

EDUCATION RESEARCH STRATEGY MEETING

The profession of physical therapy has had a constant call for an increase in education-related research to identify best practices and improve on them. However, these calls have frequently been unanswered due to dearth of funding, infrastructure, and of researchers with the requisite skill set. Additionally, the Education Leadership Partnership recognized that without a coordinated strategy, there would be a risk of duplicating resources and not harnessing opportunities to bring educational stakeholders together to work collaboratively.

On January 29-30, representatives from the American Council of Academic Physical Therapy (ACAPT), APTA, Section on Education, Foundation for Physical Therapy, and others, met at APTA headquarters to work collectively to develop short and long-term education research action plans. The meeting was facilitated by Angela Rosenberg, president of the consulting firm, Inside Out Leadership.

The group used the previous works of others (e.g., Education Leadership Partnership, ACAPT Education Research Task Force, PTE-21, Excellence in Physical Therapist Education Task Force, APTA Prioritized Education Research Agenda, and others) as a foundation and guide. The goal of this meeting was to reach some level of consensus regarding: 1) conceptual framing of education research in physical therapy; 2) community of education researchers; 3) data analytics and big data; and 4) funding and infrastructure. Participants participated in 1 of 4 groups to address the goals of the meeting.

The participants hope that this work will serve as a catalyst to move education research in physical therapy forward. The process of realizing the goals identified below are expected to evolve as more stakeholders becoming engaged in this effort. Your participation in this effort is encouraged. If you are interested in collaborating with any of these groups to address the identified goals, please contact a member of that group or staff to let them know you are interested:

ACAPT – Sandy Rossi (sandyrossi@apta.org)

APTA – Libby Ross (libbyross@apta.org) or Steven Chesbro (stevenchesbro@apta.org)

Education Section – Andi Page (andreapage@apta.org)

Draft Action Items by Group

Group 1: Conceptual Framing of Education Research in Physical Therapy

- Gail Jensen (A)- Coordinator
- Susan Appling (ELP)
- Steven Chesbro (Staff)
- Barbara Malm (Foundation)
- Anita Santasier
- Laurie Kontney (ELP)

ELEVATOR SPEECH: There is a need in professional and postprofessional education to bridge the gap between academic teaching, preparation and clinical practice, and future needs of the health care system. The profession can begin to achieve this by developing a foundational structure and identifying student performance based outcomes. Creation of a conceptual framework to guide education research, and adoption of a set of physical therapy-specific entrustable professional activities (EPAs) to guide professional and postprofessional development, including a self-assessment process for practicing physical therapists, will be catalysts to bridge this gap.

ACTION ITEMS

GOAL: Develop a robust, longitudinal set of learner performance-based outcomes that span the continuum of professional education through postprofessional level. Academic/practice partnerships are critical. (Rec 2 from BPETF; Visions of the Possible)

-  **1. Contract with an external consultant (non-PT) with advisory panel to establish a broad, overarching view and plan for design, process, and implementation.**
 - Budget: \$40,000-\$60,000 for work and meetings
 - Timeline:
 - Present to ELP at CSM on February 18, 2017 to determine leads and funding
 - Release RFP in April 2017
 - Initial completion by April 2018
- 2. Contract with an external consultant, working with an internal stakeholder group, to facilitate review of AAMC process for development of EPAs and how that may be adapted for our use.**
 - Budget: \$20,000-\$30,000 for work and meetings
 - Timeline:
 - Present to ELP at CSM on February 18, 2017 to determine leads and funding
 - Release RFP in April 2017
 - Initial completion by April 2018
- 3. Imbed education research projects that are part of the implementation phase, whether it is a pilot structure, development of assessment tools, etc. within all the initiatives (like EPAs, etc.)**
- 4. Develop a communication strategy, including/emphasizing the value proposition, for this work and how an individual can get involved.**

Group 2: Community of Education Researchers

- Jim Farris- Coordinator
- Scott Ward (ELP)
- Sara Maher
- Christine McCallum (A)
- Dario Dieguez (Foundation)
- Sandy Rossi (Staff)

ELEVATOR SPEECH: Although basic science research and clinical research in physical therapy have continued to expand through growth in the numbers of funded physical therapist researchers, the profession still lacks a robust and vibrant community of education researchers. While there appears to be a strong interest in educational research among physical therapy faculty, as evidenced by growth in related consortia and SIG's, the actual number of interested and/or trained faculty members is not known. Community members have expressed interest in mentorship and continued learning opportunities in educational research. This interest appears to be captured by the concepts of literacy in educational research and procedures. A well-prepared and well organized body of PT educational researchers is needed to advance educational research in physical therapy. The action items presented are intended to develop the community of educational researchers, develop the network of this community, and enhance educational research via Educational Based Research Networks.

