



# A Call to Shift to Competency-Based Education

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COLUMBIA

REHABILITATION AND  
REGENERATIVE MEDICINE

PROGRAMS IN  
OCCUPATIONAL THERAPY

# Disclosures

- There are no financial conflicts of interest for either presenter.
- Genesis for this presentation: Hamed, R. et al. (in press). The issue is: A call to shift to competency-based education. *AJOT*, 77, Issue 6 (Nov/Dec 2023).
  - Acknowledgment: Director of Programs in Physical Therapy, Jean Fitzpatrick Timmerberg

# Objectives

- Define CBE and establish a common language
- Status of CBE in OT
- Reasons to explore a shift to CBE
- Preliminary action steps



# CBE

Received: 23 July 2020 | Revised: 10 August 2020 | Accepted: 13 August 2020

DOI: 10.1096/fba.2020-00061

PERSPECTIVE

FASEB BioAdvances WILEY

## The future of health professions education: Emerging trends in the United States

**George E. Thibault**

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This article is part of the [Biomedical Education Special Collection](#).



# CBE

“A shift to competency-based, time variable health professions education to better fulfill our social contract and to produce the most competent practitioners most efficiently” (Thibault, 2020, p. 685).

# CBE

“Competency-based education is a concept, a philosophy, and an approach to educational design where learner professional progression occurs only when competency is demonstrated” (Fitzpatrick Timmerberg et al., 2022, p. 2).



**Begin with the  
end in mind!**

**Time is used as an  
educational resource!**

# CBE

## Backward Design

*Designing a course or curriculum by beginning with the end in mind and designing toward that end.*



Figure taken from: "Understanding by Design (UbD): Stages of Backward Design" pdf created by [ctl.columbia.edu](http://ctl.columbia.edu)

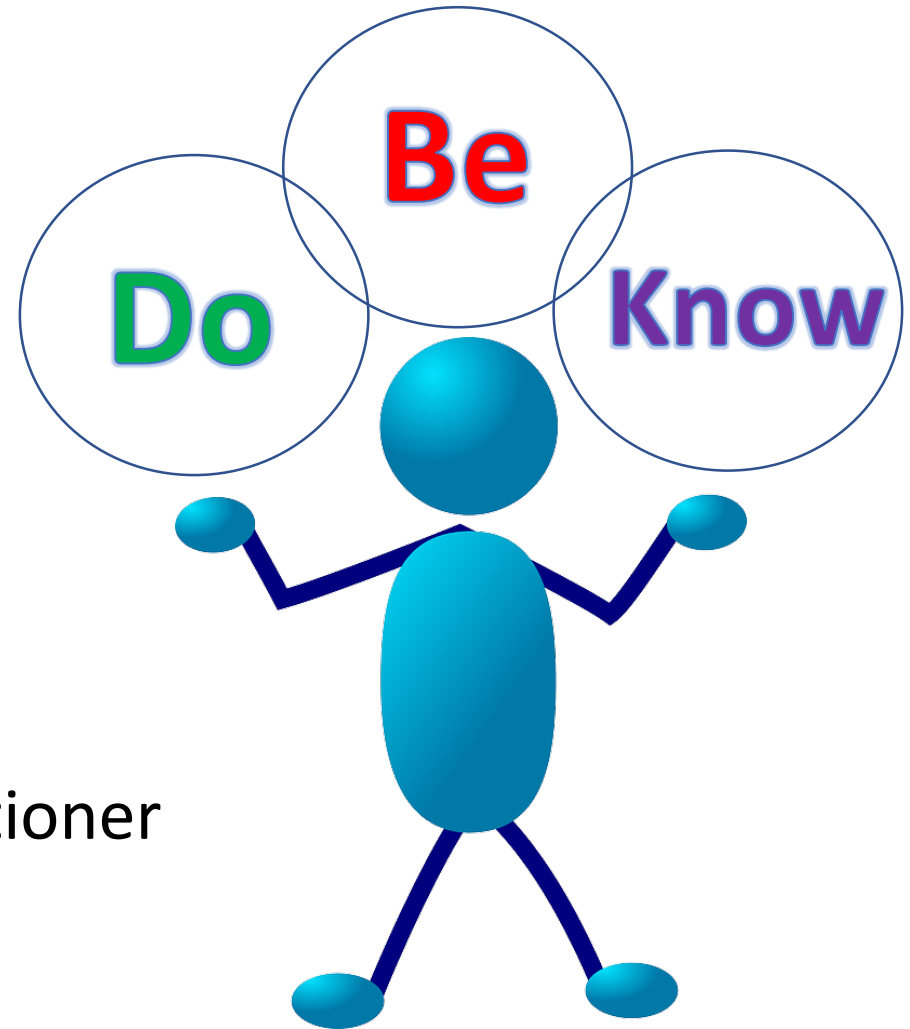
Wiggins, G.J. & McTighe, J. (2005).  
Understanding by Design, Expanded 2<sup>nd</sup> Edition. Pearson

# CBE

Desired Result?

Entry-level OT practitioner that meets the health-care needs of those they serve!

What does an entry-level OT practitioner need to...?





# CBE

**Domains of Competence:** “broad distinguishable areas of competence that in the aggregate constitute a general descriptive framework for a profession” (Englander et al., 2013, p. 1089).

