PERSPECTIVES | SIG 11

Clinical Focus

Deliberate Supervision: Practical Strategies for Success

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Purpose: Clinical supervisors play a fundamental role in enabling students to transform knowledge into clinical skills. The 2020 changes to Speech-Language Pathology Certification Standards will require speech-language pathologists who want to serve as clinical supervisors of applicants for certification to complete a minimum of 9 months of practice experience postcertification and 2 hr of professional development in the professional practice domain of supervision postcertification prior to overseeing a student in a clinical supervisor capacity.

Conclusion: This article describes a framework for clinical supervisors of graduate students to use based on the premise that supervision should be an intentional reflective activity. The authors describe how to plan for clinical education across practice settings, provide appropriate feedback, and use questions effectively.

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s being a really good speech-language pathologist (SLP) a guarantee that an individual will become a really good clinical supervisor? While teaching comes naturally to a select few, it is important to recognize that the skill set for clinical supervision is as unique as the skill set for the clinical competencies for the myriad of disorders and populations served. This difference is clearly delineated in the 2016 Scope of Practice in Speech-Language Pathology in which the professional practice domain of supervision is distinct from the eight domains of speech-language pathology service delivery and subsequent service delivery areas clinicians are most familiar with (e.g., speech production, language, fluency, cognition, voice; American Speech-Language-Hearing Association [ASHA], 2016a). This means, to prepare for the clinical supervisor role, an SLP needs to acquire pedagogical knowledge and skills. Recommendations for adequate preparation of clinical supervisors apply to clinical educators of graduate students, preceptors of audiology externs, and mentors of clinical fellows (CFs) and

supervision of support personnel and of experienced SLPs and audiologists transitioning to new areas of clinical practice or reentering the workforce (ASHA, 2016b; Council of Academic Programs in Communication Sciences and Disorders [CAPCSD], 2013). To prepare for the upcoming changes to clinical certification standards associated with the supervision requirements of students, this article will focus on clinical education of graduate students, who will also be referred to as the "supervisee." Clinical educators, preceptors of audiology externs, CF mentors, supervisors of support personnel, and those in transition are encouraged to check state regulations to ensure compliance (CAPCSD, 2013).

In 1985, ASHA took the position that preparation of clinical supervisors was important "...to preparation of students and to assurance of quality clinical service" (p. 4). This early document listed 13 tasks of clinical supervision, outlined 81 corresponding competencies for effective clinical supervision for each of the 13 tasks, and described options for preparation of clinical supervisors to master competencies. Requirements for the Certificate of Clinical Competence in Speech-Language Pathology have always contained requirements regarding degree qualifications, semester hours, practicum, and clinical supervision. Over the years, revisions of the standards for clinical certification have evolved that included requirements associated with

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amount and types of clinical supervision of students. ASHA (2008a) published a revised position statement on clinical supervision in speech-language pathology and affirmed clinical supervision in speech-language pathology as a distinct area of practice and an important component of professional education of speech-language pathology students. This revised position statement includes a clarion call for SLPs to engage in professional development in the area of clinical education. In response to the emerging evidence and insights regarding clinical education, ASHA (2008b) also published a Technical Report and a Knowledge and Skills document (ASHA, 2008c) to accompany and support the revised position statement (ASHA, 2008a).

Three decades later, the preparation of clinical supervisors is undergoing a renaissance, in part due to the work of several committees. The Ad Hoc Committee on Supervision published comprehensive recommendations on the necessary knowledge and skills training for effective clinical supervision (ASHA, 2013). The more recent work of the Ad Hoc Committee on Supervision Training (ASHA, 2016b) developed a systematic master plan to identify clinical education resources and advance training in this practice domain. Also influential in the evolution of renewed interest and action related to clinical education was the 2013 White Paper published by the CAPCSD, which put forth recommendations for the preparation of clinical educators. At the top of the list is a recommendation that formal training of clinical supervisors be required. It was through these contributions of comprehensive study and advocacy that the Council for Clinical Certification in Audiology and Speech-Language Pathology (CFCC, 2018) approved revisions to standards and implementation guidelines, effective January 1, 2020, that will impact new applicants for certification and SLPs who desire to supervise students. CFCC Standard V-E reads: "Supervision of students must be provided by a clinical educator who holds ASHA certification in the appropriate profession, who has the equivalent of a minimum of nine months of full-time clinical experience, and who has completed a minimum of two hours of professional development in clinical instruction/supervision after being awarded ASHA certification" (CFCC, 2018, p. 39).