ACTION ITEMS

1. Offer programming that develops education research literacy.

ELC 2017

- Description of courses from AAMC's MERC workshops (currently available):
 - Course 1: Program evaluation and evaluation research (3 hours in duration)
 - Course 2: Measuring educational outcomes with reliability and validity (3 hours in duration)
- Budget: Already funded by ACAPT for \$10,000.00
- Timeline:
 - We have space for a pre-con at ELC 2017 but need to apply for it to be a pre-con at CSM 2018 and ELC 2018.
 - Need to identify how/who applies for space for a pre-con at CSM.
 - Need 2 rooms for 25 people each for 1 day.
 - Offer 2 sections (A & B). Section A takes course 1 in morning and course 2 in afternoon. Section B does the opposite.
 - Scott Ward to present discussion to ELC Program Committee at CSM.
 - Do we want it to have CEUs attached? If so, will need to apply for CEU approval.
 - Need to contact AAMC to contract for MERC instructors and licensing fees.

CSM 2018

- Description
 - Course 1: Searching and evaluating literature (3 hours in duration)
 - Course 2: Questionnaire design and survey research (3 hours in duration)
 - Need 2 rooms for 25 people for 1 day.
- Budget
 - Audio/Visual: \$2,000/day/room
 - Food/Beverage: \$750/day/room

- MERC Honoraria: \$500/course
- MERC Licensing Fee \$1,500/course (worst case scenario)
- Pre-Con Fee: \$575.00 per 2-day pre-con/course
- Timeline: Determine how/who applies for space for a pre-con at CSM.

ELC 2018

- Description: Sessions determined from the remaining **Medical Education Research Certificate (MERC)**:
 - Data management and preparing for statistical consultation
 - Formulating research questions and designing studies
 - Hypothesis-driven research
 - Introduction to qualitative data collection methods
 - Scholarly writing: publishing medical education research
 - Needs assessment to determine interest and topics for ELC
- Budget: To be determined
- Timeline: To be determined
- Communication plan: Contact AAMC to secure a contract.

2. Identify the pool of interested persons who want to be mentored.

- Description
 - Communication Plan
 - Partner with the Education Section SIG on Scholarship to develop and implement. Multiple SIGs and Consortia have been identified for this partnership.
 - Remain aware that if members are not Education Section members, they cannot be members of the Scholarship of Education SIG. Needs to be addressed.
 - Marketing Plan:
 - Eblast from ACAPT, Education Section, CSM daily publication ads and announcements.
 - Promote training available from AAMC through the MERC and planned series of courses as a pre-con at APTA meetings, as well as regional offerings.
 - Build a waitlist off of the registration form.
 - Connect Section on Research, 2 consortia (Education and Pedagogy/Clinical Reasoning) and Education Section SIGs (qualitative research/scholarship of Education/Clinical Education) to pool.
 - Scholarship of Education SIG to explore the benefits working with the Section on Research to identify collaborative opportunities.
 - Conduct a Needs Assessment:
 - Gather the data of those who registered to take the pre-con at ELC and CSM and those who couldn't sign up to determine depth of interest.
 - Create a waitlist for those who can't attend, for example, ELC or CSM.
 - Identify 4 sponsoring institutions to compliment other times in which the course is offered regionally via AAMC.
 - Automate data collection.
 - Ask MERC if there's a way to offer program online.
 - Use the model of the Neurology Section for training presenters in delivering research-based material.
- Budget: Approximately \$5,000 to develop a database for linking people and place it on partner group websites.
- Timeline: TBD

