April 11-13, 2018
South	North Carolina Recreational Therapy Association Annual Conference, October 8-10, 2017
	Southeast Recreational Therapy Symposium (SRTS), March 28-30, 2018
	Arkansas TR Association , November 17, 2017
	Gulf Coast Therapeutic Recreation Symposium, April 5-6, 2018
	Therapeutic Recreation Symposium for the Southwest, November 9-11, 2017
West	Arizona State Therapeutic Recreation Association Annual Conference April 6-7, 2018
	Utah Recreation Therapy Association Annual Conference, March 29 – 30, 2018
	Pacific Northwest Therapeutic Recreation Association Annual Conference, April 12-13, 2018
	California Parks and Recreation Association-Recreation Therapy Section, March 15-18, 2018
National	Webinar focus group via Zoom for practitioners, November 15, 2017
	Webinar focus group via Zoom for educators, November 16, 2017

SURVEY RESPONSE COUNTS

Educator Survey (n=141)

Question #30: Where do you work?

U.S.	Canada	Other
107 (96.4%)	3 (2.7%)	1 (0.9%)

Question #31: In what U.S. state do you work?
Question #32: In what Canadian province or territory do you work (write-in)?

EDUCATOR RESPONSES TO QUESTIONS 31 & 32		
United States	**Number Completed**	**Frequency**
AL	2	2.2%
AZ	1	1.1%
CA	2	2.2%
CO	1	1.1%
CT	1	1.1%
FL	1	1.1%
GA	1	1.1%
ID	2	2.2%
IL	6	6.7%
IN	3	3.4%
IA	2	2.2%
KS	2	2.2%
KY	1	1.1%
LA	1	1.1%
ME	1	1.1%
MA	1	1.1%
MI	3	3.4%
MN	1	1.1%
MO	3	3.4%
NH	3	3.4%
NY	6	6.7%
NC	13	13.5%
OH	2	2.2%
OK	1	1.1%
PA	10	11.2%
SC	1	1.1%
TN	1	1.1%
TX	5	5.6%
UT	3	3.4%
VA	5	5.6%
WA	2	2.2%
WI	3	3.4%
TOTAL U.S. RESPONSES	**89**	
CanadianProvince/Territory	**Number Completed**	
Alberta, Ontario, Nova Scotia	3	
Other	1	
TOTAL # RESPONSES	**93**	

Student Survey (n=289)

Question #17: Do you go to college in the U.S?

Yes	No
278 (98.93%)	3 (1.07%)

Question #18: In what U.S. state or Canadian province or territory is your university or college located?

STUDENT RESPONSES TO QUESTION 18		
United States	**Number Completed**	**Frequency**
AL	1	.36%
AR	4	1.46%
AZ	17	6.20%
CA	10	3.65%
CO	6	2.19%
FL	4	1.46%
IL	15	5.47%
IN	2	0.73%
KS	6	2.19%
MA	4	1.46%
MI	9	3.28%
MT	1	0.36%
NH	6	2.9%
NJ	20	7.3%
NY	7	2.55%
NC	53	19.34%
OK	4	1.46%
PA	11	4.01%
SC	16	5.84%
TN	13	4.74%
TX	21	7.66%
UT	7	2.55%
VA	20	7.30%
WA	5	1.82%
WI	12	4.38%
TOTAL U.S. RESPONSES	**274**	
Canada Province/Territory	**Number Completed**	
Alberta, Ontario, Nova Scotia, Not Sure	4	
TOTAL # RESPONSES	**278**	

Practitioner Survey (n=1,663)

Question #26: Do you work in the U.S.?

Yes	No
879 (93.71%)	59 (6.29%)

Question #27: In what U.S. state do you work?
Question #28: In what Canadian province or territory do you work (write-in)?