SLPs who regularly supervise students or who are new to the clinical educator role have a number of resources available through ASHA and the CAPCSD. In Appendix A of the ASHA Ad Hoc Committee on Supervision Training document (ASHA, 2016b), SLPs can examine the topics for supervision training by supervisor roles (e.g., clinical education of graduate students, mentors of CFs, supervisors of support personnel, and supervisors of those in transition). In Appendix F of this same document, a clinical supervisor can rate their knowledge and skills across the topic areas found in Appendix A using a 0-3 rating scale (i.e., 0 =not vet acquired to 3 = applied consistently) and then reflect on the self-assigned ratings to identify professional development needs. ASHA members can also access a myriad resources from the ASHA website (ASHA, n.d.). CAPSD offers online professional development on the clinical education

process to member programs in communication sciences and disorders at no additional cost. The CAPCSD encourages member programs to provide these self-paced course modules to persons serving the institution in a clinical supervisor capacity. SLPs can search for member institutions on the CAPCSD website (CAPCSD, 2020).

This new professional development requirement is an opportunity to advance the profession as acquisition of knowledge and skills for clinical education will facilitate effective clinical teaching and positive student learning outcomes. Beyond acquisition of pedagogical skills, SLPs who supervise graduate students must learn how to manage a range of clinical education issues not specific to their work setting, such as differences in generational dispositions in the work environment (McCready, 2011), accountability issues associated with reimbursement, ethics, and legal matters (ASHA, 2008c), as well as management of the occasional low-performing student (Altmaier et al., 1990; Haynes et al., 1999).

Many clinical supervisors of graduate students will tell you they choose to supervise because they want to share their knowledge and skills with others or they do so because of their close relationship with faculty from their alma mater. In addition to these motivations for supervising, Baylis (2014) proposes there are social–emotional benefits of clinical supervision, including reduced emotional stress and burnout; improved job satisfaction; and increased self-awareness, self-esteem, and self-confidence. So how does the competent clinician reap the benefits of the added responsibility of clinical supervision? Clinical education can be rewarding and enjoyable when a clinical supervisor is intentional and reflective in the selection and organization of specific knowledge and skills that are to be taught.

Deliberate and Reflective Action

In the absence of professional development, novice clinical supervisors often perceive supervision to be the evaluation and monitoring of clinical activities. This conceptualization does not represent the breadth of tasks a clinical supervisor oversees, nor does it reflect how clinical learning activities are bound by the dynamics of personal interaction (Fredrickson & Moore, 2014; Kilminster & Jolly, 2000; Pugh & Hatala, 2016; Tangen & Borders, 2016). The CAPCSD (2013) states "...clinical supervisors do more than oversee the work of the student clinician. They teach specific skills, clarify concepts, assist with critical thinking, conduct performance evaluations, mentor, advise, and model professional behavior" (p. 3). When you add the interpersonal dynamics between the student and the supervisor due to human elements of emotion, intention, and communication, supervision becomes less of a task-specific activity and more of a dynamic process.

Inherent in designing learning experiences is reflection. Reflection is the act of thinking back on a clinical experience and, through critical analysis of the event, deepening one's understanding of the cognitive, affective, or psychomotor skill being learned (Aronson, 2011; Koshy et al., 2017;

Mann et al., 2009). The key component of reflective practice is transforming new understanding into productive action that enhances clinical service delivery. Thus, a clinical supervisor is charged with facilitating a student's self-evaluation of their perceptions of an experience and enabling the student to link those revelations to alternative options that result in a new or different clinical behavior in similar or appropriately related scenarios (Price, 2004).

A trusting and supportive relationship between a student and a supervisor is essential to effective reflection (Kilminster & Jolly, 2000; Pugh & Hatala, 2016; Tangen & Borders, 2016). Only when a student feels safe can the student critically analyze their clinical performance and professional dispositions. A student is also more likely to engage in authentic reflection when they have a clear understanding that evaluation is a separate activity from reflective clinical practice (Riddle, 2010). To facilitate honest reflection from a supervisee, a clinical supervisor should communicate explicit expectations for student engagement across the scope of teaching and learning experiences. Modeling reflective clinical practice will also assist students in modifying their behavior (Aronson, 2011; Riddle, 2010). Clinical supervisors should also engage in regular reflection of their clinical teaching. A clinical supervisor can reflect broadly on effectiveness of teaching strategies used (Dowling, 2001; Pinsky & Irby, 1997) or take a strategic approach selecting specific knowledge and skills to reflect on, such as those outlined in the Self-Assessment of Competencies in Supervision found in Appendix E of the final report of the ASHA (2016b) Ad Hoc Committee on Supervision Training.

