Education is not the filling of a pail, but the lighting of a fire.

-William Butler Yeats



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- *The delivery of continuing education should intentionally inculcate the values and skills of lifelong learning, as well as support the development of knowledge and skills that maintain and enhance professional competencies.*



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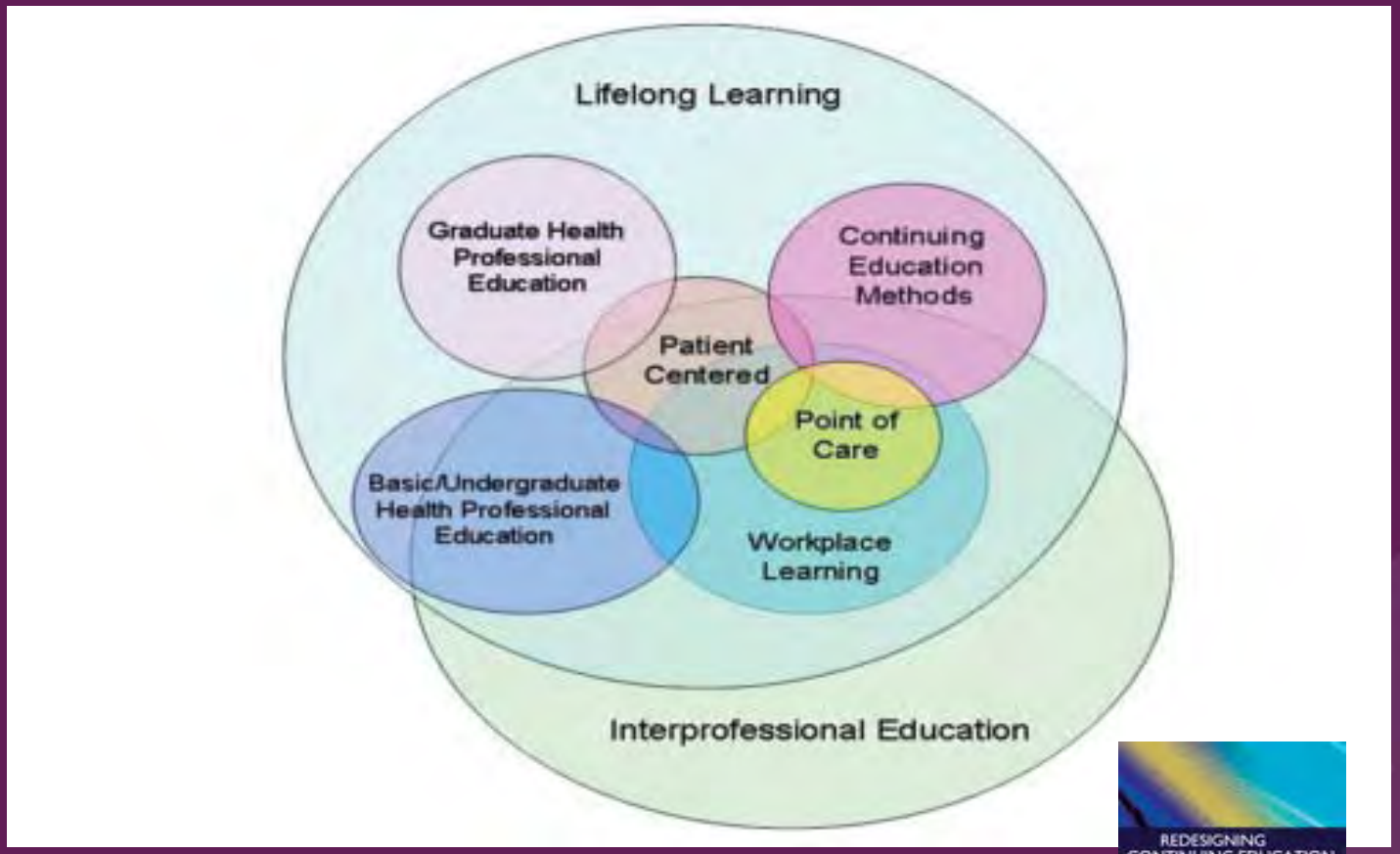
Problems and Prospects

1. Lifelong Learning and CE:
   The Same Difference?
2. Do Mandates Matter?
   You Can Lead a Horse to Water…
3. CE Outcomes:
   A Bridge to Nowhere?
4. Is There a Madness in Our Methods?:
   Emerging Models and Best Practices in CE
5. Concluding Thoughts
   and Crystal Ball Gazing



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1. Lifelong Learning and CE





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Lifelong Learning

- Lifelong learning can be regarded as "*an attribute involving a set of self-initiated activities and information-seeking skills with sustained motivation to learn and the ability to recognize one's own learning needs*." (Hojat, et al., 2009)

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Definition of CE

- The American Psychological Association (APA) regards CE as:

  an ongoing process consisting of formal learning activities that (1) are relevant to psychological practice, education, and science, (2) enable psychologists to keep pace with emerging issues and technologies, and (3) allow psychologists to maintain, develop, and increase competencies in order to improve services to the public and enhance contributions to the profession.
  (APA, 2000)

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Functions of CE

- To improve the quality of service delivery by increasing knowledge, skills, attitudes and performance.
- To enhance the effectiveness and safety of services.
- To provide accountability to the public.
- To assure professional competency

It does this by countering the naturally occurring entropic process of our knowledge and its inevitable obsolescence

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The Half-Life of Professional Knowledge

- "A useful measure for estimating the extent of obsolescence in various professions is the concept of half-life, a term taken from nuclear physics. The half-life of a professional's competence can be described as the time after the completion of professional training when, because of new developments, practicing professionals have become roughly half as competent as they were upon graduation to meet the demands of their profession" (Dubin, 1972).

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Clicker Question: If you were to stop learning anything new at this point in your area of practice or specialization, what do you think the half-life of your current knowledge might be?

a. 20-25 years
b. 15-20 years
c. 10-15 years
d. 5-10 years
e. 1- 5 years



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2. Do CE Mandates Matter?

