



Discover the leading global community
of spine surgeons

Advancing
spine care
worldwide

7 Principles for AOSpine Education

Backwards Planning

Joseph S Green

PhD

Chief Learning Officer (retired)

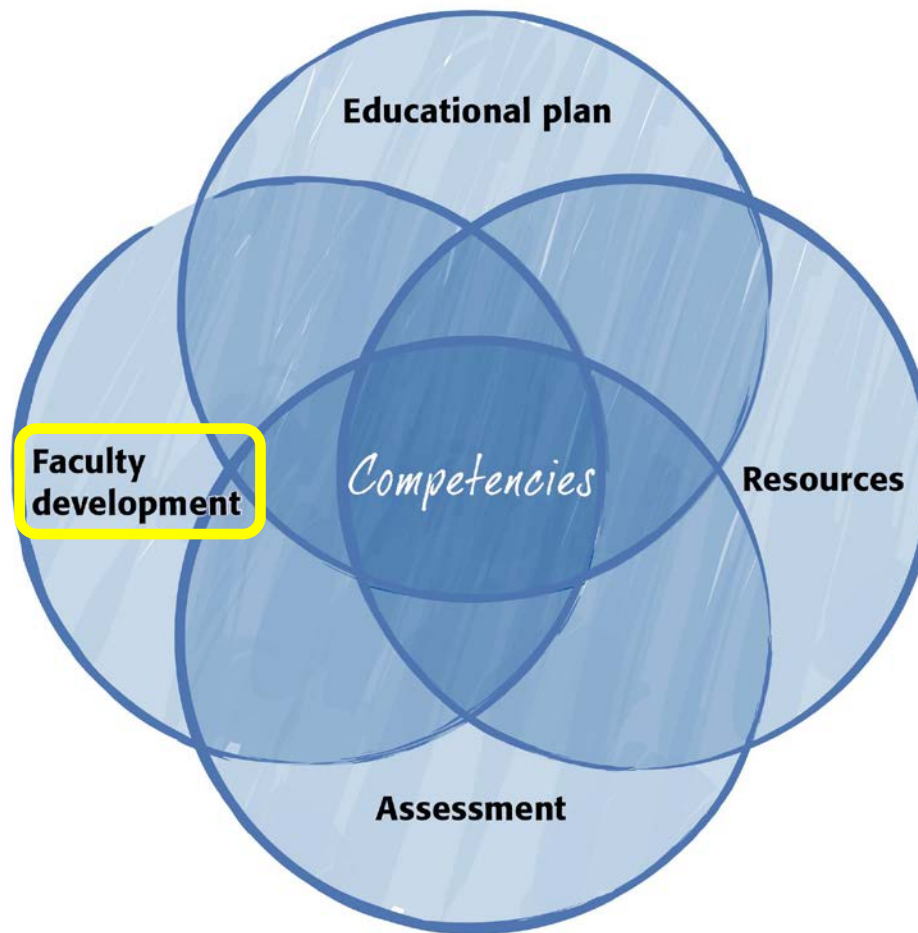
American College of Cardiology

Organizational and Learning Strategist

Duke Center for Educational Excellence

INTRODUCTION

Quality Education



7 AO Educational Principles

- Based on needs** 1
- Motivates to learn** 2
- Relevant** 3
- Interactive** 4
- Provides feedback** 5
- Promotes reflection** 6
- Leads to verifiable outcomes** 7

III. PLANNING (BACKWARDS)

6. PROMOTES REFLECTION

7. LEADS TO VERIFIABLE OUTCOMES

III. PLANNING (BACKWARDS)

Based on needs 1

Motivates to learn 2

Relevant 3

Interactive 4

Provides feedback 5

Promotes reflection 6

Leads to verifiable outcomes 7

Theoretical Concepts

- Reflective practitioner—Donald Schön in 1970's and 80's
- Reflecting “in practice”—thinking on one's feet to inform our actions
- Reflecting “on practice”—after the encounter to explore why we did what we did

Seek Environment that encourages critical *self-reflection & peer collective inquiry*

- Adults use self-diagnosis model
 - Identify desired competencies
 - Engage in objective self-assessment
 - Measure the difference
 - Evaluate peers' performance
- Peer collective inquiry-safe and effective
- Reflection
 - Return to experience
 - Attend to beliefs, feelings and values
 - Re-evaluate experiences

The Reflective Practitioner (Donald Schön)

- “Knowing in action”
 - Dynamic execution of work
 - Similarities with similar cases

- “Reflection in action”
 - Spontaneous experimentation to solve problem
 - Use of knowing, acting and reflecting

- “Reflection on action”
 - Reflection on prior performance
 - Outside immediacy of work