Objectives and Stages of Professional Development

Oftentimes a novice clinical supervisor will overwhelm a student by the amount of information that is shared at any one point in time. This compulsion to tell the student everything they know may be due to a need to be perceived as a subject expert. It may also occur out of an earnest desire to pass on knowledge that will help a student be successful. An important first step in a deliberate approach to clinical supervision is determining objectives. In clinical education, objectives give direction and provide a purpose for what will take place during a clinical experience. Designing learning experiences and evaluations are tied to student learning objectives (Sahu et al., 2017, 2019). Identifying and communicating these objectives to the supervisee must occur prior to teaching, learning, and evaluation. At agreed upon days and times, a clinical supervisor and the student should work collaboratively to review progress with learning objectives, allowing time for additional teaching and learning prior to evaluation (Kilminster et al., 2007). Additionally, an objective can be used as a point of reference for describing additional performance parameters (e.g., time constraints, setting variables, use of tools/tests) and expectations for supervisor involvement (e.g., level of support). Objectives can also be referenced throughout the lesson to prompt student

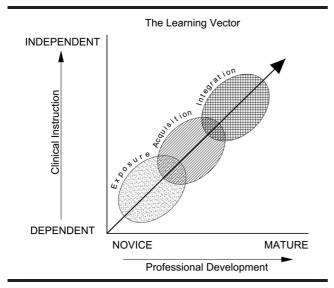
reflection. Objectives can address learning over the course of a period of time (e.g., day, week) or can be created for a specific learning experience or skill. Just as client treatment objectives must be measurable, student learning objectives must also be measurable.

An alternative to assuming all responsibility for designing learning objectives is to collaborate with the student. This approach is based on the adult learning theory, which posits adults are self-directed and are motivated when they have some degree of control over their learning (Knowles, 1973). To start the discussion, encourage the student to reflect on what they would like to know or be able to do upon completion of a clinical experience (i.e., goal or competency). Dowling (2001) suggested using a student evaluation form or other listing of competencies as a frame of reference. The student is then prompted to reflect on their strengths and weaknesses. From there, the clinical supervisor can coach the student into articulating a manageable objective (e.g., perform a clinical swallow examination, interpret articulation test results, discuss literature in support of a therapeutic method).

Objectives should be written to address both cognitive and noncognitive knowledge and skills (Beck & LeGrys, 1988). Cognitive objectives will measure a student's understanding of content and how they can manipulate and transfer that knowledge (e.g., apply, analyze, synthesize, evaluate). Noncognitive objectives include psychomotor and affective domains. Psychomotor objectives will emphasize skill demonstration (e.g., collect data in real time during a language therapy session, demonstrate the supraglottic swallow during patient teaching). Although the focus is on skill demonstration, inherent in some psychomotor tasks is an underlying cognitive process that determines which specific task must be performed based on a prior response. Affective objectives will address professional values, interest, and attitudes (e.g., accept feedback in a nondefensive manner, use techniques of active listening with students/ clients/patients).

A student's acquisition of knowledge and skills progresses through developmental stages that are based on successive experiences that move to the more complex (Knowles, 1973). Therefore, a key responsibility of a clinical supervisor is to design instruction that influences the acquisition and development of new clinical knowledge and skills in incremental steps (Beck & LeGrys, 1988; Benner, 1982; Carraccio et al., 2008). Figure 1 depicts the learning vector model (Beck et al., 1988), a practical tool to guide planning individualized learning experiences based on a student's stage of development. The horizontal axis of the model represents the student's professional development progression. This axis is multidimensional as it represents acquisition of multiple domains of knowledge (e.g., basic human communication, disorders and differences, principals of assessment and treatment, ethics, evidence-based practice) and a myriad skills (e.g., prevention, assessment, treatment, oral and written communication). The vertical axis represents the degree of direct clinical instruction, which varies in proportion to a student's developmental stage. In essence, this vertical axis represents

Figure 1. The learning vector.



differentiation of clinical education that occurs when a clinical supervisor deliberately modifies learning experiences and interactions based on a student's progression through the stages. The learning vector model is student centered, enabling a clinical supervisor to adjust their level of support to match the unique learning needs of the student. The learning vector model characterizes three developmental stages of clinical development with overlap among stages:

(a) exposure, (b) acquisition, and (c) integration.