3. Develop a multi-site network of mentors, known as the Education Based Research Network (EBRN).

- Description
 - ACAPT to identify institutions that want to partner to form an Education Based Research Network (EBRN).
 - Objectives of the EBRN would be to
 - encourage collaboration that impact student outcomes so that education research isn't happening only at one or two programs, but rather to build on a national momentum,
 - share data,
 - create a value proposition (eg, if you do this as a group, you're more likely to mutually benefit from \$\$ grants), and
 - build evidence based educational practice.
 - ACAPT houses on its website the contact info of these groups and the data shared.
 - Build marketing around initiative.
 - Data/analytics team may be creating an institutional database that would allow for the entry by program directors of one survey from which all interested parties (CAPTE, ACAPT, etc) could pull information relevant to their needs.
- Budget:
 - Need funding to help to develop.
 - \$500 - Media costs to reach out to people (e.g., postcards, flyers)
 - \$3,000 - Possible costs to develop a page on the ACAPT website for listing the members who are part of this network
- Timeline: TBD

4. Identify mentors in collaboration with the Scholarship of Education SIG.

- Description
 - Identify the authors of the publications identified in Gail's slides:
 - Invite them to participate as mentors
 - Determine objectives and identify big issues to solve
 - Determine funding needs for mentors and program, including travel, meeting services, and honoraria.
 - Identify the mechanism for those who are interested in being future mentors to fill that need.
 - Identify the mechanism for those who are seeking mentorship to connect to a mentor.
 - Identify the mechanisms for developing future mentors.
 - Develop the database on ACAPT website.
 - Establish a forum for these individuals to meet (eg, ELC)
 - How do we compliment the gap in mentors not identified through the SIG (e.g., not all program directors are members of the SIG but the education section requires that to participate in the mentorship
- Budget:
 - \$3,000 - ACAPT can help develop a database linking the mentors and mentees, developed collaboratively with the Scholarship on Education SIG

Group #3 Academic Analytics/ Big Data

- Libby Ross- (Staff) Coordinator
- Robyn Watson Ellerbe (Staff)
- Nancy Reese (ELP)
- Edee Field-Fote (Foundation)
- Bruce Greenfield (A)
- Karen Huhn

ELEVATOR SPEECH: The patterns, trends, and associations revealed by large data sets can help make processes and outcomes more efficient and effective. Our physical therapist education programs generate large volumes of data that could be analyzed to drive innovation in academic and clinical education, practice, and workforce. The profession should conduct a comprehensive data needs assessment with the goals of identifying: 1) currently available datasets across physical therapy organizations, 2) the degree to which they are standardized, interconnected, and accessible to educational researchers. Beyond understanding the data that currently exists, such an assessment would enable the profession to determine what additional datasets should be developed or connected to address strategic research questions. The creation of a new centralized institutional data repository, broader in scope and more readily accessible than what is currently available in CAPTE, would enable greater access to data for educational research purposes. To facilitate research, a unique student identifier for PT and PTA education programs could be used to connect national databases and track individuals. This would provide a secure environment from application through enrollment, licensure, practice, and post-professional education and training. Individual program data could be exported to CAPTE allowing programs to enter data one time per year. A shorter term goal would be the creation of a centralized and searchable education research repository that would assist researchers in accessing past journal articles, session abstracts, and poster abstracts.

ACTION ITEMS

1. Conduct a comprehensive data needs assessment.

- Description: The comprehensive needs assessment would address the following questions:
 - What physical therapy education, practice, and workforce datasets are currently available in APTA, ACAPT, Education Section, CAPTE, and FSBPT?
 - What reports associated with these datasets are currently available?
 - Which physical therapy datasets are currently open to educational researchers and what processes and fees are required to access them, including restrictions on use?
 - How many educational researchers have accessed these datasets to date and what were their findings?
 - What practice, education, and research datasets are currently available in other health profession organizations?
 - What reports associated with these datasets are currently available to members of each respective profession and the public?
 - Are these datasets available to educational researchers in the profession or beyond?
 - What processes and fees required to access them, including restrictions on use?
 - How many educational researchers have accessed these datasets to date and what were their findings?
- Budget: Minimal financial expenses and moderate amount of staff resources.
- Timeline: Complete data needs assessment in 4-6 months.

2. Explore what CAPTE data is currently available for use by educational researchers.

- Description: Staff will clarify what CAPTE data is currently available to educational researchers.
- Budget: No budget resources required.
- Timeline:
 - 1-2 months.
 - Staff will share related information with the group and ELP.

