

The Evolving Role of the Clinical Instructor:

Strategies for Effective Teaching and Student Development in Clinical Education



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Objectives

1. **Identify** performance expectations for physical therapy students in clinical education and recognize common areas where students encounter challenges.
2. **Apply** evidence-based teaching strategies to support diverse learning styles and promote clinical reasoning in the clinical setting.
3. **Analyze** generational learning differences and adapt instructional approaches to meet the needs of an evolving student population.
4. **Evaluate** methods for delivering constructive feedback and demonstrate effective approaches to enhance student development.
5. **Implement** strategies to foster student engagement, critical thinking, and professional identity formation while maintaining efficiency in a busy clinical environment.



Objectives

6. **Describe** the performance expectations for physical therapy students in clinical education and **identify** common challenges including safety, professionalism, and clinical reasoning concerns.
7. **Compare and contrast** generational learning preferences and **explain** how these impact instructional approaches in clinical settings.
8. **Apply** evidence-based teaching strategies to support diverse learning styles and **promote** clinical reasoning and student engagement.
9. **Evaluate** methods for delivering constructive feedback and **demonstrate** effective communication techniques to enhance student development.
10. **Integrate** strategies to support clinical instructors to overcome student performance challenges while fostering professional identity formation.



Knowing your Learner

Think about the most memorable clinical instructor that you had when you were a student.

How did that instructor make you feel?

Notice that I didn't ask, what did you learn from that CI.



Knowing your Learner

Outstanding clinical instructors are intentional about getting to know their learners and understanding their learning needs.

This “personal” approach is often what the student remembers the most because it makes the student feel valued and important.

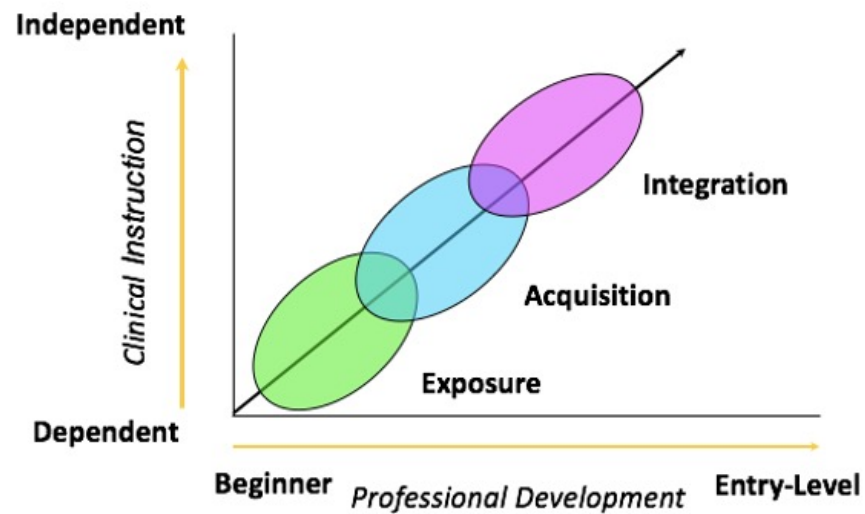
They will remember this feeling long after they have forgotten what you have taught them.



Once you understand your learner, it is important to understand the learning process. Think about the last time you learned a new skill. It is a process.