You can lead a horse to water…



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North American CE Survey

Neimeyer, Taylor and Wear, 2010

- This survey was conducted in cooperation with the State, Provincial, and Territorial Psychology Associations throughout North America
- 93% of the licensing jurisdictions were represented in the sample
- A total of 6,095 licensed psychologists participated in the survey



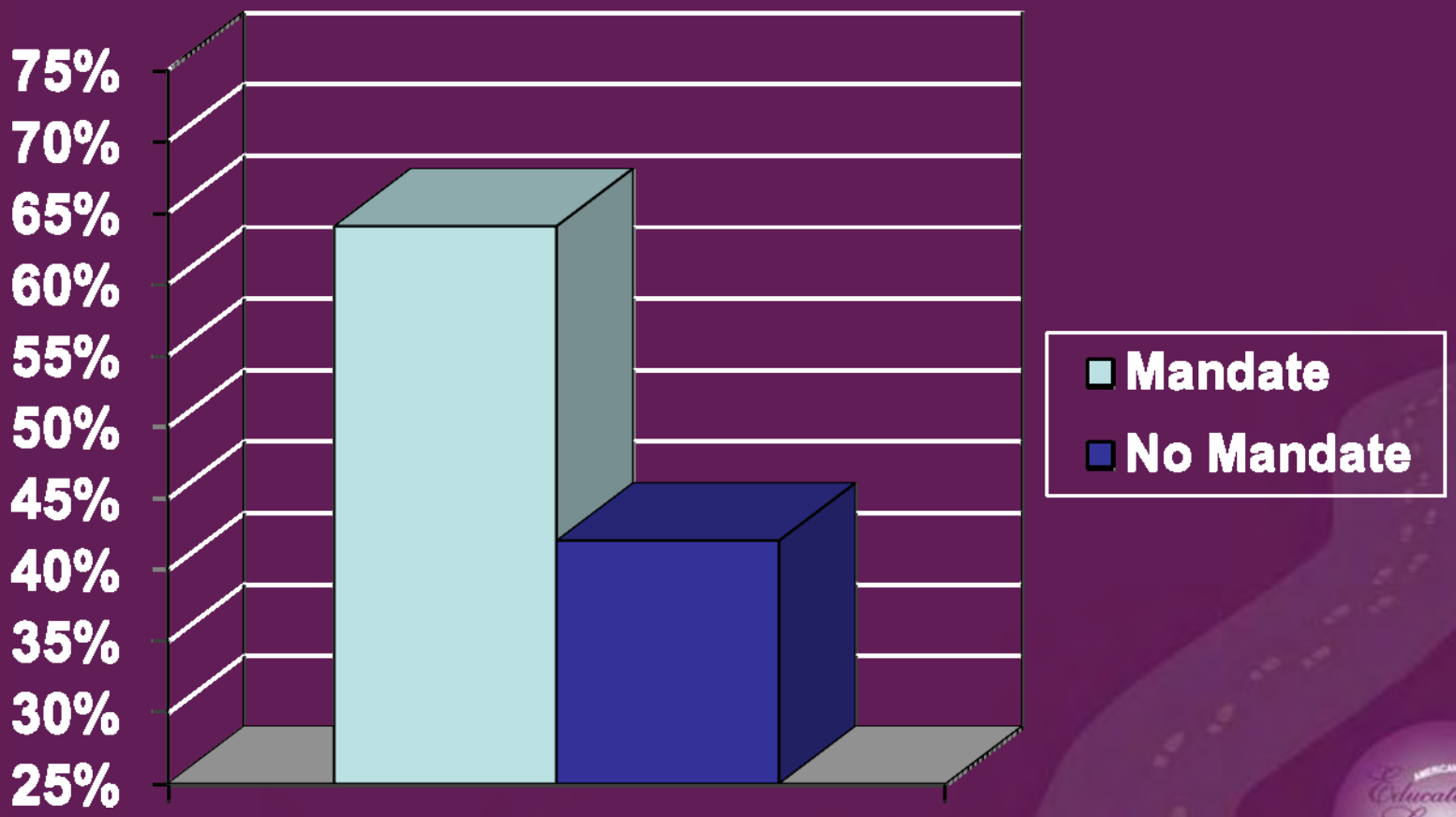
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- Mean Number of Reported CE Credits Completed Per Year for Mandated and Non-Mandated Psychologists (Cumulative Percentages)

Number of CE Credits	Mandated (n = 3,555)	Non (n =1,399)
0	1.0%	8.1%
5 or fewer	1.6%	18.0%
10 or fewer	9.6%	44.7%
15 or fewer	27.3%	63.9%
20 or fewer	59.9%	78.3%
25 or fewer	73.8%	86.4%
30 or fewer	84.4%	91.3%
35 or fewer	86.3%	93.0%
40 or fewer	91.8%	96.0%
45 or fewer	93.2%	96.3%
50 or fewer	96.3%	97.8%
100 or fewer	99.7%	99.8%

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Percentage of Mandated and Non-Mandated Psychologists Completing an Ethics Course



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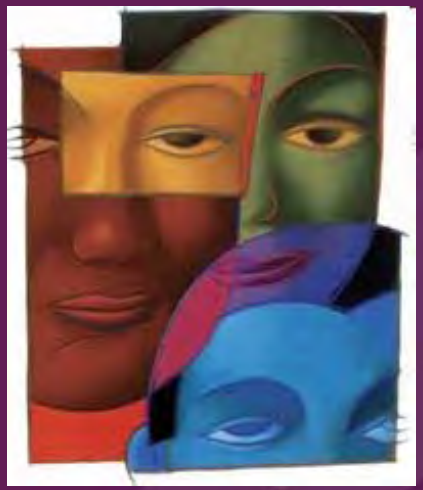
Do CE-Mandating States have more “Saints” and Fewer “Sinners” than Non-mandating States?



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- *"We are, all of us, just a little bit more human than anything else"*

-Gordon Allport-



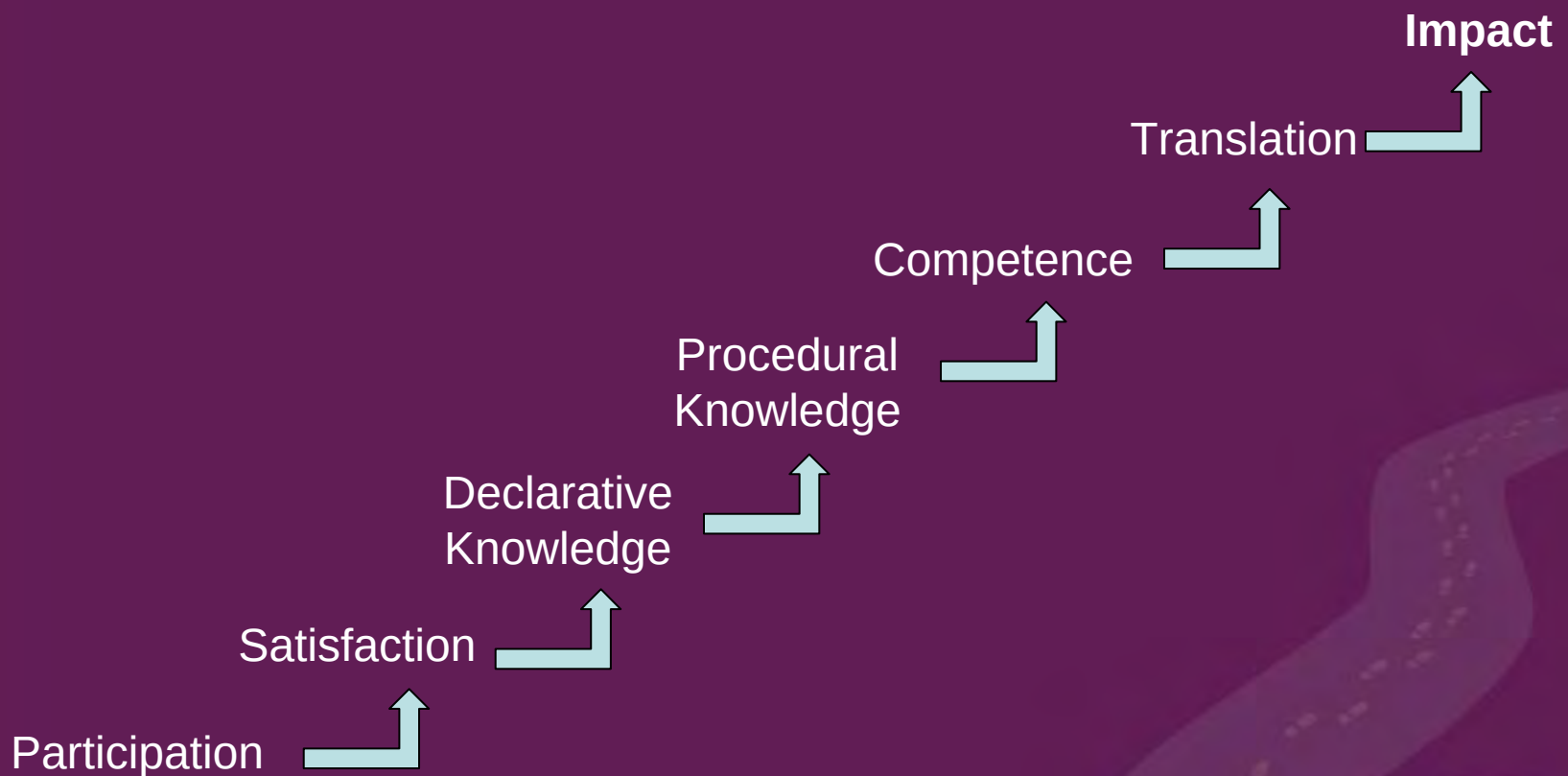
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3. CE Outcomes:
A bridge to nowhere?



