# § Student Leadership

# Forum

A Brief History of NBCE Exam Development & Scoring

Presented by:

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**NBCE Vice President of Testing** 









## Mission

Ensuring professional competency and public safety through excellence in testing.





## Vision

Doctors of Chiropractic are universally regarded as highly qualified, competent professionals.

# About The NBCE Values





**Lifelong Learning** 



Integrity



**Fairness** 



**Transparency** 



Accountability







### The NBCE exists to safeguard the public.

NBCE exams offer assurance to the general public that, regardless of where a chiropractor received their education, they possess sufficient knowledge of the basic and clinical sciences in conjunction with the necessary skills to practice chiropractic safely and effectively.



#### **Before the NBCE...**



NBCE Founder -Gordon L. Holman D.C.

Before the formation of the National Board of Chiropractic Examiners (NBCE), chiropractic candidates took the same basic science exams as medical doctoral candidates.



NBCE Headquarters in Cheyenne, Wyoming

Since each state created their own exam, testing was not standardized across the country, which did not uphold a uniform high standard of chiropractic.

#### **NBCE Formation**



The Federation of Chiropractic Licensing Boards (FCLB), commissioned a study that considered the formation of a national testing organization that would provide the same standardized exams throughout the country. This allowed all chiropractic candidates to be tested on the same merit, regardless of where they received their education.



# **NBCE Early History**

to 1,200 examinees for Part I, II and PHT.

1965



1963

NBCE incorporated in Texas with our first office in Cheyenne, Wyoming. Moved to current headquarters in Greeley, Colorado.

1990



1987

Part III Exam is introduced.



1993

The first Practice/Job Analysis Survey is conducted.

Part IV Practical Exam is introduced.

1996



# **NBCE Recent History**

Acupuncture Exam introduced.

Ethics and Boundaries Assessment Services (EBAS) is spun off as an NBCE whollyowned, for-profit subsidiary.

CBT/Part IV Advancement & **Development Project** initiated.

2023

2003









2013







2002

**Special Purposes** Examination for Chiropractic (SPEC) becomes NBCE's first computerized exam.



2009

International Board of Chiropractic **Examiners** is established.



2019

**NBCE** converts all written exams to Computer-Based Testing. 2024

**CBT** changes implemented for Part I, II, III, and PHT.



# The Doctors Behind Exam Development and Scoring

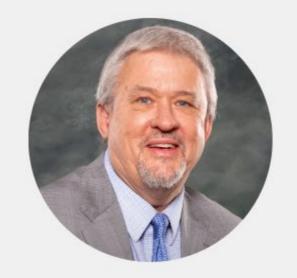


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Computer Based Testing Manager



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Director of Psychometrics & Research



## **How Exam Questions Are Chosen**





#### Parts I, II and PHT

- College curricula dictates exam content.
- Faculty from chiropractic colleges as well as state board members throughout the United States participate in test development committees to approve content to be used on these exams.





#### **Parts III and IV**

- State board and chiropractic college faculty members meet multiple times throughout the year to evaluate content that will appear on these exams.
- Input from state board members and results from the Practice Analysis of Chiropractic ensure that the exams reflect what chiropractors expect to experience in practice.







NBCE Exams provide an independent third-party assessment of a chiropractor's readiness to practice, regardless of the school they attended or the state in which they choose to practice.

#### The passing score is established through a process called 'standard setting':



- Committee members incorporate their knowledge of examinees, curriculum, and instruction as
  they analyze and rate each question. Through discussion with their colleagues, they determine
  what examinees should know and be able to do before determining the *final cut score*.
- Passing scores are periodically reviewed and re-examined when there is a significant change in a test plan.

#### Debunking the

# **Bell Curve Myth**

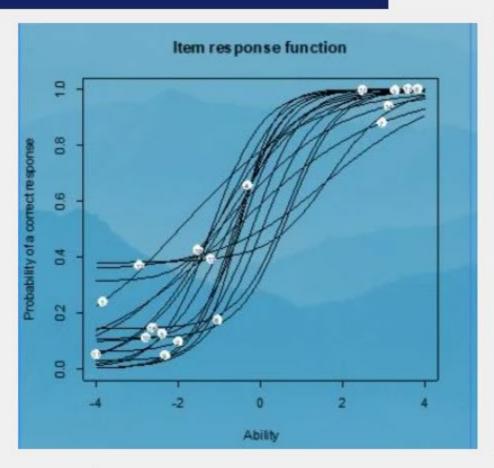
The NBCE does not predetermine the number or percentage of examinees who will pass any of its exams.

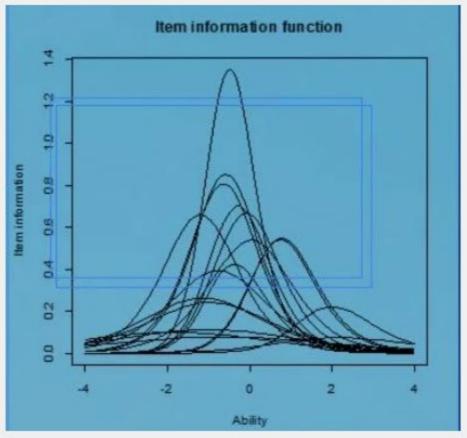


- Theoretically as many as 100% could pass....or the passing rate could potentially be 0% if students do not meet the *cut score*, which establishes minimal competency to be a licensed chiropractor.
- Passing is based on individual performance, not on an established distribution of scores.

#### Debunking the

# **Bell Curve Myth**





Exams are graded using *Item Response Theory* calculated with a *three-parameter logistic*. These parameters discern an exam question's (also known as item) *difficulty*, ability to *discern* between knowledgeable candidates, and the probability of an unknowledgeable candidate providing a correct response by *chance*.



# Multiple Steps of the Scoring Process







## Contact us.....



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