The SQF Model of Clinical Supervision Presentation
Mary Barnum, EdD, ATC       M. Susan Guyer, DPE, ATC
Springfield College Athletic Training Program

- **The SQF Model of clinical teaching utilizes very specific Supervision, Questioning, and Feedback strategies for the purpose of moving the student toward achieving clinical autonomy in both skill application and clinical reasoning. While the SQF Model was developed through observing preceptors in athletic training, the Model has been widely adopted in many health care education programs.**

**Theoretical Foundation**

- **Goals of Clinical Education:** to facilitate the student’s growth and development in the areas of skill application, clinical decision making, patient interaction and professional behaviors. A student’s transition through the process includes the following.
  - Emerging Skills and Knowledge
  - Developing Skills and Knowledge
  - Demonstrating Proficient Skills and Knowledge
  - Mastery Level Clinical Skills and Knowledge
  - Ready to enter profession as practicing clinician.

- **Conscious Competency Model:** Howell and Fleischman (1982) provide a framework to think about the stages of competency development. Their model aligns with the goals of clinical education and helps to define the stages of student development within the SQF Model.
  - Unconsciously Incompetent: “they don’t know what it is they don’t know”
  - Consciously Incompetent: “they now know that they don’t know”
  - Consciously Competent: “they now know what they know and focus intently on knowing it.”
  - Unconsciously Competent: “they knowledge is unconscious and automatic”

- **Bloom’s Revised Taxonomy Table:** Anderson and Krathwohl (2001) revised Bloom’s (1957) original taxonomy table in which they highlighted an aspect of the table that received very little attention previously: the **knowledge dimension**. The knowledge dimension describes different types of knowledge and when we examine the levels or types of knowledge, we see that it aligns with and supports what we are trying to achieve in clinical education. Knowledge dimension is targeted in the SQF Model.
  - Factual: basic elements a student needs to know within a discipline
  - Conceptual: seeing and making connections between and among the massive amount of factual knowledge one has acquired.
  - Procedural: knowledge needed to know how to do something, how to apply knowledge, use skills, and develop processes, systems and techniques.
  - Metacognitive: awareness of one’s own thinking; that which is needed to make clinical decisions, to refine and improve and grow one’s own body of knowledge and perhaps even generate knowledge.
Connecting Goals of Clinical Education with Bloom’s Revised Taxonomy and the Conscious Competency Model: As preceptors, we need to select the appropriate type of supervision and approach to mentoring that will best assist the student in being successful in clinical experiences. Students need to be prompted to utilize the type of knowledge required to achieve each level of competency to progress through the clinical education experiences and successfully transition to practice.

<table>
<thead>
<tr>
<th>Goals of Clinical Education</th>
<th>Conscious Competency Level</th>
<th>Knowledge Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td>Unconsciously Incompetent</td>
<td>Factual</td>
</tr>
<tr>
<td></td>
<td>Consciously Incompetent</td>
<td></td>
</tr>
<tr>
<td>Developing Skills</td>
<td>Consciously Incompetent</td>
<td>Factual</td>
</tr>
<tr>
<td></td>
<td>Consciously Competent</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Demonstrating Proficiency</td>
<td>Consciously Competent</td>
<td>Procedural</td>
</tr>
<tr>
<td>Mastery</td>
<td>Consciously Competent</td>
<td>Metacognitive</td>
</tr>
<tr>
<td></td>
<td>Unconsciously Competent</td>
<td></td>
</tr>
<tr>
<td>Transition to Practice</td>
<td>Unconsciously Competent</td>
<td>Metacognitive</td>
</tr>
</tbody>
</table>

Supervised Autonomy: supervision strategy that allows for varying degrees of supervision while still mentoring the student through independent, but guided, application of clinical skills, patient care and clinical reasoning skills. Goal is to move the learner toward readiness to enter the profession as skilled and thoughtful clinicians (Sexton et al., 2009).

SQF Model of Clinical Teaching (Barnum, Guyer, Levy, & Graham, 2009)

1. Situational Supervision
   - S1: Directing and Coaching: “standing beside”
   - S2: Supportive and Encouraging: “over the shoulder”
   - S3: Delegating: creating distance-“over there”
     i. The type of supervision you use should be based on the situation.
     ii. Situation is comprised of:
     iii. The learner
       1. D1 Level Student:
          a. Unconsciously incompetent
          b. Consciously Competent
       2. D2 Level Student
          a. Consciously Competent
       3. D3 Level Student
          a. Unconsciously Competent
   iv. The urgency
      1. Time frame
2. **Pressure**
3. Consequences of failing or incorrect decision/application

**v. The task**
1. Novel or known task
2. Complexity
3. Consequences of failing or incorrect decision/application

### 2. **Strategic Questioning**

- Consciously adapting the timing, sequencing, and phrasing of questions in order to facilitate student processing of information at increasingly complex cognition levels (Barnum, 2008).

- The **purpose of Strategic Questioning** is to actively engage and stimulate the student to use increasingly complex cognitive processing skills. Consistently using strategic questioning is thought to assist the student in developing a model for thinking for making appropriate and accurate clinical decision (Barnum, 2008).

- **Q1 Level Questions** ("what")
  1. **Target** the factual and conceptual dimension of knowledge.
  2. **Q1 questions** require the student to recall recite and explain basic, foundational information needed to engage in discussion or activity.
  3. **Purpose** is to confirm for both the student and the preceptor that the student has the **appropriate factual knowledge base to safely precede**.

- **Q2 Level Questions** ("so what")
  1. **Target** the conceptual and procedural dimension of knowledge.
  2. **Q2 questions** require the student to use and apply information appropriately.
  3. **Purpose** is to confirm for both the student and the preceptor that the student is making appropriate connections and correctly applying information: skill application

- **Q3 Level Questions** ("now what")
  1. **Target** metacognition skills.
  2. **Q3 level questions** require the student to make explain and defend choices and actions and to think their own though process. It is important to inquiry about “how” and “why” the student arrived at a specific decision to stimulate reflective practice.
  3. **Purpose** is to provide opportunity for students to develop and practice cognitive processing skills vital for developing sound clinical reasoning abilities.

#### Putting Situation Supervision & Strategic Questioning together with the learner

- D1 Learner = S1 Supervision and Q1 Questions
- D2 Learner = S2 Supervision and Q2 Questions
- D3 Learner = D3 Supervision and Q3 Questions
3. Feedback

- Feedback is any information that you give to your student regarding his or her skills and knowledge. Nottingham and Henning (2014) identified four main purposes for providing feedback to students during clinical experiences.
  - **Confirm or reinforce** ideas, responses, knowledge, decisions
  - **Correct** false statements, understanding or application of knowledge
  - **Promote improvement**

- Feedback has five components:
  - **Timing**: immediate or delayed
  - **Specificity**: general or specific
  - **Content**: focus on clinical skills, clinical reasoning or professional behaviors
  - **Form**: verbal, non-verbal or written
  - **Privacy**: feedback provided in private or in public

---

**The SQF Model of Clinical Supervision**

(Barnum, Guyer, Levy & Graham, 2009)