PRACTITIONER RESPONSES TO QUESTIONS 27 & 28		
United States	**Number Completed**	**Frequency**
AL	7	0.81%
AR	5	0.58%
AZ	13	1.50%
CA	52	6.00%
CO	13	1.50%
CT	10	1.15%
DISTRICT OF COLUMBIA	2	0.23%
DE	1	0.12%
FL	24	2.77%
GA	27	3.12%
HI	1	0.12%
IA	13	1.50%
ID	7	0.81%
IL	64	7.39%
IN	33	3.81%
KS	5	0.58%
KY	12	1.39%
LA	7	0.81%
MA	8	0.92%
MD	17	1.96%
ME	5	0.58%
MI	62	7.16%
MN	28	3.23%
MO	9	1.04%
MS	8	0.92%
MT	2	0.23%
NC	57	6.58%
ND	2	0.23%
NE	6	0.69%
NH	8	0.92%
NJ	25	2.89%
NM	6	0.69%
NV	2	0.23%
NY	60	6.93%
OH	40	4.62%
OK	11	1.27%
OR	5	0.58%
PA	36	4.16%
SC	10	1.15%
TN	10	1.15%
TX	46	5.31%
UT	15	1.73%
VA	40	4.62%
WA	21	2.42%
WI	26	3.00%
WV	3	0.35%
WY	2	0.23%
TOTAL U.S. RESPONSES	**866**	
Canadian Province or Territory	**Number Completed**	
Alberta, New Brunswick, British Columbia, Newfoundland	59	
TOTAL # RESPONSES	**925**	

APPENDIX B
SELECTED DATA-BASED RESULTS

SELECTED RESULTS FROM SURVEY DATA					
QUESTIONS:	**Educators**	**Practitioners (ALL)**	**Practitioners (MS)**	**Practitioners (non-MS)**	**Students**
Should bachelor's be the entry-level degree? **Mean of means: 3.68**	Q6 **Mean: 3.26** 1= strongly disagree, 5= strongly agree	Q7 **Mean: 3.85**	Q7 **Mean: 3.36**	Q7 **Mean: 4.02**	Q1 **Mean: 3.93**
Should MS be the entry-level degree? **Mean of means: 2.84**	Q13 **Mean: 3.11** 1= strongly disagree, 5= strongly agree	Q14 **Mean: 2.81**	Q14 **Mean: 3.24**	Q14 **Mean: 2.34**	Q7 **Mean: 2.71**
How well are bachelor's programs preparing students for competent practice? **Mean of means: 3.74**	Q7 **Mean: 3.56** 1= strongly disagree, 5= strongly agree	Q8 **Mean:3.75**	Q8 **Mean: 3.48**	Q8 **Mean: 3.89**	Q2 **Mean: 4.02**
How well are MS programs preparing students for competent practice? **Mean of means: 3.65**	Q12 **Mean: 3.55** 1= strongly disagree, 5= strongly agree	Q13 **Mean: 3.61**	Q13 **Mean: 3.72**	Q13 **Mean: 3.52**	Q6 **Mean: 3.85**