3. Create a unique student identifier for physical therapy education to connect datasets, facilitate research for education and workforce purposes, and eliminate duplicate records.

- Description
 - A unique student identifier for physical therapist and physical therapist assistant education programs would allow the profession to track individuals from application through enrollment, licensure, practice, and post-professional education and training.
 - Meet with representatives in medicine and dentistry to determine how their professional unique identifiers were developed and implemented, and to what extent they are used to support educational research.
- Budget
 - No budget to explore item.
 - Potential for substantive budget to implement.
- Timeline
 - 1-2 months to conduct initial exploration.
 - Multiple years to develop, promote, and implement, if adopted.

4. Create a centralized and searchable education research repository to facilitate access to past journal articles, session abstracts, and poster abstracts.

- Budget
 - No budget to explore item.
 - Cost to implement is unknown.
- Timeline
 - Staff will meet with meetings and professional development staff at APTA to determine what information
 - Exploration of options may take 4-6 months and implementation would take additional time and resources.

5. Explore development of a centralized institutional data repository for physical therapy education.

- Description
 - A centralized institutional data repository would allow the profession to capture institutional data in a standardized format that could be queried for educational research purposes and broader than what is currently available via CAPTE.
 - Programs would enter data into the system once for multiple purposes, including CAPTE accreditation.
 - New dataset might include student-specific (rather than aggregate) enrollment and graduation data, standardized fields for curriculum content and format, additional details about academic and clinical faculty. See Appendix A.
 - Potential research questions that might be addressed with data include the following:

- Which program models produce the most successful students in terms of leadership, morality, administration, post-professional education, patient care outcomes, or other measures?
- Where do graduates work after graduation in terms of practice area or medically underserved areas?
- What admission criteria best predict success in the program and future career pathways?
- Does curricular models matter?
- Do these data elements make a difference in outcomes?
- Budget
 - No budget to explore item.
 - Cost to implement is unknown.
- Timeline
 - Staff will meet with meetings and professional development staff at APTA to determine what information
 - Exploration of options may take 4-6 months and implementation would take additional time and resources.

Group #4 Funding and Infrastructure

Rick Segal (A) - Coordinator
 Bill Boissonnault (Staff)
 Barbara Connolly (Foundation)

Gina Musolino (ELP)
 Andi Page (Staff)

ELEVATOR SPEECH: The profession’s education communities are facing significant challenges, with little research data available to guide important decisions. This dilemma is compounded by the fact we have limited numbers of qualified education researchers and there is limited funding for those who are qualified. To increase our profession’s education research capacity we need to mentor faculty to enhance success in attaining grant funds. Thus, we propose a grant writing workshop that is based on the successful TIGRR workshops for rehabilitation research. To best use available education research dollars, we need research grants that are aligned with education research priorities. Thus specific requests for proposals (RFP) and/or requests for applications (RFA) tied to our priorities will be developed. New monies will be raised to support high priority grants, scholarships and fellowship opportunities.

ACTION ITEMS

1. Form a group of consultants to develop Request for Proposal (RFP) to address the top 3 (three) priorities as identified by Conceptual Framing consultant and work group.

- Budget
 - Once the RFPs are developed, the amount of funding needed will be identified and then will lead to the announcement of a grant.
 - Funding will be needed for paying the group of consultants who will develop the RFP and funds will be needed to be raised for the Grants.
 - Fundraising/identification needs to happen for RFP consultants and the grants/contracts.
- Timeline:
 - Long-term goal

- 6-12 months after the identification of top 3 priorities

2. Development of new Educational Research funding opportunities based upon identified priorities (focusing on the top new priorities identified in action item # 1 above). The Foundation for Physical Therapy currently is considering new funding mechanisms and will incorporate a discussion of support of educational research in these considerations.