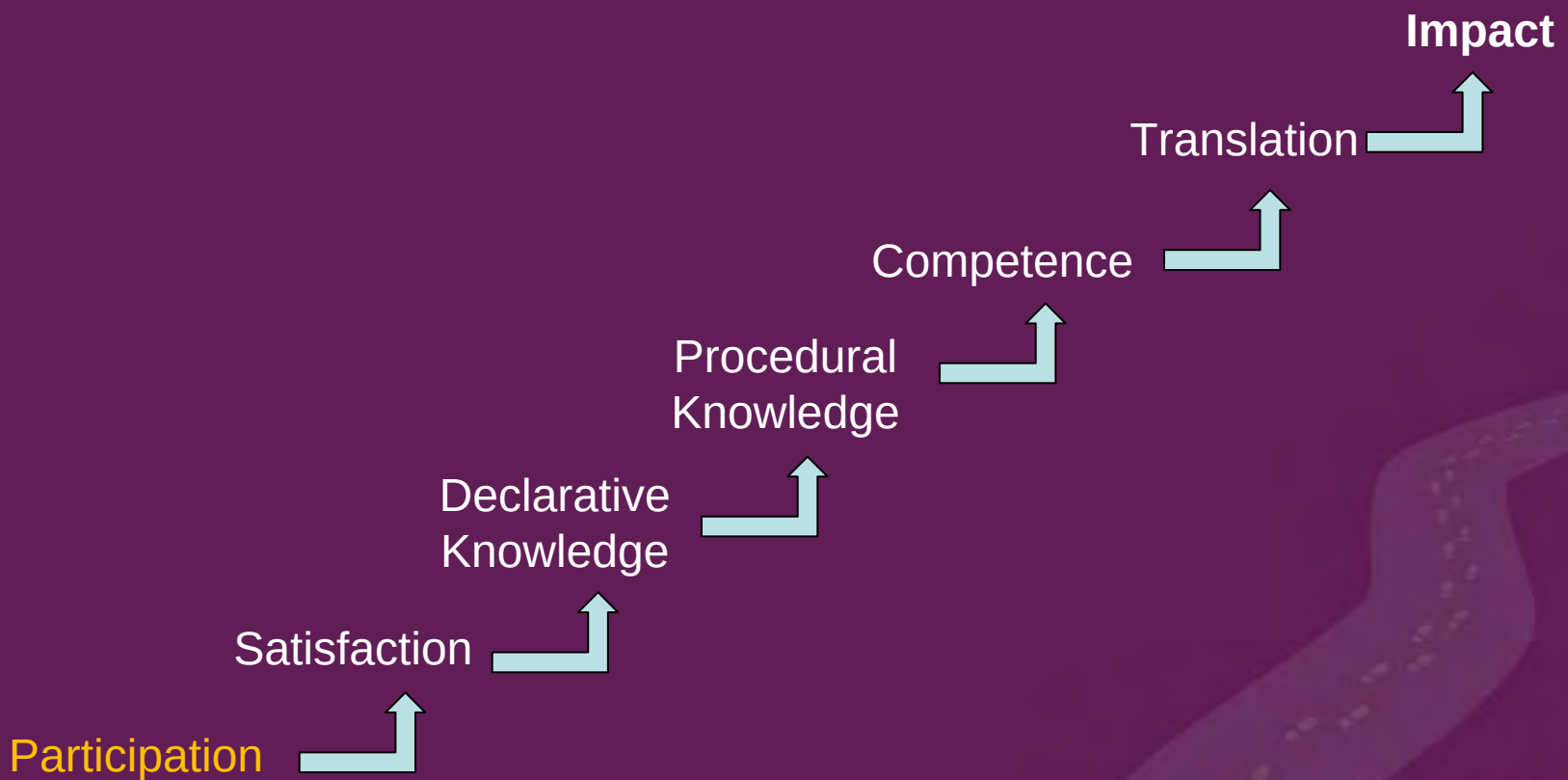
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A Continuum of CE Outcomes