Implications for Faculty/Course Chairs

- Provide opportunities in learning experience to reflect on what is being learned and what can be incorporated into practice
- Assist learners to question their own practice
- Help them to decide what innovative approaches to use in their practice
- Encourage a commitment to change and improve

References

6. Promotes Reflection

- Schon, D. *The Reflective Practitioner. How Professionals Think in Action*, London: Temple Smith, 1983
- Boud, D., Keogh, R., & Walker, D. (1985). Promoting reflection in learning: A model. In D. Boud, R.Keogh, & D. Walker (Eds.) *Reflection: Turning experience into learning* (pp. 18–40). London: Kogan Page.
- Bennett NL, Fox RD, Davis DA. Feedback and reminders: tools for change in the practice setting. In: Davis DA, Barnes BE, Fox RD, eds. *The Continuing Professional Development of Physicians: From Research to Practice*. Chicago, IL: AMA Press; 2003:221–240.
- Fox RD, Mazmanian PE, Putnam RW. *Changing and Learning in the Lives of Physicians*. New York, NY: Praeger; 1989.
- Wakefield J. Commitment to change: exploring its role in changing physician behavior through continuing education. *J Contin Educ Health Prof*. 2004; 24~4!:197–204.

III. PLANNING (BACKWARDS)

Based on needs 1

Motivates to learn 2

Relevant 3

Interactive 4

Provides feedback 5

Promotes reflection 6

Leads to verifiable outcomes 7

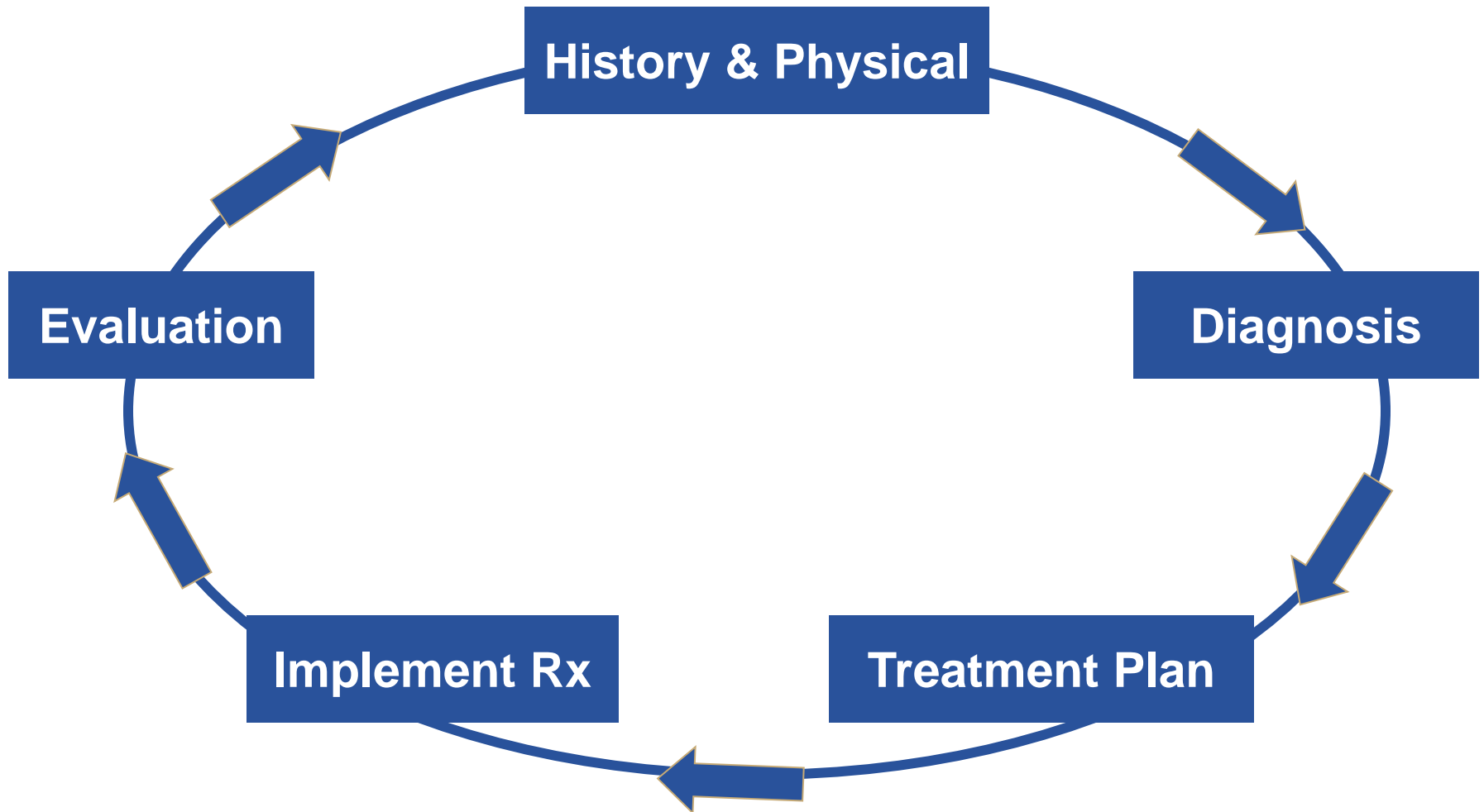
Theoretical Concepts

- Seven levels of outcomes for driving needs assessment and outcomes evaluation
- These outcomes serve as the starting point for “backwards planning”
- Pre-disposing, enabling and reinforcing activities to assure outcomes