SELECTED RESULTS FROM SURVEY DATA					
SURVEY QUESTIONS:	**Educators**	**Practitioners (ALL)**	**Practitioners (MS)**	**Practitioners (non-MS)**	**Students**
What is the Ideal level of educational preparation?	Q8 1. Adv. Prac. MS (27.59%) 2. Bachelor's + more fieldwork (25%) 3. MS, no RT background (15.52%) 4. Current bachelor's (11.52%) 5. Other (11.52%) 6. Bachelor's + >1 internship (9.48%)	Q9 1. Bachelor's + more fieldwork (**46.21%**) 2. Current bachelor's (19.52%) 3. Bachelor's + >1 internship (15.81%) 4. Adv. Prac MS (9.44%) 5. MS, no RT background (5.08%) 6. Other (3.95%)	Q9 1. Bachelor's + more fieldwork (**36.88%**) 2. Adv. Prac MS (15.63%) 3. Current bachelor's (13.75%) 4. MS, no RT background (13.44%) 5. Bachelor's + >1 internship (12.81%) 6. Other (7.50%)	Q9 1. Bachelor's + more fieldwork (**49.67%**) 2. Current bachelor's (21.68%) 3. Bachelor's + >1 internship (16.92%) 4. Adv. Prac MS (7.08%) 5. Other (2.54%) 6. MS, no RT background (13.44%)	Q3 1. Bachelor's + more fieldwork (**55.56%**) 2. Current bachelor's (22.5%) 3. Bachelor's + >1 internship (8.61%) 4. MS, no RT background (6.94%) 5. Adv. Prac MS (5.28%) 6. Other (1.11%)
Rank the educational priorities	Q9 **Most frequently ranked:** 1. Increase consistency in learning outcomes across curricula 2. Additional fieldwork 3. Improve internship quality w/ sup training 4. Improve internship quality w/ sup training 5. Additional required support courses 6. Additional full-time internship 7. Additional options to specialize in RT edu. **8. Move to MS**	Q10 **Most frequently ranked:** 1. Increase consistency in learning outcomes across curricula 2. Additional fieldwork 3. Additional fieldwork 4. Improve internship quality w/ sup training 5. Additional options to specialize in RT edu. 6. Additional options to specialize in RT edu. 7. Additional full-time internship **8. Move to MS**	Q10 **Most frequently ranked:** 1. Increase consistency in learning outcomes across curricula 2. Additional fieldwork 3. Additional fieldwork 4. Improve internship quality w/ sup training **+** Additional required support courses **(tie)** 5. Improve internship quality w/ sup. training 6. Additional options to specialize in RT edu 7. Additional options to specialize in RT edu 8. **Move to MS**	Q10 **Most frequently ranked:** 1. Increase consistency in learning outcomes across curricula 2. Additional fieldwork 3. Additional fieldwork 4. Improve internship quality w/ sup training 5. Additional options to specialize in RT edu 6. Additional options to specialize in RT edu 7. Additional full-time internship 8. **Move to MS**	Q4 **Most frequently ranked:** 1. Increase consistency in learning outcomes across curricula 2. Additional RT coursework 3. Additional fieldwork 4. Additional fieldwork 5. Additional full-time internship 6. Additional full-time internship 7. Additional full-time internship **8. Move to MS**

Mixed Methods Result #1 – Bachelor's Entry-Level Degree with Improved Fieldwork			
Informants	**Quantitative (survey)**	**Qualitative (focus groups & interviews)**	**Interpretation**
Educators	Bachelor's + additional fieldwork (#2 on ideal level of prep)	Benefit of bachelor's is immediate entry into job market	**Bachelor's degree is the priority for current entry-level education, but should include additional fieldwork.**
Practitioners	Bachelor's + additional fieldwork (#1 on ideal level of prep)	Bachelor's prepares for entry-level practice	
Students	Bachelor's + additional fieldwork (#1 on ideal level of prep)	• Benefit of bachelor's is immediate entry into job market • Bachelor's in RT should be a major, not an emphasis	
Credentialing bodies	N/A	Undergraduate curricula need to be accredited at the programmatic level	
Literature	See ATRA HETF Competency Matrix (which will be in the final white paper)		

Mixed Methods Result #2 – Consistent Competencies and Learning Outcomes in Curricula			
Informants	**Quantitative (survey)**	**Qualitative (focus groups & interviews)**	**Interpretation**
Educators	• Increase consistency in learning outcomes across curricula was most highly ranked (#1)	Need consistency in curriculum based on competency	**A need for consistency in learning outcomes and competencies across curricula.**
Practitioners	• Increase consistency in learning outcomes across curricula was most highly ranked (#1)	Consistency in practice competencies based on learning outcomes	
Students	• Increase consistency in learning outcomes across curricula was most highly ranked (#1)	Consistency in curricula	
Credentialing bodies	N/A	Develop standardized curricula Undergraduate curricula need to be accredited at the programmatic level	
Literature	Increased scope of practice and necessary competencies (see competency matrix based on literature – will be in white paper)		