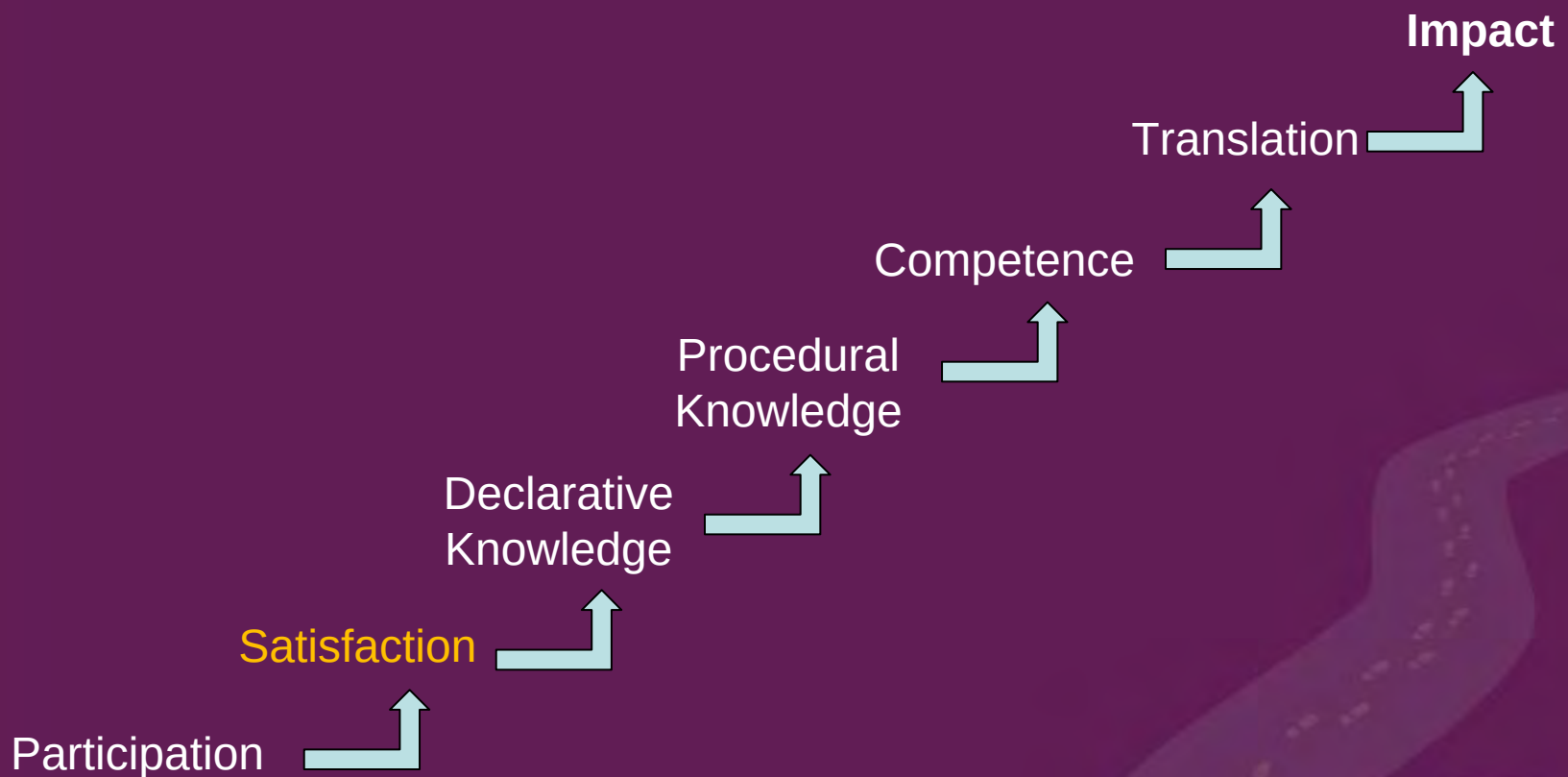
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A Continuum of CE Outcomes



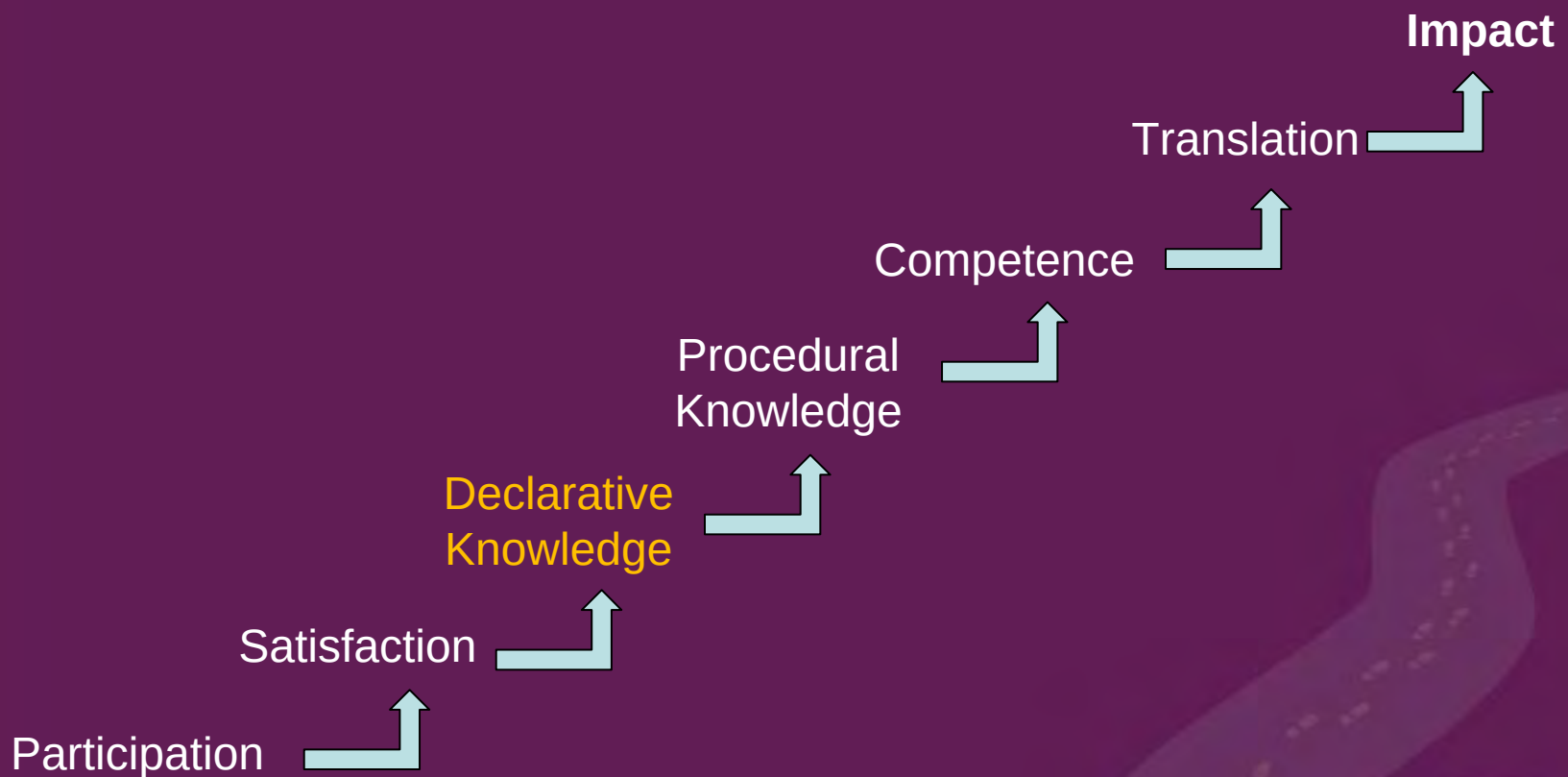
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A Continuum of CE Outcomes