**Competency:** “...a characteristic or feature of an individual... an observable ability of a health professional to do something successfully or efficiently” (Fitzpatrick Timmerberg et al., 2022, p.2). **Person!**

**EPA:** “...units of professional practice, defined as tasks or responsibilities to be entrusted to the unsupervised execution by a trainee once he or she has attained sufficient specific competence” (ten Cate 2013, p.157). **Task!**

# CBE

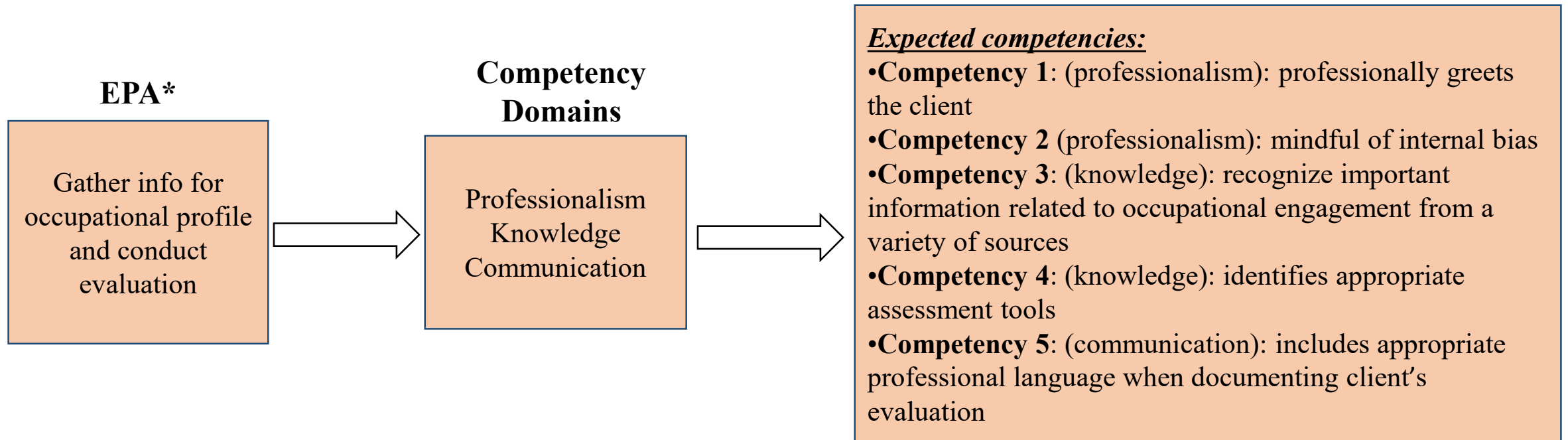


Figure 1. Example of using EPA, competency domains, and competencies in CBE. EPA= entrustable professional activities; \*= adapted from AAMC core EPAs

Reprinted from “The issue is: A call to shift to competency-based education,” by Hamed et al., in press, *AJOT*, 77(6).

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# CBE

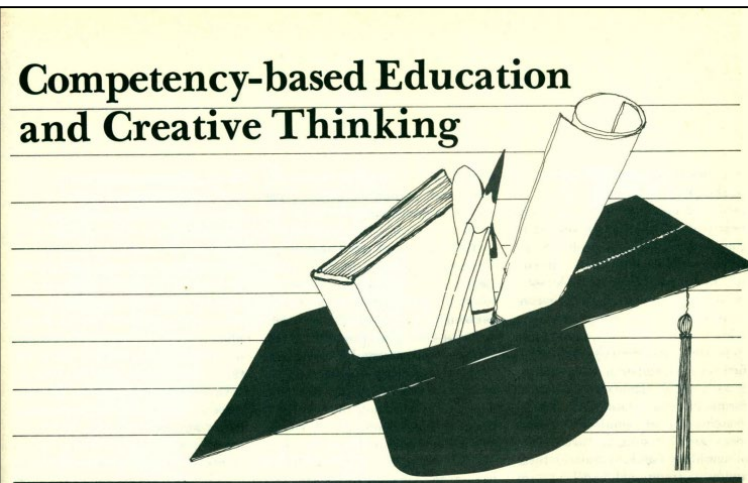
Single destination but  
multiple ways to get  
there!



# Status of CBE in OT--USA

## Roann Barris (1978)

"because of its emphasis on stated objectives, feedback, self-evaluation, and alternative learning experiences, is an approach to curriculum design that should lead students to become more creative thinkers". p363



**Competency-based Education and Creative Thinking**

Roann Barris

When creativity is considered as an approach to problem-solving, rather than as an innate talent, then education can play an important role in its development. This paper postulates that competency-based education, because of its emphasis on stated objectives, feedback, self-evaluation, and alternative learning

Roann Barris, M.S., OTR, is a senior occupational therapist at Essex County Hospital Center, Cedar Grove, New Jersey.

In the past, creativity has been associated with a unique, original end-product arising from innate talent in certain individuals. More and more, however, people are thinking of creativity as an attitude and process that can be fostered or inhibited throughout one's life (1). In an article on creativity Maslow asks, "What's the use of teaching

## Jim Hinojosa (1985)

A competent practitioner is one who call perform [competency-specific] activities under certain conditions with a demonstrated degree of mastery."p.539



**THE ISSUE IS**

Implications for Occupational Therapy of a Competency-Based Orientation

Jim Hinojosa

Competency-based educational models focus on the development of clinical skills for clinical practice. During the last several years, the American Occupational Therapy Association (AOTA) has supported the development of competency-based educational programs (1. J Hinojosa, personal communication). We must consider the limitations of such programs and also examine the potential implications for the practitioner and for the profession itself.

History

Occupational therapists have used the competency-based model

competency-based program *Training: Occupational Therapy Educational Management in the Schools* (1). Highly valued as an effective educational curriculum, the program is now considered by some occupational therapists as "the model" for the development of continuing education programs.