Mixed Methods Result #3 – TR/RT Emerging and Increasing Competencies			
Informants	**Quantitative (survey)**	**Qualitative (focus groups + interviews)**	**Interpretation**
Educators	N/A	Clinical reasoning Design thinking Entrepreneurship Funding and finance Evaluation and research Globalization and diversity Technology (telehealth, medical records)	**Identified new and increasing level of competencies beyond current professional and credentialing standards**
Practitioners	N/A	Cultural competence and diversity Interdisciplinary or interprofessional skills Group facilitation and leadership skills Evidence-based practice	
Students	N/A	Cultural competence Advocacy Evidence based practice Grant writing Documentation's relationship to funding	
Credentialing bodies	N/A	*Competencies not captured in NCTRC Job Analysis and Tasks and CARTE standards, but necessary for advanced practice:* Professional advocacy Marketing services to administrators Advanced research Advanced grant writing skills Reimbursement In-depth knowledge to fiscal responsibility Budget analysis Human resource management Advanced facilitation techniques	
Literature	Competencies outlined in the ATRA HETF Competency Matrix to appear in white paper		

Mixed Methods Result #4 – Graduated Progression of Structured, Outcome-Based Fieldwork			
Informants	**Quantitative (survey)**	**Qualitative (focus groups & interviews)**	**Interpretation**
Educators	• Additional fieldwork (#2) • Improve internship quality w/ sup training (#3&4) • Bachelor's + additional fieldwork (#2 on ideal level of prep)	Increase quality fieldwork opportunities	**Infrastructure to support high quality field-based learning opportunities in these two areas:** • **Structured, outcome-based field experiences prior to internship.** • **Internship with high quality internship supervision.**
Practitioners	• Additional fieldwork (#2) • Improve internship quality w/ sup training (#4) • Bachelor's + additional fieldwork (#1 on ideal level of prep)	• More structured outcome-based sustainable hands-on learning experiences • Multiple populations during rotation • Lack of internship sites (quantity & quality)	
Students	• Additional fieldwork (#3 & #4) • Improve internship quality w/ sup training (#3&4) • Bachelor's + additional fieldwork (#1 on ideal level of prep)	Additional experience with different populations and settings with structure prior to internship	
Credentialing bodies	N/A	• Need more quality internship sites • Need more hands on experiences • Require additional practical experiences • Increase student exposure to current practice	
Literature	To be added in white paper		

Mixed Methods Result #5 – Graduate Education			
Informants	**Quantitative (survey)**	**Qualitative (focus groups & interviews)**	**Interpretation**
Educators	Move to MS (#8) Reasons for obtaining MS: • To increase depth of understanding of TR/RT (15.1%) • To increase my job opportunities (13%) • To teach in higher edu (9.6%) MS impact on salary: • 46% saw improvement • 26% did not change Constraints to PhD: 1. Do not want to return to school (24.3%) 2. Cost is prohibitive (20%) 3. Lack of time (15.7%) Pursuing or have plans for PhD? 1. Do not desire (34%) 2. Desire to pursue, but no plans (24.5%) 3. Currently pursuing in RT (20.8%) 4. Currently pursuing in related field (15.1%) 5. Planning to pursue PhD within next 2 years (5.7%)	Benefits: more respect and more research Constraints: potential loss of bachelor's programs, reduced enrollment in bachelor's	**Field sees benefits and constraints to the master's degree as entry level** **Master's degree is pathway to specialization, research & evaluation, advancement in the profession, administration/management, credibility and respect, and development of doctoral level faculty**

Practitioners	Move to MS (#8) Reasons for obtaining MS: 1. Increase job opportunities (15%) 2. Increase depth of understanding (14.85%) 3. Increase competitiveness in job market (13.65%) Effects of MS: 1. Improved managerial/ administrative knowledge and skills (8.39%) 2. Improved advanced practice knowledge and skills (8.07%) 3. Increased ability to conduct research and evaluation (8%) MS impact on salary: 1. 31% saw improvement 2. 34% did not change 3. .3% reduced Limitations of practicing with MS: 1. No limitations experienced (36%) 2. Other limitation (12.24%) 3. Being promoted in my agency or organization (11.56%) 4. Obtaining a job due to my degree (e.g., overqualification (11.11%)	Benefits: Credibility and respect corresponds with master's degree More practice settings & career ladder Possible higher salary Specialization, research, management Constraints: no pay increase—return on investment, no job description change, Access to get MS; long-term care does not require and would lose their positions; potential loss of jobs	