The first stage, exposure, reflects a novice speechlanguage pathology student clinician. The student may have limited socialization to clinical experiences or settings (Beck et al., 1988). During this stage, clinical supervisors will provide a high level of support as students are dependent on the clinical supervisor for almost all aspects of service delivery (Beck et al., 1988). Clinical supervisors should model clinical thinking (e.g., applying theoretical knowledge of disorders to practice, choosing appropriate materials, focusing a session on therapy goals), noncognitive therapy skills (e.g., administering an exam, using a treatment method, or establishing a rapport with a client/student), and reflection. Students in the second stage of development, acquisition, are practicing clinical skills acquired during the exposure stage and begin to assume responsibility for their learning (Beck et al., 1988). During this stage, the clinical supervisor will provide varying levels of support as a student practices applying knowledge and developing skills. This will range from direct instruction and modeling to more indirect and less intrusive coaching. As the student improves, as noted by efficiency and accuracy in answers and task performance, the clinical supervisor can provide the student with autonomy with select clinical tasks. For example, a student in the acquisition stage may be able to administer an articulation test independently and require only feedback with linking assessment results to the treatment plan yet may require the supervisor to model writing a level-appropriate clinical

summary of the results. In this acquisition stage, a clinical supervisor may give the student choices regarding selection of objectives and learning activities. A supervisor will also expect the student to show emerging skills in reflection, although the clinical supervisor may still have to guide the student in using the self-assessment to change a behavior (Beck et al., 1988).

The final stage of development is integration (Beck et al., 1988). At this point in a learning experience or clinical setting, a student has begun demonstrating mastery of various cognitive and noncognitive clinical skills. With this developmental stage, the clinical supervisor role becomes one of the consultant (Beck et al., 1988). The clinical supervisor may be comfortable letting the student assume more responsibility, such as planning learning activities and performing many tasks independently (Beck et al., 1988). Students in the integration stage of development should be regularly reflecting on their professional development. Clinical supervisors are reminded the developmental stages can be applied to all knowledge and skills necessary for professional practice as identified by the CFCC (2018), such as professional interaction skills, developing cultural competence, working collaboratively, and handling ethical dilemmas.

Other health professions (e.g., medical education, nursing, counseling, and physical therapy) also use developmental models for clinical instruction (Beck & LeGrys, 1988; Benner, 1982; Carraccio et al., 2008; Falco & Managhan, 2018; Stoltenberg, 1981). SLPs may be familiar with Anderson's (1988) continuum of supervision framework, which describes stages of supervision that also reflect a fluidity of clinical supervision support based on the learner's needs. Regardless of developmental model used as a reference, a clinical supervisor must be aware that, although progression is predictable, in the context of new learning or during conditions of stress, a student may revert back to needing previous levels of support or resources to help them. Progression is thus predictable and hierarchical but is not a linear trajectory (Beck & LeGrys, 1988). Consider a case where a competent clinician is finishing a successful rotation working primarily with school-age children with speech sound and language disorders. The supervisor is confident the student is in the mastery stage of assessment and treatment of speech sound and language disorders, including success with documentation and collaboration with teachers. However, when a child diagnosed with stuttering is added to the caseload, the student may become dependent on the clinical supervisor to help them apply academic coursework to the specific case. The clinical instructor increases involvement to a degree equivalent to earlier experiences but only for certain aspects of this case associated with the introduction of the new clinical population.

Strategies

Clinical supervision outside the confines of the classroom or university clinic poses unique challenges. Clinical supervisors who accept students in their work setting essentially add a secondary role and additional responsibilities

to their work day. Clinical education occurs in real time during the course of the clinical supervisor's daily routine. This means teaching is embedded in service delivery with real patients/clients/students. While this provides an authentic and rich context for teaching, it is not without its challenges, especially those associated with time constraints. Therefore, it becomes even more pressing that a clinical supervisor engages in deliberate supervision. Deliberate supervision requires a clinical supervisor to plan for each clinical experience. The remainder of this article provides clinical supervisors with specific strategies that are appropriate for "teaching on the run" (Lake & Ryan, 2004, p. 643).