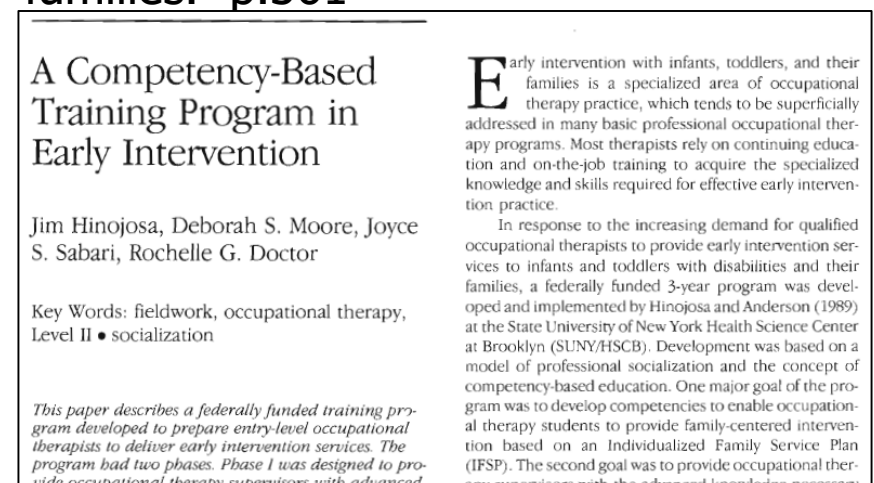
The American Physical Therapy Association (APTA) supported the development of a competency-based model for the analysis of physical therapy practice. By analyzing the whole of physical therapy practice along with its component parts, competencies for each area of practice were identified and

professional needs to perform adequately. An operational definition suggested for physical therapists by Davis and others (4) is "a significant behavior or activity, performed in a specific setting; to a specified standard" (p 1088). These researchers suggest that being competent involves doing something, in a specific environment, in accordance with a specified standard. Their definition implies that one who is competent demonstrates the ability to perform a set activity skillfully.

Competency refers to the performance of a specified activity under observable, measurable stand-

## Hinojosa et al. (1994)

"The overall intent of the program was to train entry-level occupational therapists to deliver quality early intervention services to infants and toddlers with disabilities and their families." p.361



**A Competency-Based Training Program in Early Intervention**

Jim Hinojosa, Deborah S. Moore, Joyce S. Sabari, Rochelle G. Doctor

Key Words: fieldwork, occupational therapy, Level II • socialization

This paper describes a federally funded training program developed to prepare entry-level occupational therapists to deliver early intervention services. The program had two phases. Phase I was designed to provide occupational therapy supervisors with advanced skills for supervising and teaching the students about the provision of early intervention services. These skills were specific supervisory strategies and learning techniques designed to facilitate optimal communication between the student, the supervisor, and the academic faculty members, as well as to facilitate consistency of information between workshops and practices in the clinic. Phase II involved a 12-week clinical fieldwork experience for the students in an early intervention program combined with didactic programs at the university. Both supervisors and students provided feedback on the program.

Development of the Program

Early intervention with infants, toddlers, and their families is a specialized area of occupational therapy practice, which tends to be superficially addressed in many basic professional occupational therapy programs. Most therapists rely on continuing education and on-the-job training to acquire the specialized knowledge and skills required for effective early intervention practice.

In response to the increasing demand for qualified occupational therapists to provide early intervention services to infants and toddlers with disabilities and their families, a federally funded 3-year program was developed and implemented by Hinojosa and Anderson (1989) at the State University of New York Health Science Center at Brooklyn (SUNY/HSCB). Development was based on a model of professional socialization and the concept of competency-based education. One major goal of the program was to develop competencies to enable occupational therapy students to provide family-centered intervention based on an Individualized Family Service Plan (IFSP). The second goal was to provide occupational therapy supervisors with the advanced knowledge necessary to supervise and train occupational therapy students in early intervention services. The overall intent of the program was to train entry-level occupational therapists to deliver quality early intervention services to infants and toddlers with disabilities and their families. This paper describes the "Occupational Therapy: Early Intervention Preservice Training Program," its content, the participants, and their feedback.

# Status of CBE in OT—International

Jung et al. (2015)

Research paper

## Competency-based education: A survey study of international occupational therapy educational programmes

Bonny Jung<sup>1</sup>, Lorie Shimmell<sup>1</sup>, Deb Stewart<sup>1</sup>, Leah Gatti<sup>1</sup>, Kyrsten Venasse<sup>1</sup>, Lindsay Plaisant<sup>1</sup>, Ritchard Ledgerd<sup>2,3</sup>, Sue Baptiste<sup>1,3</sup>

<sup>1</sup>McMaster University, School of Rehabilitation Science, Occupational Therapy Program, Hamilton, ON, Canada, <sup>2</sup>Research & Development Department, North East London NHS Foundation Trust, Goodmayes Hospital, Ilford, UK, <sup>3</sup>World Federation of Occupational Therapists

The purpose of this study was to determine how occupational therapy education programmes approved by the World Federation of Occupational Therapists (WFOT) are utilising, implementing and evaluating competency-based education (CBE). The survey was distributed to a sample of 645 participants using the WFOT distribution process. A total of 67 respondents completed the survey. The results indicated that programmes are using WFOT and their country-specific competencies to guide their curriculum and that some programmes are in transition to a competency-based model of education. However, a number of barriers were identified, which impact the uptake and implementation of CBE that include resource intensity, specificity of some competencies to individuals and culture, and lack of understanding of CBE. This paper provides recommendations for further research and actions.