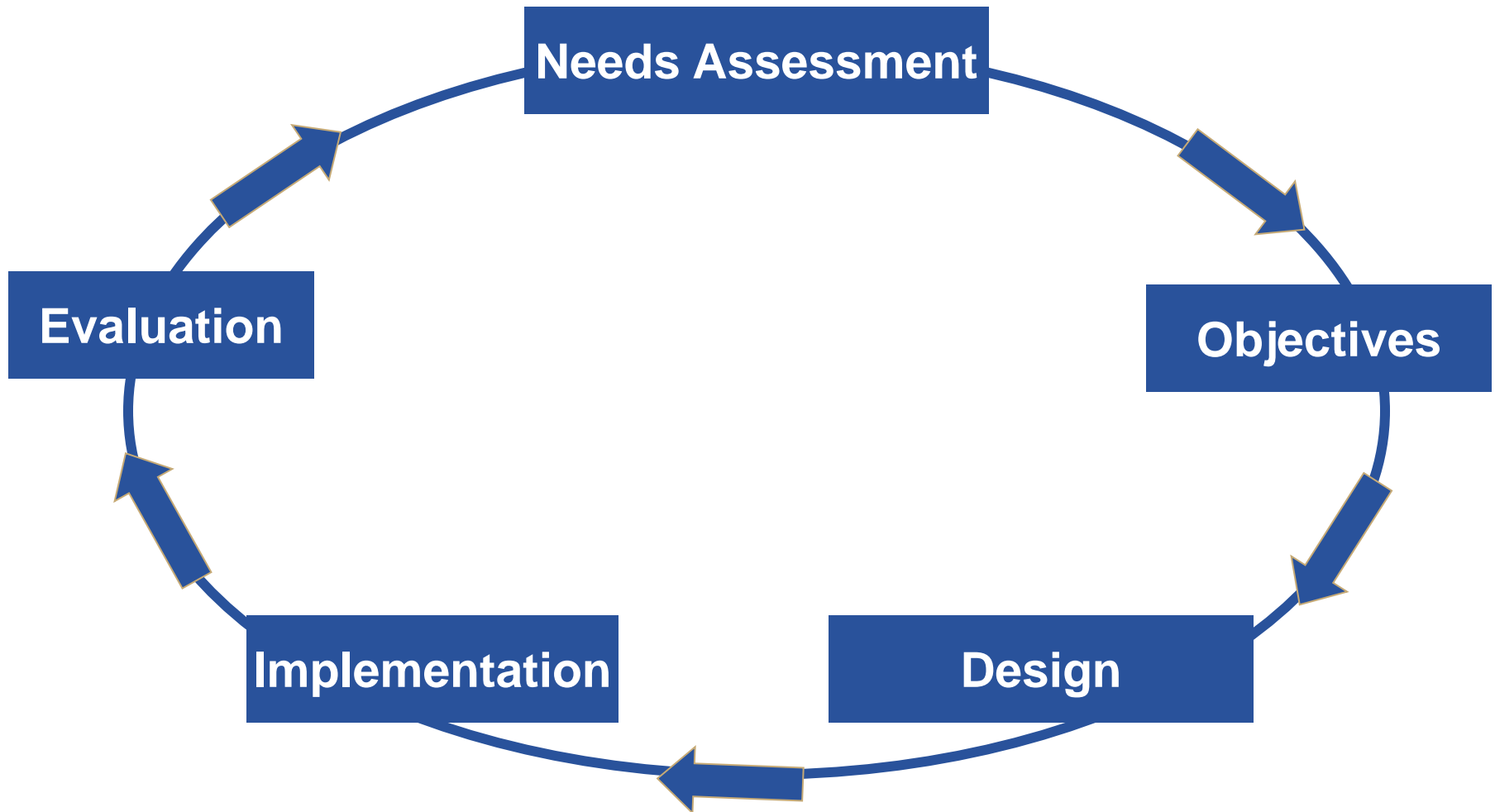
Traditional Planning Model – Simple, but Ineffective

- Decide on topic
- Select faculty
- Faculty select content/methods
- Assess success
 - #'s
 - \$\$
 - happiness

Medical Model



Professional Educational Model



Levels of Outcomes for CME

CHAIRS – Target outcomes at levels 4-5!