Planning a Teaching Episode

Lake and Ryan (2004) referred "teaching episode" as any planned teaching and learning experience. The authors recommended using teaching scripts for planning a teaching episode. Teaching scripts capitalize on clinical supervisors being subject experts on the recurring clinical experiences unique to settings, diagnoses, and procedures as the basis for planning a teaching episode. To create a teaching script, first take into consideration the learning objective for the student. With the objective in mind, identify two or three important points that the student should think about in a critical way in the context of service delivery. Scripts are based on the clinical supervisor's thoughts on the clinical skill and delivered to the student in an organized manner. The medical education literature suggests scripts be organized in a way that anticipates common mistakes new learners make (Irby, 2014; Parcell & Bligh, 2001). Once a basic script is developed, the clinical supervisor can modify each script based on individual student objectives and developmental stages.

Supplemental Material S1 is an example of using a script for clinical teaching. The interaction that occurred before the session shows a script designed for a student in the exposure stage for clinical experiences associated with early intervention settings and populations. The clinical supervisor is a subject expert in working with children in the prelinguistic stage of communication development. Notice that, during this brief planned teaching episode, the supervisor first identifies the student's level of knowledge and skill with this population and then delivers her script based on the student's developmental stage. The supervisor used a short script yet was able to provide background information regarding the upcoming session and provide concrete strategies for the student to try. Objectives and expectations for the learning activity were clearly communicated to the student before starting the encounter. In addition to the script, notice the engaging manner in which the clinical supervisor included the student in the teaching episode, such as using eye contact and asking the student questions to check understanding. Lake and Ryan (2004) suggested the exchange between the clinical supervisor and student be a brief dialogue, approximately 5–15 min, and should help the student focus on meaningful information. Scripts can be modified using

case-based learning or customized based on a learner's needs. Table 1 provides additional ideas for planning a teaching episode using scripts.

A clinical supervisor should also take into account how the planned teaching experience will be arranged (Lake & Ryan, 2004). This includes considering the physical environment and necessary tools, tests, or materials that will be required. The clinical supervisor should let the student know if anyone else will be present with whom the student will be expected to interact with. Deliberate supervision requires the clinical supervisor to consider if that person might distract the student and prepare the student accordingly.

Creating teaching scripts is essentially a metacognitive task. Initially, the task of organizing information for teaching scripts requires extensive information processing with demands on attention and memory as elements of the script are organized and rearranged. With repeated practice, the clinical supervisor will have memorized the script, and delivery will be automatic. At this point, the clinical supervisor can easily adjust elements of the script to individualize instruction and they can focus on engaging a student during the interaction. Desirable strategies for interaction during dialogue include addressing a student by name, using eye contact, and strategic use of questions. Lake and Ryan (2004) also recommended informing the student when there will be time for a debrief and reflection. Supplemental Material S2 shows the post experience debrief, an aspect of planned teaching Lake and Ryan refer to as "closure." Notice the clinical supervisor summarized the experience in a descriptive manner. She used feedback and questions to prompt reflection and asked the student to consider how techniques might be modified for a different child with concomitant physical disabilities. Although using scripts for clinical teaching results in little to no disruption to daily activities, time constraints can and do occasionally interfere with ideal teaching. In these situations, it may be better for the clinical supervisor and student if the teaching episode is delayed until a later time.

Feedback

The goal of a clinical supervisor is to play a part in developing students into efficient and effective SLPs who can think critically, be creative, and problem solve to help those they serve (Kleinhans et al., 2018). For this reason, providing feedback is a valuable strategy for student growth and development. However, if not used correctly, feedback can be useless or even detrimental to a learner's development; therefore, it is imperative to provide deliberate feedback to student clinicians. A key consideration is to provide feedback that is a match to the supervisee's preparation or experience (Solomon-Rice & Robinson, 2015). When deliberate feedback is paired with a supportive environment where a student is comfortable sharing ideas, receiving constructive feedback, and reflecting on areas of growth as learning opportunities, the student can thrive in

Table 1. Ideas for scripts.