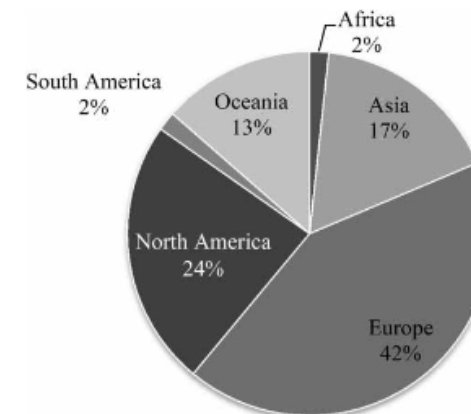


Figure 1 Percentage of respondents by continent.

Jung et al. Competency-based education: A survey study of international occupational therapy educational programmes

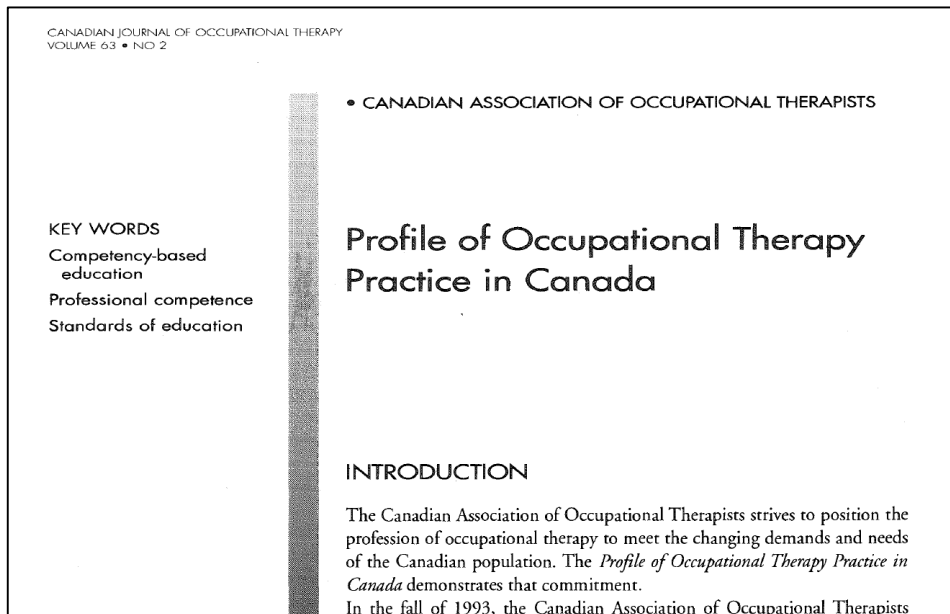
Table 1 Country-specific competencies

Country	Competencies
Australia	Australian Minimum Competency Standards For New Graduate Occupational Therapists <a href="http://www.otaus.com.au/sitebuilder/aboutus/knowledge/asset/files/16/australian_minimum_competency_standards_for_new_grad_occupational_therapists.pdf">http://www.otaus.com.au/sitebuilder/aboutus/knowledge/asset/files/16/australian_minimum_competency_standards_for_new_grad_occupational_therapists.pdf</a>
Canada	The Association of Canadian Occupational Therapy Regulatory Organization (ACOTRO) Essential Competencies <a href="http://www.coto.org/pdf/essent_comp_04.pdf">http://www.coto.org/pdf/essent_comp_04.pdf</a>
Europe	European Network of Occupational Therapy and Higher Education (ENOTHE) <a href="http://www.enothe.eu">http://www.enothe.eu</a>
United Kingdom	Health and Care Professions Council (HCPC) <a href="http://www.hpc-uk.org/assets/documents/10000512Standards_of_Proficiency_Occupational_Therapists.pdf">http://www.hpc-uk.org/assets/documents/10000512Standards_of_Proficiency_Occupational_Therapists.pdf</a>
United States of America	Standards of Practice for Occupational Therapy <a href="https://www.aota.org/-/media/Corporate/Files/Practice/OTAs/ScopeandStandards/Standards%20of%20Practice%20for%20Occupational%20Therapy%20FINAL.pdf">https://www.aota.org/-/media/Corporate/Files/Practice/OTAs/ScopeandStandards/Standards%20of%20Practice%20for%20Occupational%20Therapy%20FINAL.pdf</a>

# Example CBE in OT—Canada

## Canada (1993)

[occupational therapy profile] emphasizes the outcomes of work, rather than the methods or tasks". p.79



- Association of Canadian Occupational Therapy Regulatory Organizations
- Association of Canadian Occupational Therapy University Programs
- Canadian Association of Occupational Therapists

Unified set of Competencies across the three stakeholders:

## COMPETENCIES FOR OCCUPATIONAL THERAPISTS IN CANADA

1st Edition December 2000

2nd Edition June 2003

3rd Edition May 2011

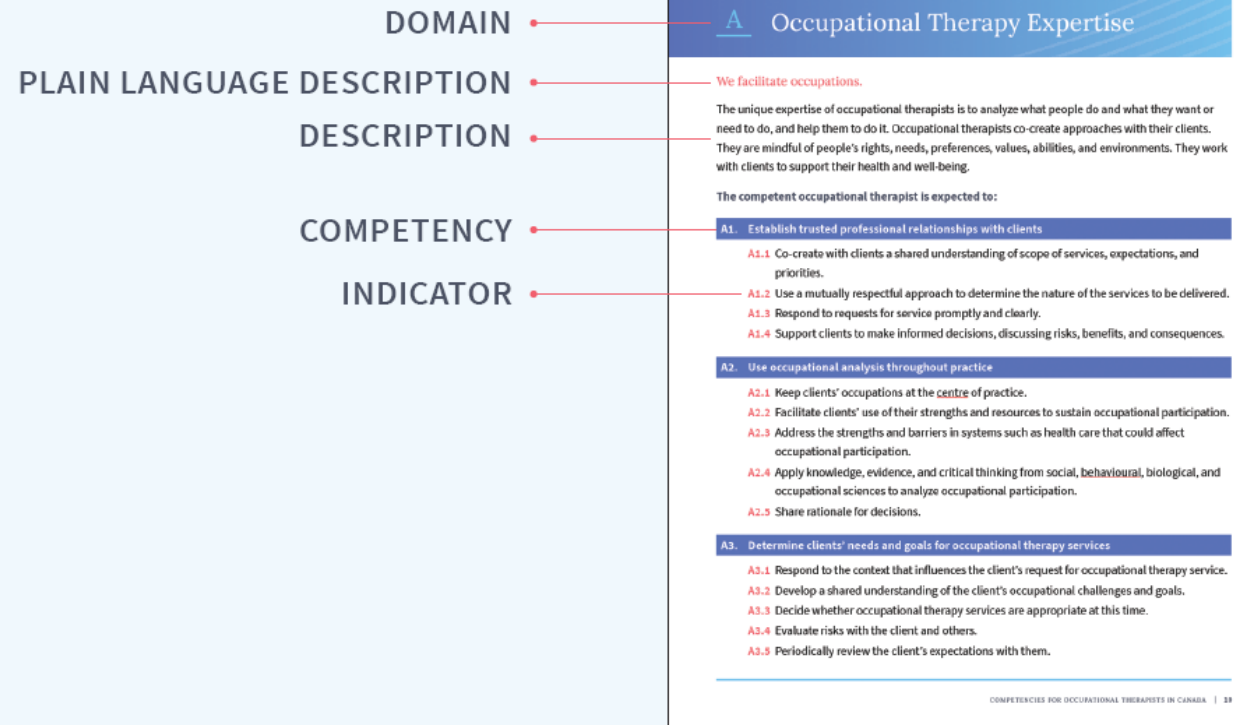
4<sup>th</sup> Edition December 2021

# Example CBE in OT—Canada

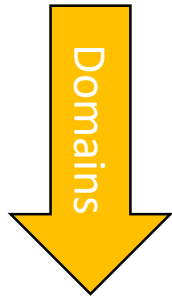
“Competencies are the dynamic combination of knowledge and understanding, interpersonal and practical skills, ethical values, and occupational therapy responsibilities and attitudes **Competencies are not the same as competence.**

Competence describes the level at which the occupational therapist is demonstrating the competencies. An occupational therapist might have a level of competence from novice to expert or beginner to advanced” p.4

## HOW COMPETENCIES FLOW (STRUCTURE)

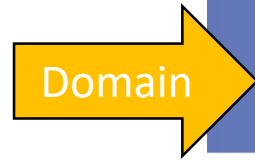


# Example CBE in OT— Canada



The occupational therapy competencies are grouped thematically into six domains, labelled A to F:

- A.** Occupational Therapy Expertise
- B.** Communication and Collaboration
- C.** Culture, Equity, and Justice
- D.** Excellence in Practice
- E.** Professional Responsibility
- F.** Engagement with the Profession



## A Occupational Therapy Expertise

*We facilitate occupations.*

The unique expertise of occupational therapists is to analyze what people do and what they want or need to do, and help them to do it. Occupational therapists co-create approaches with their clients. They are mindful of people's rights, needs, preferences, values, abilities, and environments. They work with clients to support their health and well-being.

**The competent occupational therapist is expected to:**

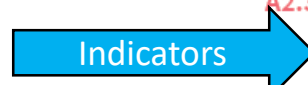
### A1. Establish trusted professional relationships with *clients*

- A1.1** Co-create with clients a shared understanding of scope of services, expectations, and priorities.
- A1.2** Use a mutually respectful approach to determine the nature of the services to be delivered.
- A1.3** Respond to requests for service promptly and clearly.
- A1.4** Support clients to make informed decisions, discussing risks, benefits, and consequences.



### A2. Use *occupational analysis* throughout practice

- A2.1** Keep clients' occupations at the centre of practice.
- A2.2** Facilitate clients' use of their strengths and resources to sustain *occupational participation*.
- A2.3** Address the strengths and barriers in systems such as health care that could affect occupational participation.
- A2.4** Apply knowledge, evidence, and critical thinking from social, behavioural, biological, and occupational sciences to analyze occupational participation.
- A2.5** Share rationale for decisions.





# Reasons to Shift?

## Enhancing Quality of Care and Accountability:

- Clearly define how OT uniquely meets the health-care needs of those we serve.
- Reduction in unwanted variation in service delivery
- Clarification of dual entry points & possible reduction in ACOTE standards