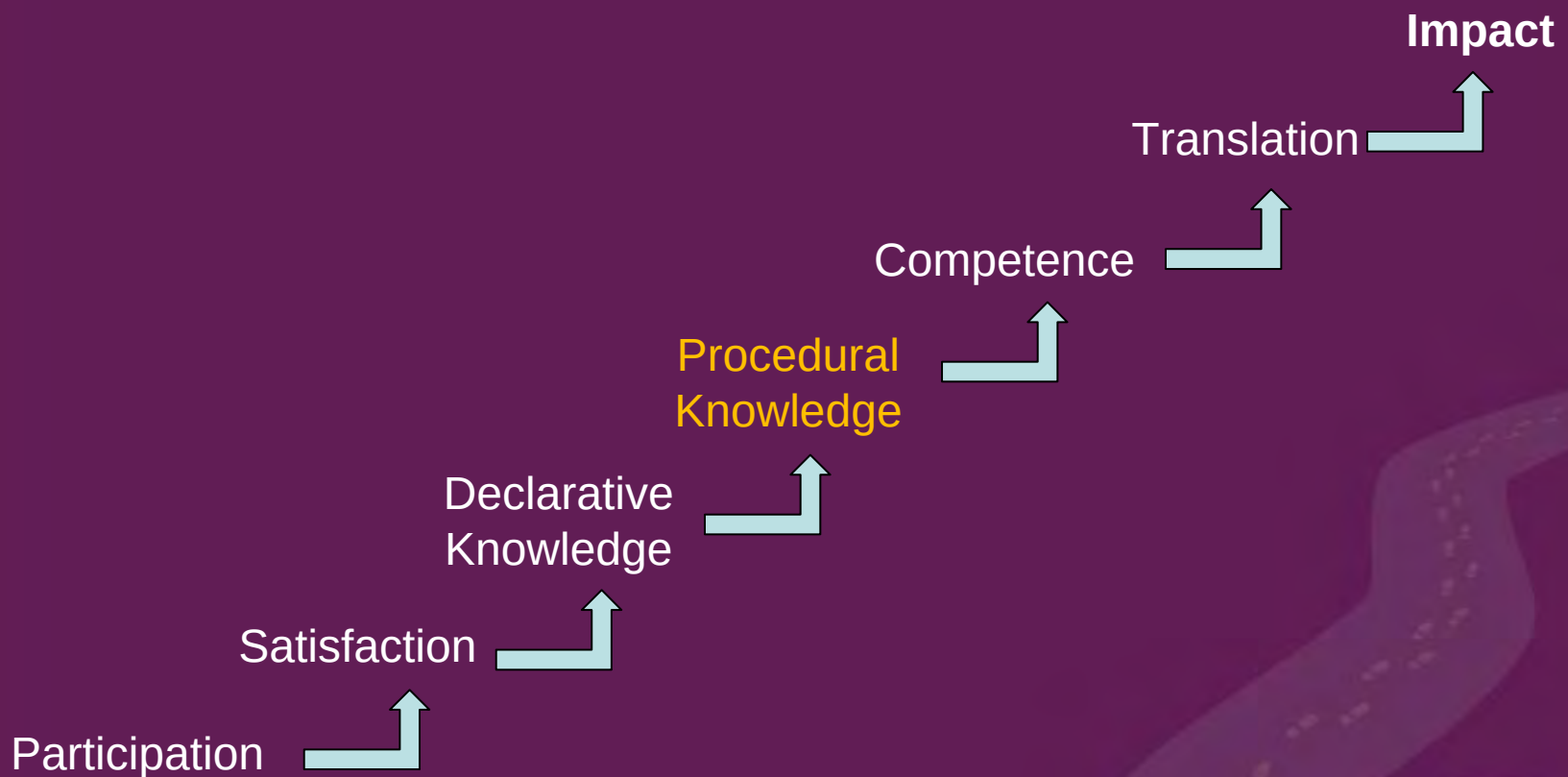
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A Continuum of CE Outcomes



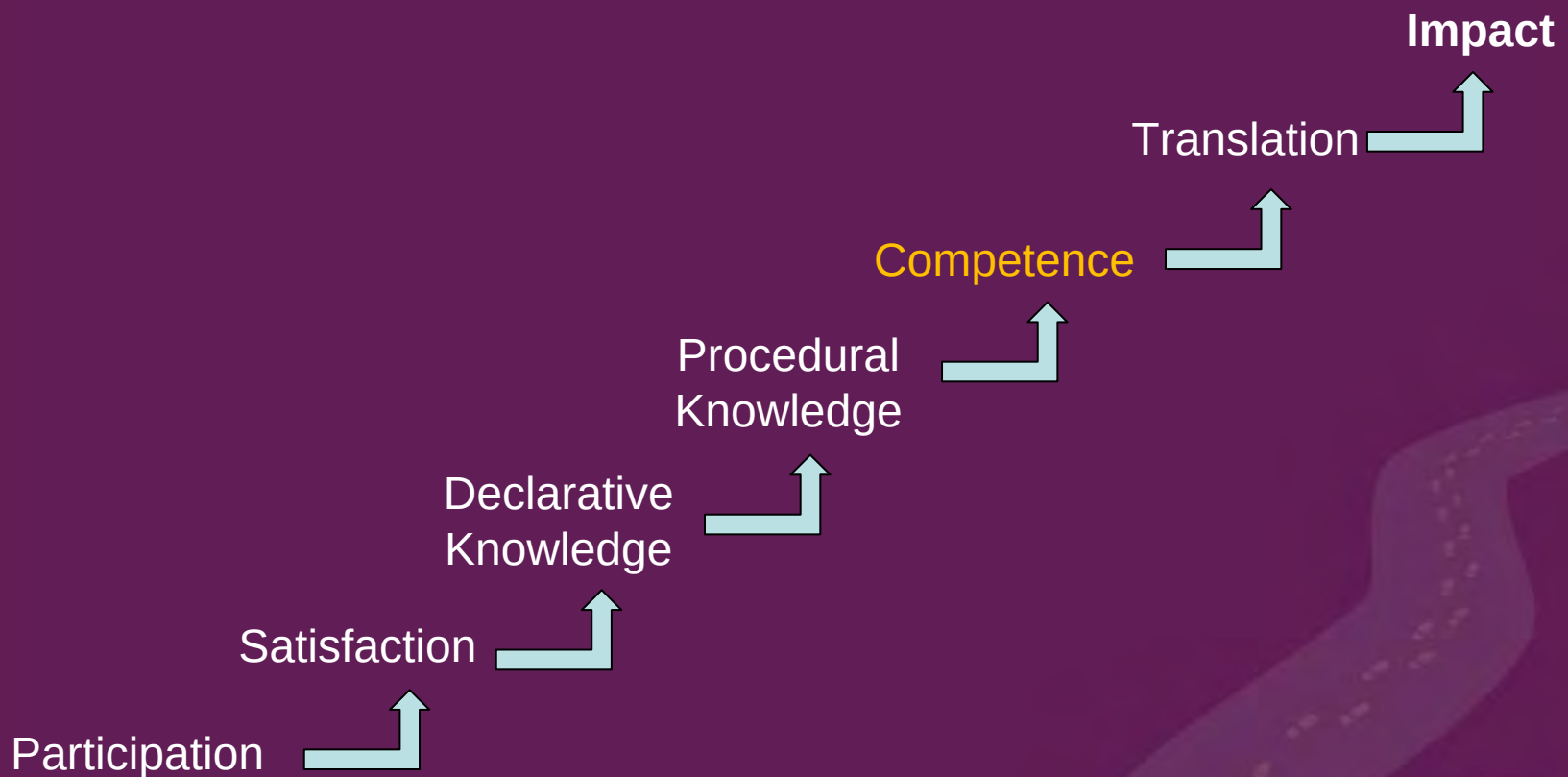
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A Continuum of CE Outcomes



