**THE PEDIATRIC MILESTONE PROJECT**

**Accreditation Council for Graduate Medical Education & American Board of Pediatrics**

**8. *Develop the necessary skills to be an effective teacher***

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**Background**

What is an effective teacher and what characteristics do they possess? In this sub-competency, a number of knowledge, skills, and attitudes (KSA) form the conceptual framework for effective teaching. It is important to note that the definition of “effective” may be difficult to quantify because much of the literature on this ability is based on perceptions and not on learner outcome measures. The KSA may progress at similar rates, or some elements may lag behind while others progress. For example, someone may be very learner-centered and adaptable, but may feel inadequate due to insufficient content knowledge. A few overarching themes that progress through the developmental process towards a good or effective teacher are:

• Teacher-centered versus learner-centered

• Fixed approach with teaching methods versus adaptability

• Inadequacy versus confidence

Teacher-Centered versus Learner-Centered

A learner-centered teacher asks learners about their needs and aims to align the teaching method and content with the specific learner at hand. This concept also includes creating a learning climate that facilitates optimal learning. For example, a teacher who shows enthusiasm and empathy for learners, does not interrupt presentations on rounds, and encourages questions is learner-centered. In contrast, a teacher-centered approach is one that focuses on the teacher’s needs. Very little to no effort is put into assessing what the learner may need. This approach is typically symptomatic of a lack of insight and of feelings of inadequacy about the knowledge and skills for teaching, thus wanting to stay in a prepared and rehearsed mode of teaching to remain safe. Alternatively, it may be due to lack of interest and enthusiasm for the task of teaching. An example of this concept is a new teacher who prepares every bit of detailed medical information about a topic so as not to appear to be lacking in knowledge; however, his talk may be overwhelming, too expansive and unfocused, and thus unhelpful to the learners. Another example is a professor who is lecturing about a topic with no attempt to make it relevant to the particular audience. He may even speak for 10 minutes over time, again focusing on his desire to talk about everything he prepared rather than on the learner’s desire to have their time respected.

Fixed Approach versus Adaptability

Adaptability refers to the willingness of teachers to modify the form and content of instruction, their ability to change style based on subtle cues from learners, and their capability to not be fixed or limited in style. This theme includes the creativity of the teacher. Inflexible teachers do not change based on the situation. For example, a fixed or inflexible teacher would likely not shorten rounds to allow a resident to get to clinic because “that is how they always run rounds.” Another example is a resident who continues lecturing students long after a number of them have dozed off.

Inadequacy versus Confidence

Confidence in teaching may stem from a number of factors, including positive reinforcement, enthusiasm, experience, and self-identity as a teacher. Some of these thoughts about self-efficacy and self-perception may be inaccurate or over valued. That is to say that although confidence is a characteristic of effective teaching, one who is confident alone may not be an effective teacher. Often, early-stage teachers may be so focused on their own knowledge content and learning needs that they may feel inadequate and unsafe teaching others. A master teacher, on the other hand, probably has appropriate confidence in an insightful way and a positive self-image as a good teacher.

In one study, the following three key themes seem to emerge when faculty and residents are attempting to characterize and describe good teaching attributes: 1) enthusiasm for teaching (current and future), 2) learner-centeredness, and 3) self-knowledge about teaching.1 In this qualitative study, the intervention group of residents received 13 more hours of resident–as-teacher development compared to the control group. The study took place in a university medical center with primary care residents. Qualitatively analyzed resident interviews identified the above themes and found that their self-perceptions of their teaching roles persisted for over 1 year after the intervention. Other descriptions of effective teaching and precepting include similar themes, such as respect for learners, positive role modeling, and demonstrable patient care skills.2,3 In another study, the authors developed a validated faculty peer evaluation on teaching skills, which resulted in the following list of behaviors of effective teachers:

• Establishes a safe and positive learning environment and learner involvement

• Leads teaching sessions

• Communicates goals of teaching and is learner-centered

• Uses appropriate methods and materials

• Primes the learner by asking for commitment, plan, and responses (in a learner-centered manner)

• Gives feedback to learners

• Encourages learners to continue their learning

In a study by Beckman, peer-to-peer evaluations occurred between faculty attendings on a general internal medicine hospitalist service. Many of the categories utilized were adapted from the Stanford Faculty Development Program-26 (SFDP-26),5 which is a validated questionnaire for students and residents to use in evaluating attendings. However, it is important to recognize that students may not have views completely similar to faculty and/or may not value the same teacher attributes that faculty value.

Being a teacher is generally perceived as a favorable quality or skill for a physician to have; however, it does require time and effort. The quality of teaching can become subject to contextual circumstances and can advance or regress through the milestones. In general, the progression through the milestones follows the three overarching concepts detailed above.

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| **Developmental Milestones** * **Completely teacher-centered;** focused on her perception of what needs to be taught rather than the learning needs of the students. Barriers to effective teaching include lack of content knowledge and lack of teaching skills and repertoires. **Not adaptable** because of need for preparation and scripted teaching. **Fear of inadequacy, lacks confidence.**
* **Quite teacher-centered.** Is able to identify a good teacher, but lacks insight into the discrete qualities that contribute to this skill. Has no internalized plan, technique, or mindful practice of teaching. **Not adaptable to others’ learning needs.** Does not see learners as barriers/nuisance, but may be somewhat ambivalent towards them. Feels **inadequate** due to limited teaching repertoire and experience
* **Exhibits some learner-centered teaching behaviors, but remains mostly teacher-centered.** Able to identify a few of the discrete qualities of effective teaching behaviors. **Teaching methods and repertoire are expanding, therefore less limited and more adaptable.** May be developing self-identity as one who likes to teach. **Gaining confidence in teaching abilities,** which allows for interaction with learners and enthusiasm for assisting them in learning.
* **Exhibits mostly a learner-centered approach to teaching.** Assesses learner needs and wants to advance learners. Eager and enthusiastic to teach. Shows enriched insight and understanding of some teaching concepts and is **able to adapt and modify teaching** to unforeseen learner needs in most situations. More relaxed and **confident** with teaching, with obvious enjoyment in this role.
* **Consistently demonstrates a learner-centered** approach to teaching. Understands and seeks new information regarding teaching and learning. Seen as a dedicated teacher based on the time and energy committed to teaching, which is part of the core of her self-image. **Confidence in teaching skills** allows for **creative and adaptive teaching abilities.**
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