



Considerations for Curricular Development & Change

Donna Mannello, DC Logan University



Cultural Authority

- Chiropractic is constantly striving to attain higher levels of clinical recognition, respect and influence.
- Not just for survival, but as a matter of professional growth consistent with the professions ideals and goals in the healthcare arena.



Chiropractic Education

Improving the quality of chiropractic education through curriculum evaluation needs to be a continuous process.

Chiropractic education has to be responsive to new scientific developments, evolving practice patterns and societal demands.



National Research Council (2001)

- Description Educational standards define the knowledge and skills students should possess at critical points in their educational career.
- Standards serve as a basis of educational reform as educators and policy makers respond to the call for a clear definition of desired outcomes of schooling.



National Research Council (2001)

- Standards also necessitate ways of measuring student success in terms of outcomes.
- A method for determining student performance nationally are standardized examinations which have created bench marked standards of expected performance and knowledge.



General Competencies and Accreditation in Medical Education

- Standards are dictated by a profession or educators and reflect a measure of accountability.
- Accreditation bodies are responsible for discerning and maintaining publicly recognized good education standards including developing and the deployment of competencies.



Current Educational Standards

- From historical accounts of the professions educational transformation from proprietary to a more cohesive chiropractic curriculum took many years and required a coordinated effort from the FCLB and CCE.
- Having a clearly established curriculum and educational standards has also led to greater credibility and legal defensibility.



The FCLB is affiliated with NBCE

The National Board of Chiropractic Examiners has committed itself to the development and administration of quality examinations. The results of these along with academic records are utilized by state licensing boards in their determination of a graduates academic and clinical competency.



NBCE Examinations

The sequence of these examinations reflect the curricular framework from most of the colleges.

The sequence is also consistent with the most commonly utilized educational curriculum format Bloom's Taxonomy.



Prescriptive Standards

- Recently 50 individuals affiliated with CCE were surveyed as part of the work of the CCE Task Force of Accreditation Standards and Improvements.
- There were 6 questions dealing with current standards strengths and weaknesses.
- Overall the comments were positive, a recurring theme was too prescriptive.



Thoughts

- Prescriptive versus lock-step format.
- What constitutes an innovative curriculum?
- Types of curricular designs and which will best meet educational goals for our students.
- Curriculum design needs to focus on clinical competencies.
- What knowledge or skills should a student possess before interacting with patients?



ABC of learning and teaching in medicine (BMJ 2003)

- There are 2 types of prescriptive models:
 - Objectives are defined and are then used to determine content, teaching and learning strategies, assessment and evaluation.
 - Identify educational experiences likely to attain the objective
 - Outcomes based education
 - To produce graduates with knowledge and skills for recognizing and treating common conditions.



Lock-step Format

- Lockstep means that all students in a group take the same courses for the duration of the program. There is little or no variation.
- Sequence is dictated but still may fall under various hierarchies of curriculum design.



Synthesis of Curriculum Designs

- Academic: start with the basics and expands
- * Technical: hands on primarily vocational
- Intellectual processes: problem solving
- Social: provides students the ability to work in the real world (secretary, CA, assistants)
- Personal: learner centered
- Integrated: blending of approaches



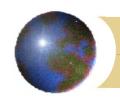
Intellectual Processes

- This curriculum design deals with the development of cognitive processes such as critical thinking and problem solving first, then on the context and content of the learning situation.
- Current research about cognition reveals that the student has to have prior or basic level of knowledge with respect to this processes.



Integrated Curriculum Design

- Starts with the fundamentals or foundation courses such as basic sciences.
- Incorporates defining elements of the discipline and the complementary courses.
- Achieve the application.



Challenges

- Which ever curriculum design is utilized there are still basic levels of knowledge that are necessary before moving into the steps of comprehension, application, analysis, synthesis and evaluation.
- When students are placed in the application level prior to understanding the relevance they will resort to mimicking the instructor.



Early Patient Interaction

- Becoming a physician is a process which requires advanced knowledge level, skill set and ethical basis.
- Before patient interaction occurs a student needs to appreciate the significance of patient care, the scope of practice, extent of conditions and appropriate clinical steps.



Early Patient Interaction

- There is a logical sequence to the way most individuals learn and repetition is useful.
- A logical sequence does not exclude flexibility in curricular design.
- There are other options such as assessment center projects with standardized patients, incorporating problem solving.



Clinical Competency

- Whatever approach we take the end result is that our students acquire the necessary skills to be a competent and successful physician.
- The ability to standardize and measure skills is essential, but the tools utilized must demonstrate reliability and validity.
- Lack of any of these components will undoubtedly lead to controversy and undermine the profession.