Script topic	Script ideas
Treating a speech sound disorder	 Discuss considerations for selecting treatment targets based on the position of the sound in words and linguistic complexity Teach phonetic placement cues Explain how to use motivation, reinforcement, and feedback to facilitate change
Completing a chart review	Instruct in policies for electronic medical records access and use Outline the components of a chart review Explain the rationale for reviewing various elements of the chart Discuss how to discern relevant from irrelevant information Describe how the information will inform assessment
Communicating with an individual with dementia	 Explain why getting the person's attention before beginning treatment enhances the interaction; provide strategies (e.g., identify self, use the person's name) Describe how communication is impaired based on the progression of the disease; predict communication of person scheduled for the clinical encounter based on stage of dementia Give examples and explain how to manipulate sentence structure and vocabulary based on preserved cognitive abilities Explain how multisensory or multimedia resources help facilitate communication

their professional development (Pugh & Hatala, 2016; Tangen & Borders, 2016).

Being deliberate in the provision of feedback begins with awareness of student learning objectives. To reiterate, objectives function to guide teaching and learning activities. It is essential that these objectives are clearly communicated between the clinical supervisor and student. To aid in using feedback effectively during evaluation, objectives should be in writing to facilitate reflective conversations during supervisory conferences (e.g., After administering the Clinical Evaluation of Language Fundamentals-Fifth Edition, Wiig et al., 2013; student will correctly tally the score for each subtest.). Not all feedback is directed to specific formal student learning objectives; feedback can also focus on informal objectives associated with student engagement in multiple or repeated learning experiences. Informal objectives give direction but may not have specific performance criteria (e.g., Supervisee will correctly score a standardized test.). Feedback on the informal objective would apply to the administration of any standardized test across clients or even serve as a main point in a teaching script. Informal objectives open up opportunities to fluidly guide the student in day-to-day activities and responsibilities.

Effectively timed feedback has a profound impact on a student's learning (Al-Hattami, 2019). Uncertainties associated with feedback may elicit emotional responses from the student, such as fear or embarrassment, which can interfere with learning (Ossenberg et al., 2019). A student needs to understand that feedback is part of the clinical education process and learn to expect it in a variety of formats. Clinical supervisors can reduce student anxiety toward feedback by establishing regularly agreed upon times to meet for purposes of feedback on performance versus evaluative feedback (Ossenberg et al., 2019; Russell, 2019). Dowling (2001) stressed that the "catch me when you can" modus operandi is ineffective and that further stating it will "...negatively affect the establishment of trust, the quality of the interpersonal relationship, and the effectiveness of the conference" (p. 128). Anderson (1988) proposed effective supervision must

include routine conferences with the supervisor and supervisee, both contributing to the development of a conference agenda. Effectively timed feedback, "in the moment" or at the time a student is performing an activity or task should also be used intentionally. Feedback for in-the-moment teaching ensures the feedback is current, rather than asking the student to recall encounters from earlier in the day or week (Branch & Paranjape, 2002). Branch and Paranjape (2002) suggested feedback be brief and provide a learner with useful, concrete suggestions that will enable the student to alter their clinical performance on subsequent experiences. As with regularly scheduled feedback, the supervisor should preface this feedback with a verbal acknowledgement they are about to provide it (e.g., "Let me give you some feedback.").

Novice clinical supervisors might believe providing feedback is simply telling a student what they did or did not do, or may unknowingly use feedback in only an evaluative manner. Deliberate feedback, however, is nonjudgmental and is meant to provide a frame of reference to the student so they may better understand their level of performance based on observations from the supervisor. Novice supervisors may also be apt to provide negative feedback, which, if not properly executed, can be perceived as criticism on the part of the student and has the potential to create anxiety, decrease confidence, and lead student to withdraw from trying new ideas or think creatively (Thomas & Arnold, 2011). A student is most receptive and responsive to feedback when it is given by someone they respect as a role model (Mormer et al., 2013). It is vital for a supervisor, novice or seasoned, to invest time initially to build a positive working relationship with the student (Hardavella et al., 2017; Mormer et al., 2013). In addition to the interpersonal element, a private and safe environment is valued by the student. Hardavella et al. (2017) revealed that providing feedback in the presence of others is not effective because students are concerned about their professional reputation, and any feedback that they perceive as critical may jeopardize their credibility. Therefore, deliberate feedback

should be delivered in a private setting to foster open and effective communication between the student and the supervisor.