## Learner-centered Education:

- Alternative pathways to achieve outcomes
- Flexibility
- Partnership



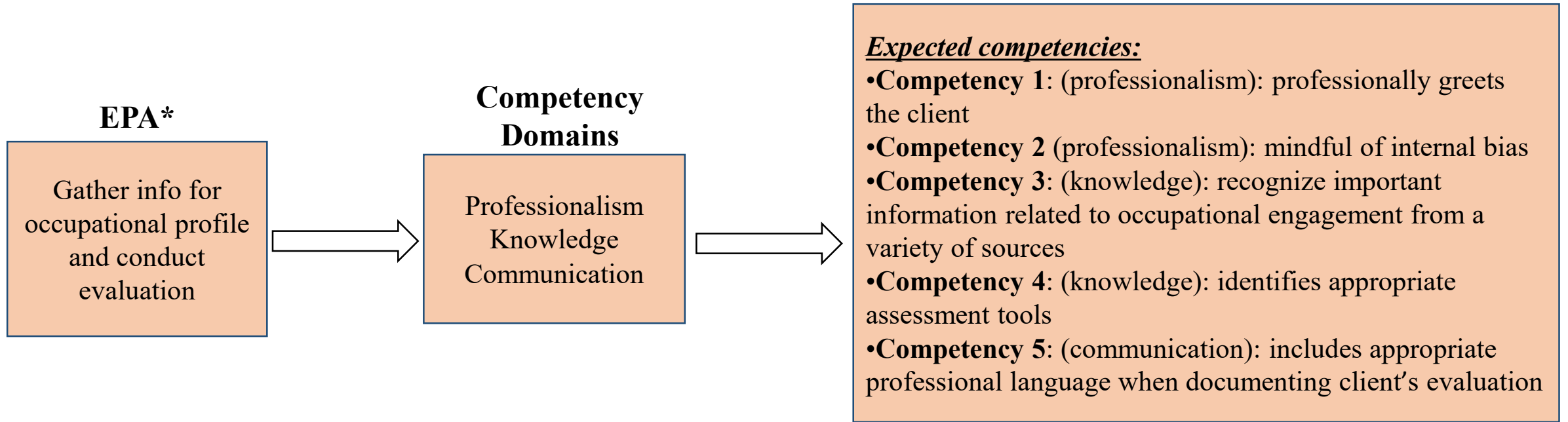


Figure 1. Example of using EPA, competency domains, and competencies in CBE. EPA = entrustable professional activities; \*= adapted from AAMC core EPAs

# Preliminary Action Steps

POSITION PAPER

## Competency-Based Education in Physical Therapy: Developing a Framework for Education Research

Gail M. Jensen, PT, PhD, FAPTA, Diane U. Jette, PT, DSc, FAPTA, Jean Fitzpatrick Timmerberg, PT, DPT, PhD, Steven B. Chesbro, PT, DPT, EdD, Robin L. Dole, PT, DPT, EdD, Zoher Kapasi, PT, PhD, MBA, FAPTA, and Ana Lotshaw, PT, PhD

**Background and Purpose.** The physical therapy education community is actively engaged in planning and developing an approach to competency-based education in physical therapy (CBEPT). The creation of an underlying framework for education research in CBEPT can provide guidance in identifying key areas of needed study, give direction for future research, and provide opportunities for collaboration. The purpose of this article is to 1) describe the critical concepts of CBEPT as both an educational philosophy and design and 2) identify a working education research framework, examples of potential research questions, and associated methodological

**Position and Rationale.** As the movement in CBEPT evolves, we have the opportunity to propose a working framework and potential research questions for our education community. An initial step in the development of a research framework was review of a model paper from medical education that proposed a research agenda for competency-based medical education. We developed a draft of categories and related research questions and then used an iterative group process that included members of the Education Leadership Partnership Education Research Network to review and provide feedback. Core areas for investigation include learners, the learning process, and needs along with research questions in

Since that time, the physical therapy education community has been actively engaged in a coordinated effort to address this opportunity through the Education Leadership Partnership (ELP),<sup>2</sup> numerous and ongoing stakeholder meetings, task forces, planning groups, and subgroups. The National Study of Excellence and Innovation in Physical Therapy Education identified a critical need for the profession to develop a continuum of professional performance expectations grounded in key competencies and establish a comprehensive and longitudinal approach for the development of a competency-based group to develop educational needs and research questions in

There is a lot to learn from **professions** that are further along in the process

- Medicine
- Physical therapy
- Social work

Research Report

## A Core Components Framework for Evaluating Implementation of Competency-Based Medical Education Programs

Elaine Van Melle, PhD, Jason R. Frank, MD, MA(Ed), Eric S. Holmboe, MD, Damon Dagnone, MD, MSc, MMEd, Denise Stockley, PhD, and Jonathan Sherbino, MD, MEd, on behalf of the International Competency-based Medical Education Collaborators

### Abstract

#### Purpose

The rapid adoption of competency-based medical education (CBME) provides an unprecedented opportunity to study implementation. Examining “fidelity of implementation”—that is, whether CBME is being implemented as intended—is hampered, however, by

organized into a draft framework. Using a modified Delphi approach, the second step examined consensus amongst an international group of experts in CBME.

#### Results

Two different viewpoints describing how a CBME program can bring about change were found: production and

stable professional activity (EPA) framework. To apply an EPA framework to our study, we sought to (1) identify graduates of Canadian internal medical education. These lists were subject to a survey-based survey. Consensus (more than 50%) was reached on all items per procedure. Consensus (more than 50%) was reached on all items per procedure. Consensus (more than 50%) was reached on all items per procedure.

One of the challenges in the increased need to provide of competencies achieved for workplace, criterion-based

CBME is the expectation that competent in performing procedural skills

Accepted 7 March 2016

DOI: 10.1002/cbe.2.1011

### ORIGINAL ARTICLE

## The operational definition of competency-based education

J. Gervais

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Email: [jennifer.gervais@uwrf.edu](mailto:jennifer.gervais@uwrf.edu)

## Competency-Based Education and Practice in Physical Therapy: It's Time to Act!

Jean Fitzpatrick Timmerberg, PT, PhD, MHS<sup>1\*</sup>, Steven B. Chesbro, PT, DPT, EdD<sup>2</sup>, Robin L. Dole, PT, DPT, EdD<sup>3</sup>, Zoher Kapasi, PT, PhD, MBA, FAPTA<sup>4</sup>, Diane U. Jette, PT, DSc, FAPTA<sup>5</sup>

Advances in Health Sciences Education (2022) 27:491–499  
<https://doi.org/10.1007/s10459-022-10098-7>