- Levels of outcomes:
 - Participation (1)
 - Satisfaction (2)
 - Learning
 - Knows (3A)
 - Knows how (3B)
 - Shows how (4)
 - Performance (5)
 - Patient Health (6)
 - Community health (7)

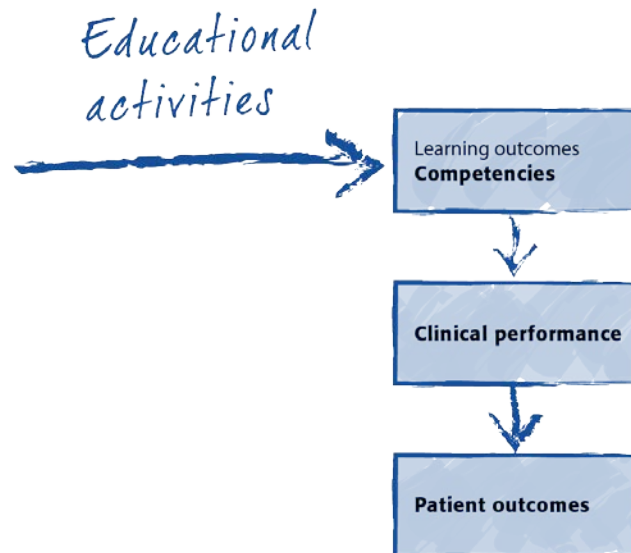
Start with the end in mind

Identify desired results (outcomes) early

Use these data:



To plan this activity:



EXAMPLE of BACKWARDS PLANNING

- What is the patient care problem?
- Who is involved in this issues?
- Is the problem related to patient outcomes, physician behavior, competencies or knowledge?
- Can learning experiences impact physician performance?
- What are the necessary learning activity outcome measures?
- What are the best educational formats and methods to bring about these outcomes?
- Who are the best faculty and what is the best content?

Challenge Assumptions of the Faculty Role!

- Don't use same formats and methods just because you have always done it that way
- Expand your comfort with new formats and methods
- Learn about new educational methods: *“From Curricular Goals to Instruction: Choosing Methods of Instruction”* Patricia Thomas, MD and David Kern, MD, MPH (in *Methods for Teaching Medicine*)
- Use methods that:
 - Tied to competencies and key learning outcomes
 - Most effective to accomplish goals
 - Promotes interaction of learner with content, faculty and other learners
 - Authentic—closest to reality of practice setting

Example From: AOSpine Principles Course Material

Implications for Faculty/Course Chairs

- Start planning with the end in mind
- Use desired outcomes to create learning objectives, select faculty and content
- Use pre and post-tests to measure learning
- Use case studies to measure changes in competence
- Use other data (registries) to measure changes in performance

References


7. Leads to Verifiable Outcomes

- “From Curricular Goals to Instruction: Choosing Methods of Instruction” Patricia Thomas, MD and David Kern, MD, MPH (in *Methods for Teaching Medicine*)
- Moore DE, Green JS and Gallis HA, Achieving Desired Results and Improved Outcomes: Integrating Planning and Assessment Throughout Learning Activities, *Journal of Continuing Education in the Health Professions*, 29(1):1-14, 2009.
- Green, J.S., Grosswald, S.J., Suter E. and Walthall D.B. III (Editors). *Continuing Education for the Health Professions: Developing, Managing, and Evaluating Programs for Maximum Impact on Patient Care*. San Francisco: Jossey-Bass Publishing Co., 1984.
- Davis, D., Barnes, B., Fox, R. eds., *The Continuing Professional Development of Physicians: From Research to Practice*, AMA Press, 2003.
- *Continuing Medical Education: A Primer* Second Edition, 1992, Rosof and Felch, Editors
- Caffarella, R.S, *Planning Programs for Adult Learners-A Practical Guide for Educators, Trainers and Staff Developers*, Second Edition, Jossey-Bass, 2002..
- Moore DE Jr. A framework for outcomes evaluation in the continuing professional development of physicians. In: Davis D, Barnes BE, Fox R, eds. *The Continuing Professional Development of Physicians: From Research to Practice*. Chicago, IL: American Medical Association Press; 2003:249–274.



New York City, NY (May, 2010)

‘Getting everyone on the same page is never easy, but if and when it all comes together, it is usually worth it’ ...jg

A photograph of a male surgeon in a blue surgical cap and mask, looking directly at the camera with a slight smile. He is wearing blue scrubs. In the background, other surgical team members are visible, blurred. The image is overlaid with a series of white, curved lines that sweep across the frame from the top left towards the bottom right.

Advancing
spine care
worldwide