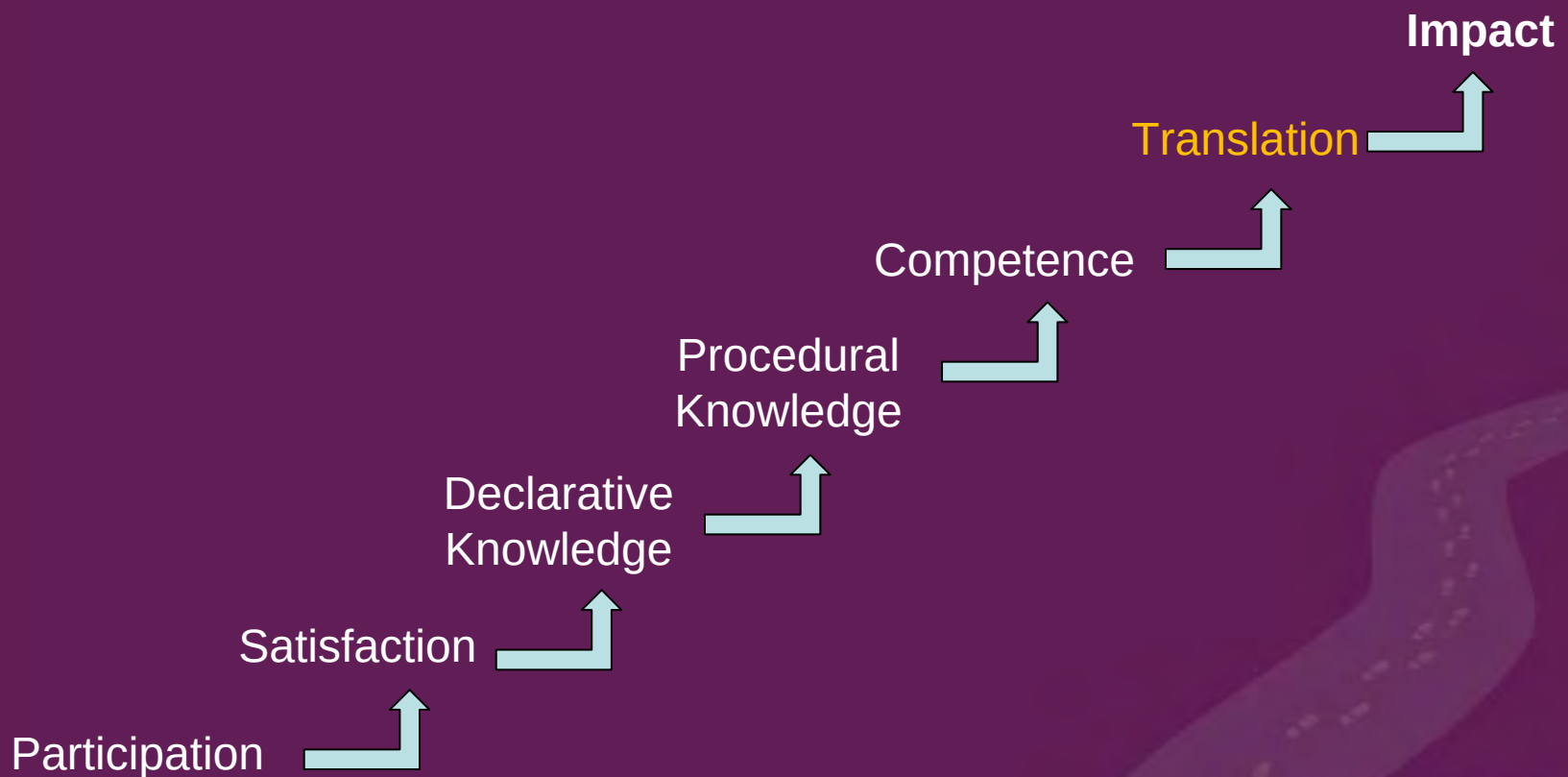
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A Continuum of CE Outcomes



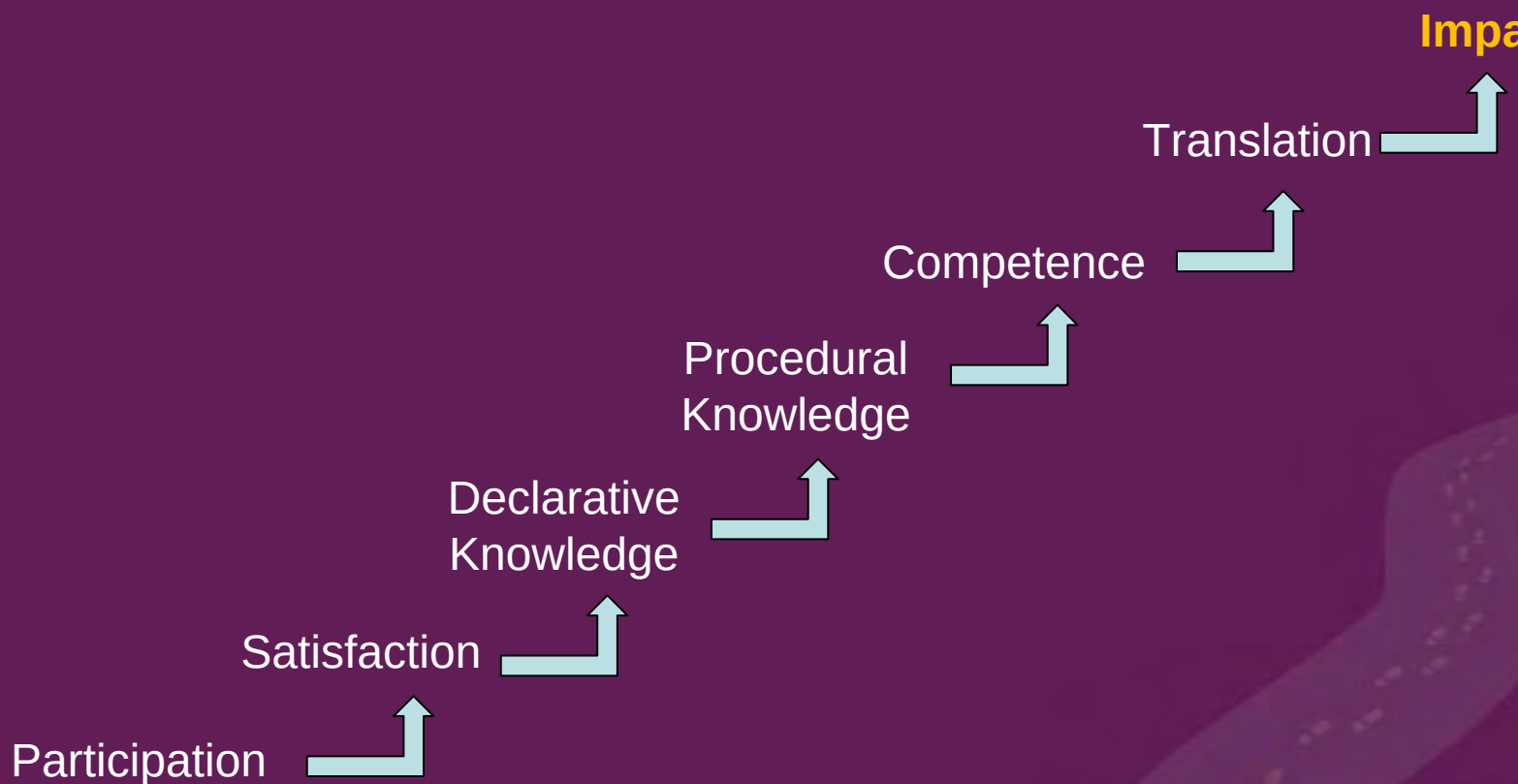
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A Continuum of CE Outcomes