USA  
University, Chester, Pennsylvania, USA



### Entrustable professional activities versus competencies and skills: Exploring why different concepts are often conflated

Olle ten Cate<sup>1</sup> · Daniel J. Schumacher<sup>2</sup>

Received: 14 August 2021 / Accepted: 23 January 2022 / Published online: 28 February 2022

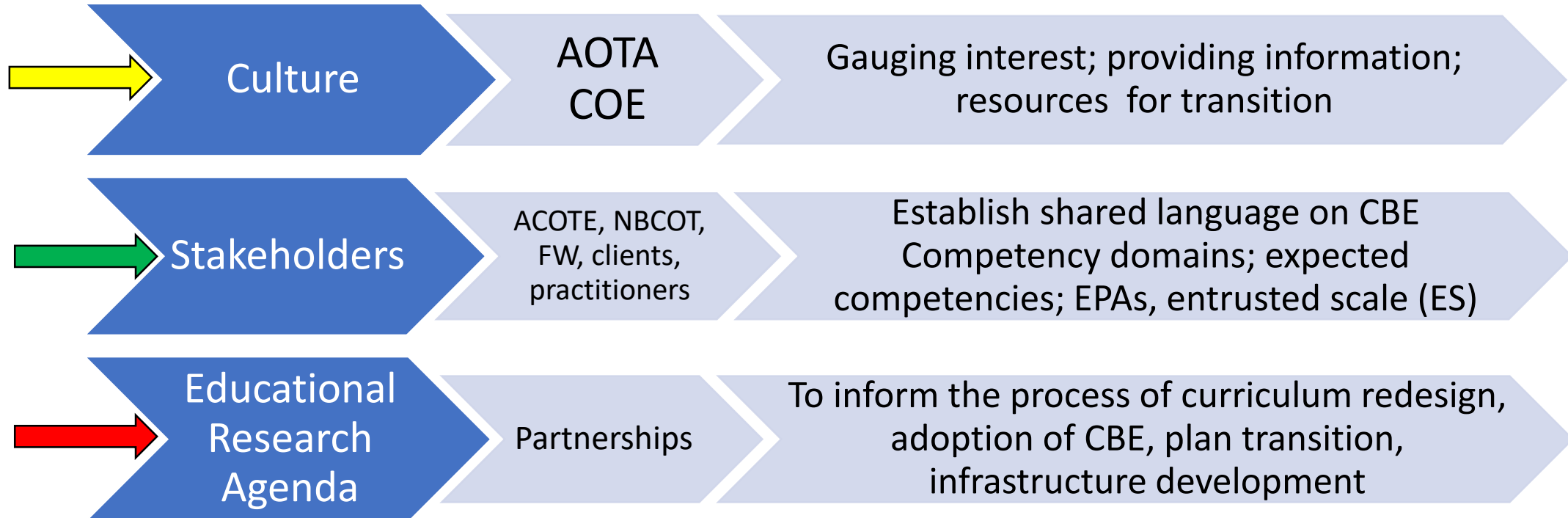
approach to educational design where learner standard defined performance outcomes for any “artists. Those outcomes are based on the health profession of health professions education programs, throughout one’s career—has the potential to in practice, potentially hindering delivery of the commonly understood language, standardized, and a process to assess whether competence exist the need for a shared language. (2) provide (4) discuss the most efficiently safe patient care needs of /-based system

WILEY

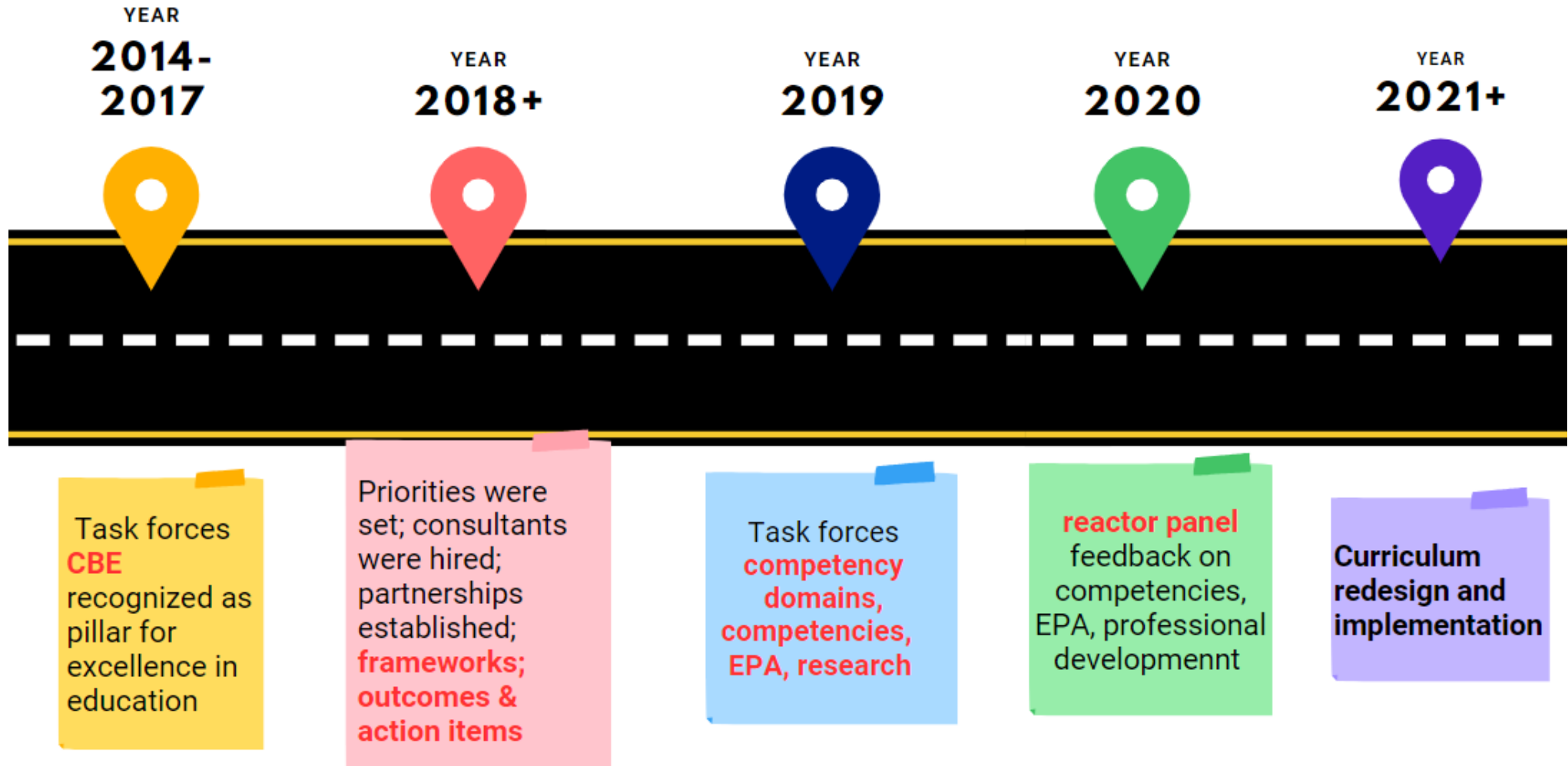
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THERAPY