Deliberate feedback should be a balance of positive, constructive, and specific feedback that promotes reflection on the part of the recipient (Vickery & Lake, 2005). Positive aspects of feedback should focus on identifying strengths and reinforcing behaviors (Vickery & Lake, 2005). A supervisor can use positive feedback to project support and respect, as well as to praise a student as a strategy to promote continuation of observed desirable and effective behaviors (Branch & Paranjape, 2002). Constructive elements of feedback are used to engage students in a dialogue about their observations regarding their performance and will include suggestions to help students improve their clinical behaviors and skills. Clinical supervisors should be strategic with constructive feedback and careful not to bombard students with this type of feedback (Thomas & Arnold, 2011) as the student may become overwhelmed if the feedback becomes more of a list of required corrective actions. Specific feedback is a compliment to a constructive feedback and is perhaps preferable. Specific feedback pinpoints examples of objective observations and delivers detailed, driven information intended to strengthen skills or correct ineffective practices (Vickery & Lake, 2005). Supplemental Material S3 is an example of specific feedback.

One strategy for effective feedback is the use of I-statements (e.g., I saw, I heard, I observed). It is human nature to take feedback "personally" or feel as if one is being judged. Burr (1990) suggested the use of I-statements enable a learner to focus on relevant performance behaviors, whereas neutralizing perceptions feedback is targeted toward a learner's personality. Burr characterized these types of statements as less accusatory than using you-statements (e.g., you did, you said). It is not always natural or practical to use only I-statements, but it is a helpful strategy to implement when possible.

Deliberate feedback can also be used to teach reflective practices (Aronson, 2011; Caty et al., 2015). Feedback can direct the student's thinking about a clinical experience or behavior beyond their own perspective and expose them to thinking about experiences and events from multiple perspectives. As a reminder, feedback for enhancing reflection will be most effective for the student if a clinical supervisor models reflective behavior, demonstrates clinical competence, and nurtures the supervisor-supervisee relationship (Branch & Paranjape, 2002). Feedback that fosters reflection is grounded in meaningful clinical activities (vs. mundane) in which a clinical supervisor provides positive and specific feedback about the student's role in the experience. A clinical supervisor can validate a student's reflection by repeating what a student has expressed. Feedback can help extend a student's thought process by bringing peripheral clinical considerations to the forefront. This might include reflecting on situational or environmental factors surrounding the clinical encounter, professional behaviors, or values that may have impacted service delivery (Mann et al., 2009; McLeod et al., 2015).

Being Deliberate With Questions

It is certainly not a novel concept for clinical supervisors to use questions as a strategy for teaching. Questions have long been used to assess students' knowledge, promote comprehension, and stimulate critical thinking (Tofade et al., 2013). However, the key to deliberate use of questions rests on when, why, and how those questions are asked. Inadequately framed questions and/or questions presented at inappropriate times certainly can limit abstract thinking and reasoning, be intimidating to students, oppress learning, and impede the student's growth and movement through the stages of professional development. Gose (2009) stated that effective questions asked in a psychologically safe learning environment support student learning by probing for understanding, encouraging creativity, stimulating critical thinking, and enhancing confidence.

So, why do clinical supervisors ask questions? There are a number of reasons a clinical supervisor will ask questions: to obtain factual information, to probe and explore what students know, to understand how a student is progressing with clinical reasoning, to discover a student's learning needs, and to promote reflection. Regardless of reason, effective questioning should provide explanations and answers to a student (Parcell & Bligh, 2001). Various types of questions are more or less appropriate for students at various stages of clinical learning. What-, when-, and where-type questions allow for sorting out factual information (Lake et al., 2005). During the exposure stage of learning, a clinical supervisor may use these types of questions to determine what a student knows. Note these types of questions are not intended to determine what the student thinks in terms of clinical reasoning. Examples of knowledge-based questions appropriate for a student in the exposure stage of learning are found in Figure 2.

As a student advances to the acquisition stage of learning, a clinical supervisor's line of questions will change to promote and facilitate clinical problem-solving skills. "How"type questions seek responses that apply knowledge in clinical settings (Lake et al., 2005). Applied questions will require a student to link acquired knowledge with their actions.