Students	Move to MS (#8) <u>For students currently pursuing MS, reasons for obtaining MS:</u> 1. Increase depth of understanding of RT (13.57%) 2. Increase knowledge of admin/managerial aspects of RT practice (10.71%) 3. Career change (10.71%) 4. Increase job opportunities (10%) 5. Increase competitiveness (10%) 6. NCTRC eligibility (9.29%) <u>For bachelor's students, barriers to obtaining MS</u>: 1. I cannot afford (14.56%) 2. Bachelor's makes me eligible to practice RT, so no need for MS (12.21%) 3. I am adequately prepared with bachelor's (11.76%) 4. Want work experience prior to MS (11.65%) <u>For bachelor's and MS students, if MS required, would you have chosen RT major?</u> 1. No (39.43%) 2. Yes (34.41%) 3. I'm not sure (26.16%)	<u>Benefits</u>: respect & recognition to profession; increase research; increase number of dedicated students to RT <u>Constraint</u>: financial impact; potential loss of enrollment; limited return on investment in MS	

Credentialing Bodies	N/A	Benefit: Aide with obtaining licensure in some states Constraint: shortage of doctoral faculty, potential loss of license in 1 state if MS	
Literature	Historically, management and research were reported with MS content.		

Appendix C
Dissemination Plan

1. First level dissemination will be done via ATRA vehicles (e.g., publications and presentations) and may include the following:
    a. Presentations – To be completed by ATRA Higher Education Task Force members
        i. Major presentation at ATRA annual conference to all attendees
        ii. Education presentations at ATRA annual conference
        iii. ATRA webinars and/or podcasts
        iv. Presentations at regional and state ATRA chapter conferences by either ATRA Higher Education Task Force members or designees with the use of PowerPoint developed by ATRA Higher Education Task Force
    b. Publications – To be written by ATRA Higher Education Task Force members
        i. White Paper published by ATRA on their website
        ii. ATRA newsletter articles
        iii. ATRA Annual in TR – journal article(s)
            1. We recommend a special edition on Higher Education of the ATRA Annual for publication of the resulting task force manuscript.
            2. If no special edition is created, the task force continues to plan for submission of the manuscript to the ATRA Annual.
        iv. ATRA website page related to higher education task force project (e.g., infographic)
        v. Other publications of ATRA partner arrangements

2. Second level of dissemination – Ex-Officio members' organizations (i.e., NCTRC, CARTE, CTRA) and organizations sponsoring task force members (e.g., university – newsletter, website) - ATRA Board of Directors will be informed about other publications and presentations disseminated by the Task Force if publication/presentation solely focused on process and/or outcomes of the Higher Education Project.
    a. Publications – To be completed by ATRA Higher Education Task Force members
        i. Newsletters and journals (e.g., NCTRC, CARTE, CTRA)
    b. Presentations - By either ATRA Higher Education Task Force members or designees with the use of PowerPoint developed by ATRA Higher Education Task Force
        i. CTRA annual conference
        ii. CTRA webinar
        iii. CTRA regional conferences

3. Third level of dissemination to external conferences and publications – ATRA Board of Directors would need to be alerted if being done by Higher Education Task Force or Higher Education Committee member if presentation solely focused on process and/or outcomes of the Higher Education Project.
    a. Presentations
    b. Publications
        i. TR journals: TRJ, AJRT
        ii. Higher education journals (e.g., Journal of Higher Education)
        iii. Health Care / Allied Health / Social Service/Science journals
        iv. Non-Canada International RT related professional organizations