# Preliminary Action Steps



# PHYSICAL THERAPY JOURNEY TOWARD CBE

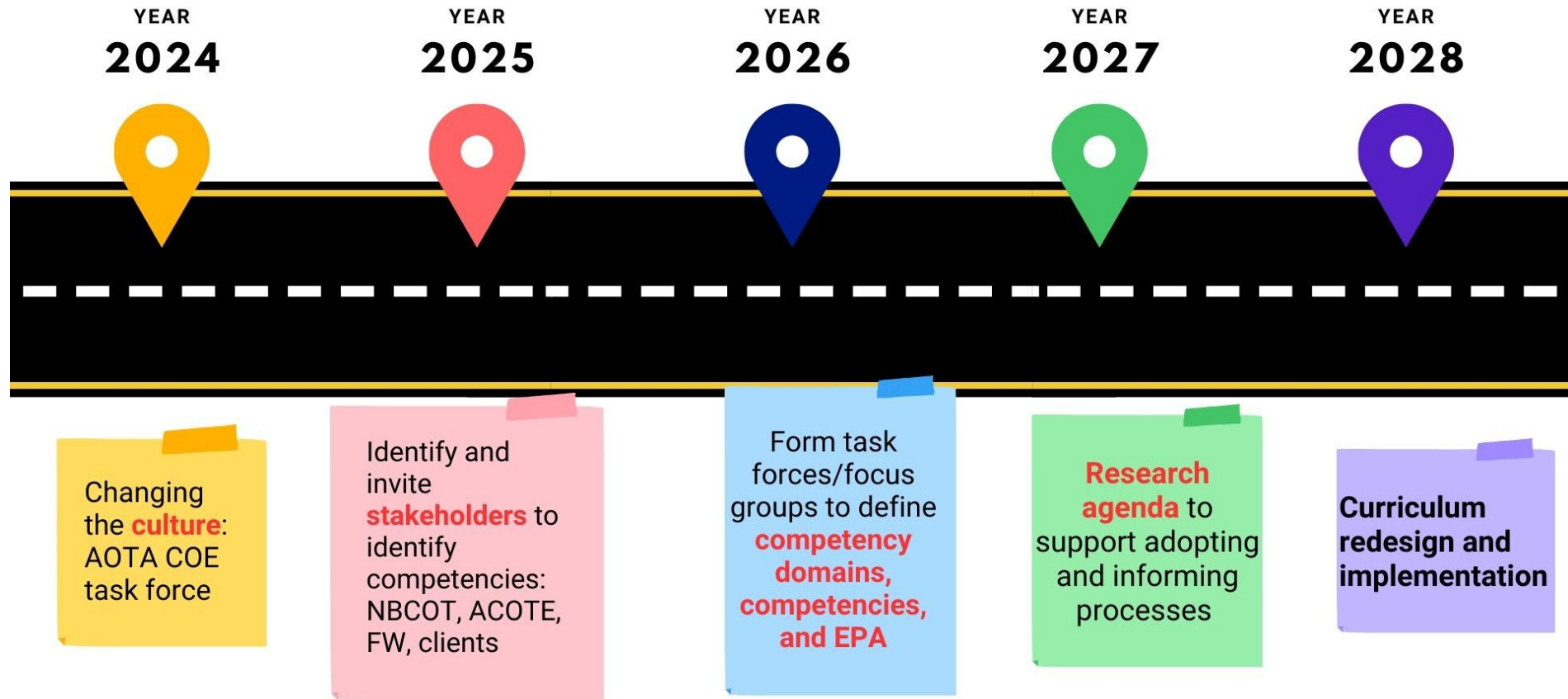


# Pillars of PT education

The path to achieving the vision for physical therapy education focuses on six pillars:

1. **Accessibility of Education**
2. **Collaboration and Networks**
3. **Competency-Based Education**
4. **Diversity, Equity, and Inclusion**
5. **Education Research and Data Management**
6. **Infrastructure, Capacity, and Faculty Development**

# 5 YEAR ROADMAP TOWARD CBE



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