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A Continuum of CE Outcomes



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Clicker Question: Which of the following has been the most commonly studied outcome in the CE literature?

a. Participant satisfaction
b. Declarative knowledge
c. Procedural knowledge
d. Competence
e. Translation into practice
f. Impact on service delivery outcomes

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- “It seems to us that in the current ‘culture of competence’ (Roberts, et al., 2005) providing a means of *assessing* ongoing competence ranks in importance with providing a means of maintaining competence.”
(Rodolfa, Shaffer & Webb, 2010)

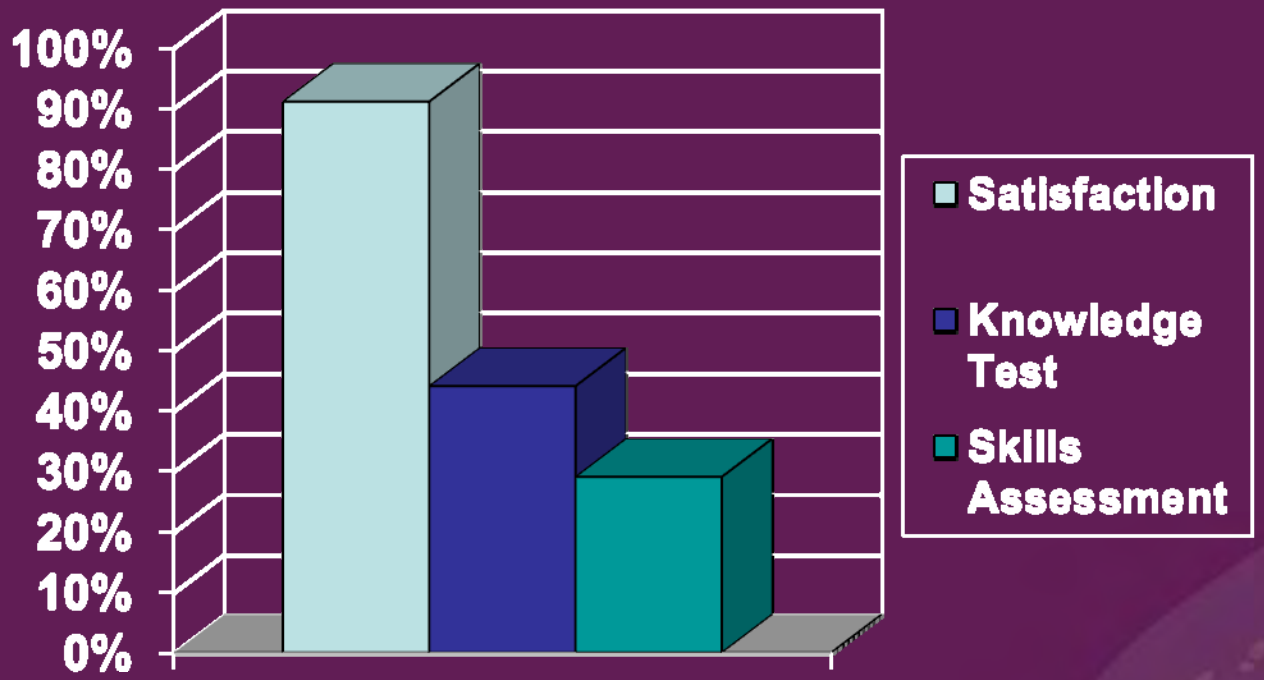


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Percentage of Psychologists Who Agree or Strongly Agree with the Assessment of their CE Experiences

(Neimeyer, et al., 2010)





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- Authentic, Embedded, Formative Assessment (BEA Task Force on Strengthening the Teaching and Learning of Undergraduate Psychological Science, 2008)
- Authentic Assessment deemphasizes rote learning and passive test taking in favor of real-world situations that push learners in the direction of more meaningful task-relevant construction, integration, and application of knowledge (Mueller, 2003). Consequently, authentic assessment is both direct and performance based, requiring learners to demonstrate proficiency by actually doing something in contexts that simulate the challenges faced in daily life.
- Teaching and learning are integrated in the practice of authentic assessment

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- So, what is the current state of the art in relation to the scientific study of CE and its outcomes?

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"If continuing education can be viewed as an essential part of a profession's natural evolution (Houle,1980), then professional psychology can be viewed as suffering a significant developmental delay." *As* it currently stands, the scientific study of CE in psychology "*can best be described as a pre-experimental patchwork of isolated surveys conducted largely on localized samples of convenience. These efforts have not yet risen to the level of programmatic research. And for that reason they have not yet demonstrated the methodological progression or systematic knowledge gains that would ordinarily accompany a sustained program of research. The discrepancy between the field's reliance on CE and its scholarly dedication to the understanding of CE is a striking, and now enduring, feature of its professional landscape."*

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- The current body of literature does not conclusively identify the most effective CE methods, the correct mixture of CE methods, or the amount of CE needed to maintain competence or to improve clinical outcomes. The literature does offer some guidance for improved learning, suggesting that CE should be guided by needs assessments, should be interactive, and should provide multiple learning opportunities and multiple methods of education (IOM, 2010).