- Description
 - Consideration of establishing a new research grant through the Foundation for Physical Therapy with focus on educational research. Can be a small grant of \$30,000 to \$50,000 with small administrative fee.
 - An endowment does not have to be established but a smaller pass through grant.
 - Funding opportunities such as NIH and Robert Wood Johnson will be identified and shared through the ELP.
- Budget
 - No costs associated with Foundation for Physical Therapy activities. May be a cost for searching for other funding opportunities depending upon process used for identification.
- Timeline
 - Short term
 - 1-3 months

3. Establishment of a new Grants and Mentorship in Educational Research (GAMER) 

- Description
 - Intensive one on one grant writing mentorship provided by leading education researchers.
 - [Note: Similar to current TIGRR program offered at Medical University of South Carolina (MUSC) - Linking of mentors and mentees].
 - Mentors would not necessarily have to be physical therapists.
 - Fundable and research-oriented project outcome focus that would advance the physical therapy profession and build cohort of physical therapy education researchers.
- Budget
 - If similar to TIGRR, there will be a requirement for funding with hosting institution, NIH, Foundation for Physical Therapy, ACAPT, Education Section, and other foundations and federal agencies that are interested.
 - Attendees (either personally or from home institutions) will pay and have institutional support.
 - [Notes: TIGRR currently charges \$2500. TIGRR requires payment from institution and letter from institution committing to providing time for development of proposals and time to carry out grants if funded.]
- Timeline
 - Long-term goal
 - Immediately could begin to identify potential Principal Investigator/Program Lead/s and possible site/s who would be interested in hosting the program.
 - Develop a budget for GAMER using TIGRR budget as starting point.
 - 6-12 months for development of the program and securement of funding

4. Foundation for Physical Therapy (FPT) to review criteria for current funding opportunities for educational research and publicize via FPT website using a link specific to educational research opportunities.

- Description: APTA, ACAPT and Section on Education will provide links to FPT site.
- Budget: Minimal cost

- Timeline: Short-term goal; 1-3 months/ongoing
5. **Publicizing the Legacy Partners (Bequests) program of the Foundation for Physical Therapy with individuals who are interested in funding educational research in the future. Share information about the *Bella J. May Scholarship Fund* and the *Mildred Wood Endowment Fund*.**
- Budget: Minimal cost
 - Timeline
 - Short-term goal
 - Immediate/ongoing
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APPENDIX A

Below is a preliminary list of existing and needed datasets in physical therapy by category. Existing datasets may have limited value to researchers because they are not accessible to the public, captured in a standardized format that can be queried, or include common field that would allow them to be connected to other databases.

APPLICANT AND STUDENT DATA

- Applicant Data
 - GPA
 - GRE
 - PT observation hours
 - Colleges attended/US News ranking
 - Demographics
- Student Data
 - DPT Performance (programmatic level)
 - Graduation
 - Student Debt (graduate and scholarships)
 - Pass rates (NBTE has all scores, but students have the right to keep private).
 - Graduation scholarships
 - Clinical performance or performance-based outcomes
- Post-DPT Education and Practice Experiences
 - Residency/Fellowship - APTA
 - Membership
 - Leadership Positions – within APTA
 - Practice Area
 - State Board Violations (FSBPT)

CURRICULUM

- Curricular model (CAPTE)
- Curricular length (CAPTE)
- Face-to-Face versus virtual education (CAPTE – more precision data needed)
- ICE (CAPTE, but not timing of when it happens)
- Final clinical experience
- Research requirement
- Content beyond CAPTE standards

- Competency-based programs.
- Content beyond curriculum – eg, reflective practice, meta-cognition.
- Class size (CAPTE)
- Faculty/student ratio (CAPTE)
- Evidence-based teaching
- Lab vs didactic hours (CAPTE)
- Length of Clinical education experiences (CAPTE)
- Clinical education requirements - eg, acute care
- CE models
- Simulations/ simulated patients
- OSCE
- Exit Exams

FACULTY

- Degree
- Area of study
- Length of time teaching
- Rank/Tenure status
- Age
- Salary
- Specializations
- Vacancies
- Part-time
- Clinical educators (CSIF/CPI)
- Path of education

PROGRAM/INSTITUTION

- Carnegie Classification
- Public versus Private (CAPTE)
- Program structure
- Institutional structure
- Research support - \$ and personnel
- Other health science programs
- Rural/Urban
- Academic Health Center
- Pro-bono clinic
- Tuition and fees (CAPTE)
- Institution size
- Geographic location
- Budget structure and control – eg, program chair have input, does tuition go to program
- Institution diversity (program and at large)
- Affiliations/Clinical Partners - Number/location and strength of connection.
- Admissions prerequisites by program
 - Admissions process/model
 - Courses
 - Standardized tests
 - PT hours