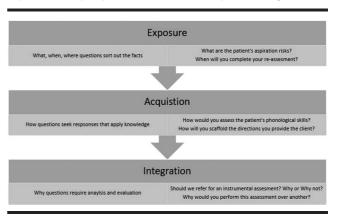


Figure 2. Example questions for each developmental stage.

These questions often require a student to provide evidence or justify a clinical decision. Examples of applied questions for students in the acquisition stage of learning are found in Figure 2. As the student transitions into the integration stage of learning, they will begin to consider how information relates to multiple elements of a clinical experience. As such, "why" questions typically are employed and require analysis and evaluative thinking. Figure 2 provides examples of "why" questions for students in the integration stage of learning.

There is consensus in the literature that the development of reflective practice in students is strongly associated with a strong, trusting, supportive, and nurturing relationship between the clinical supervisor and the supervisee (Branch & Paranjape, 2002; Mormer et al., 2013; Ossenberg et al., 2019; Pugh & Hatala, 2016; Tangen & Borders, 2016). Aronson (2011) offered 12 tips to teach reflection. Aronson suggested beginning with characterizing reflection as a metacognitive skill that is rooted in self-awareness and self-evaluation. This first step is essential to professional success. As previously recommended, reflection and learning objectives should be linked. A student's developmental level will also guide the selection of question types that match a student's stage of learning. The clinical supervisor using guided instruction for a student with little to no experience will ask general questions (e.g., What did you learn? What was new? How do you think that went?). As a student gains experience, questions demand deeper reflection and connection between theory and practice. A clinical supervisor might ask: "How do you think the strategy you used today with this client compared to yesterday's session? How can you use what you learned today with what you are going to do next? How did your clinical priorities change during the session and why?"

As a general rule, ask one question at a time (Riddle, 2010). Asking more than one question at a time increases the information processing demands of the task (Rowe, 1986). A clinical supervisor may deliberately choose to ask more than one question if appropriate to the students' stage of development. Managing multiple sources of data is a necessary skill as a student moves toward independence. Developmental stage will also guide a clinical supervisor in determining how much time they will allow for a student to answer a question. If, for example, a clinical supervisor is working with a student in the exposure stage, it would be appropriate to allow the student time to organize their thoughts. A clinical supervisor is cautioned not to make a habit out of providing an immediate response or answer to every question. Doing so consistently may create a stimulus response pattern in which a student seeks reward. This pattern may preclude a student's opportunity for reflection and exploration of alternative options (Riddle, 2010). Clinical supervisors are advised to maintaining a neutral affect and use of a deliberate pause. These strategies will provide a student time to elaborate, reconsider, or reformulate a response. This decreases the probability a student will try to answer in a way they perceive the clinical supervisor wants them to answer. A clinical supervisor can sometimes be

surprised at a student response if the response revealed significant knowledge gaps or misunderstandings. It is under these situations that a clinical supervisor must avoid facial expressions that reveal their surprise (Lake et al., 2005). Finally, remember that, outside assessment, questions as a strategy are to evaluate a student's thinking skills not just a student's accuracy.

Summary

Adopting the role of clinical supervisor is accepting responsibility to be an effective educator. A clinical supervisor should adopt an approach to clinical education that reflects the complex interaction of teaching and learning methods, interpersonal relationships, and professional attitudes that make up the fabric of clinical supervision. Clinical supervisors are encouraged to use the Self-Assessment of Competencies in Supervision tool (ASHA, 2016b) to guide reflection of their skills now and as they adopt new strategies for clinical education.

Clinical education is essential to develop a student's critical thinking, clinical reasoning, and professional problemsolving and contributes to developing the next generation of competent professionals. Modern clinical education encompasses interprofessional practices, evidence-based practices, ethical challenges, evolving regulatory/reimbursement issues, and rapidly changing technologies that are all impacting clinical practice. There is value in recognizing clinical education as requiring a unique set of knowledge and skills and with appropriate preparation potential for clinical educators to positively impact workplace practices (ASHA, 2016a). Clinical education founded on learner-centered approaches may resemble partnerships. A nurturing student–supervisor relationship will empower a student to contribute to teaching and learning by offering up fresh ideas, access to current literature, and innovative clinical practices that have been passed onto them from university researchers and leading experts. Thus, the partnership can in turn enhance the clinical educator's practice (Davis et al., 2011).

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