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4. Is There a Madness in our Method?: *Emerging Models and Best Practices in CE*



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- The “Spray and Pray” technique (Shern, 2010)


&


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- The “Spray, Pray and Weigh” technique

 &  & 

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- Clicker Question: When you think of your formal continuing education experiences, what percentage of them would you characterize as "Spray and Pray"- type presentations?

  a. Nearly all (90% or more)
  b. The vast majority (75% or more)
  c. Most (over 50%)
  d. The minority (less than 50%)
  e. The vast minority (less than 25%)

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In its current form, CE consists primarily of didactic activities…. Lectures and conference sessions, long the mainstay of CE, remain the most commonly used CE methods. For physicians, … more than 82 percent of total hours of instruction are in the form of courses or series (e.g. grand rounds) (IOM, 2010).



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Alternative (or supplemental) Models of CE Delivery

- Problem-Based Learning
  (Barrows and Tamblyn, 1980)
- Intentional Learning
  (Palincsar, 1990)
- Reciprocal Teaching
  (Palincsar & Brown, 1984)
- Cognitive Apprenticeship
  (Collins, Brown & Holum, 1991)



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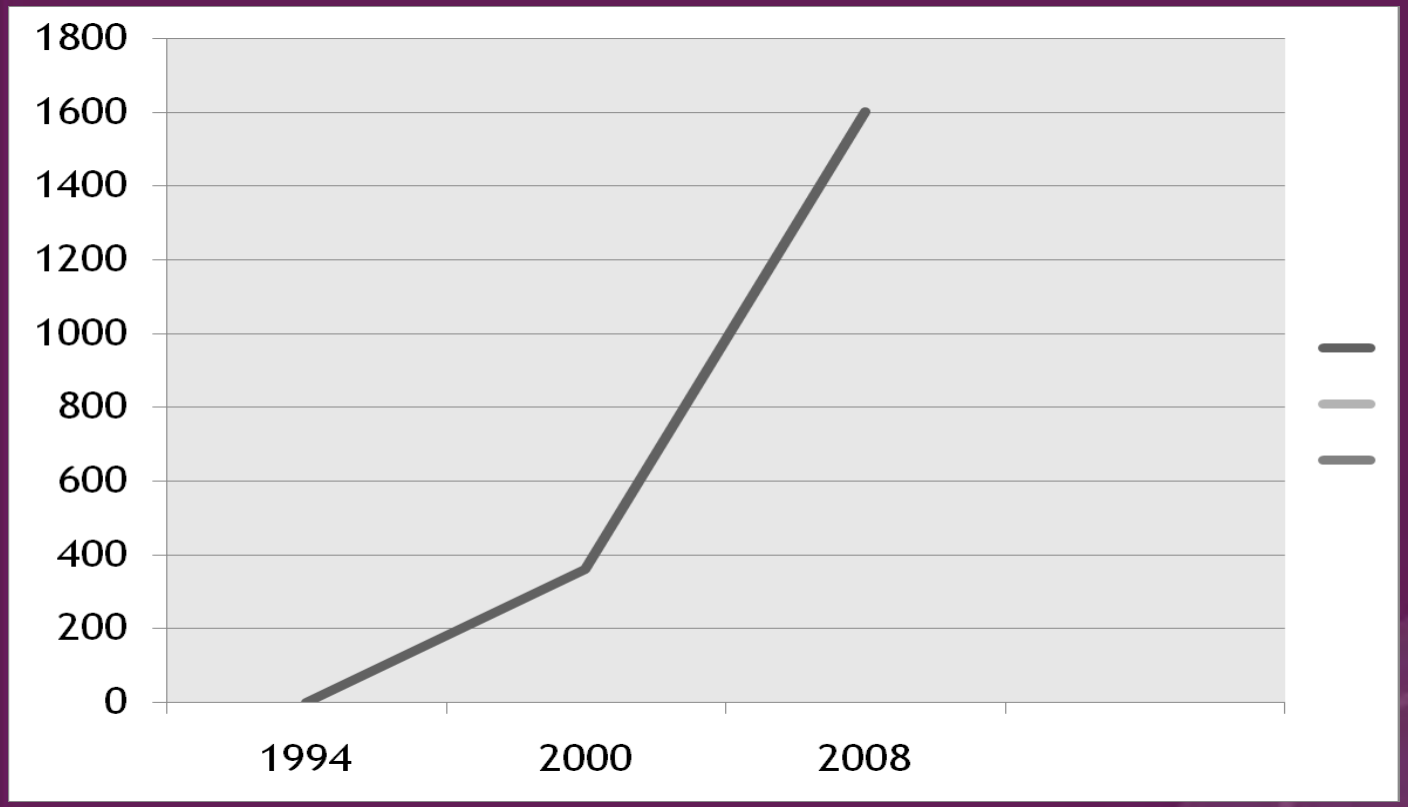
Emerging Models in Medicine: Workplace Learning

- Academic Detailing
- Point of service or just-in-time learning
- Workplace audits and feedback
- Reminders, protocols, checklists, flow charts



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World Wide Internet Use (in Millions)



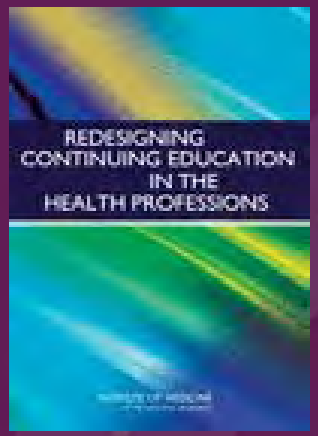
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Selective e-Learning Options

- Webinars
- Hybrid Webinars
- Internet-based case discussions
- Practice Reminders
- InfoPOEMS
- Micro- or Macro-system dashboards
- Low or High-Fidelity simulations
- Learning portfolios
- Podcasting
- 3G videos
- Phone-based videoconferencing
- POC Decision support tools (ePOCRATES, Up-to-date)
- Smartphone-based social networking

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- The findings of several notable studies (Davis et al., 1992, 1995,1999; Grimshaw et al., 2002; Grol, 2002; Grol and Grimshaw, 2003) are in general agreement that some methods are more "*predispose[d] toward success*" than others (Slotnick and Shershneva, 2002).
  -IOM, 2010



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Aspire 4 More

- Assess (needs, level)
- Simulate (high or low fidelity)
- Protocols (templates, checklists, flow charts)
- Interact (small group, Q & A, clickers)
- Reflect (opportunities to think and apply)
- Experience (personal relevance and application)
- -4-
- Multimedia/Multiple Exposure
- Organize (systematic, sequenced learning)
- Rehearse
- Evaluate (the experience and the learning)

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5. Concluding Thoughts

and Crystal Ball Gazing…

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"I'm afraid you've had a paradigm shift."

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Paradigm Shift in CE

- Technology
- Regulation and Accountability
- Competency Movement
- Internal Interests in Best Practices

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Psychology and CE

- Clarion theoretical conceptualizations
- Theories of learning and models of education
- Data-driven, evidence-based practices

  Are we dedicating the very best that we have to offer as a discipline to our own development, our own growth and our own competencies?

- Make every professional development experience an opportunity for discovery, application and genuine education

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- *The purpose of education is to replace an empty mind with an open one*. Malcolm Forbes



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