The Learning Vector Model

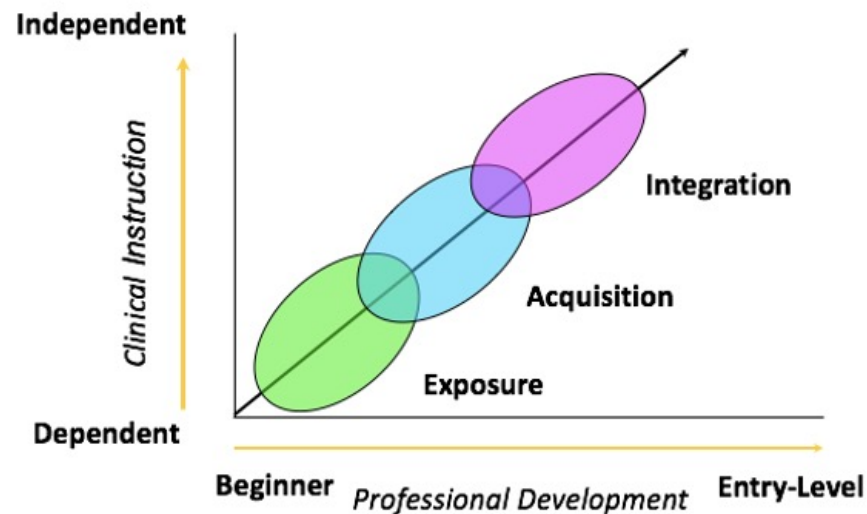
(Adapted from [Stritter, 1986](#))



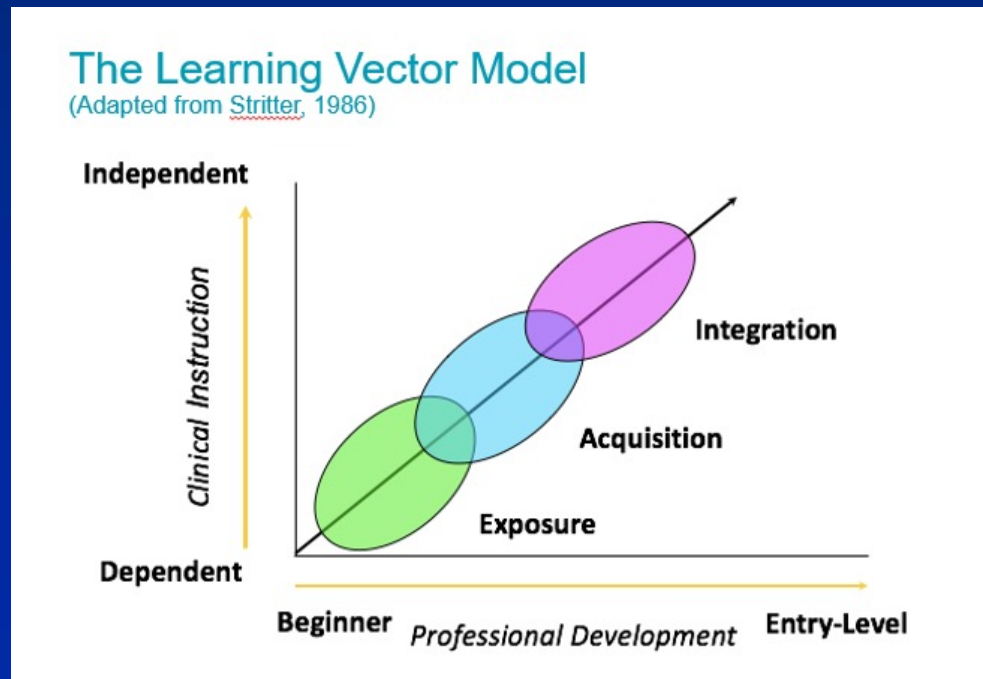
Single day clinical visits in the Fall (Clinical Education 2 course) help to “expose” our students to the clinic. Many students state that these visits help reduce some of the anxiety that accompanies their full-time clinical experiences.

The Learning Vector Model

(Adapted from Stritter, 1986)



There are inherent challenges related to learning in different clinical settings. Students may essentially be starting over in their skill exposure, acquisition, and integration from setting to setting. It is easy to forget this as a CI since we often work in the same setting/scenario every day.



Strategies and Tools to Enhance Your Clinical Teaching

Clinicians are often very busy so they must be very efficient in their teaching.

Understanding your learner also helps a CI be more efficient as the student gradually assumes more clinical responsibility over the course of their clinical experience.

How do you balance teaching efficiency with effectiveness?



So, who are we?



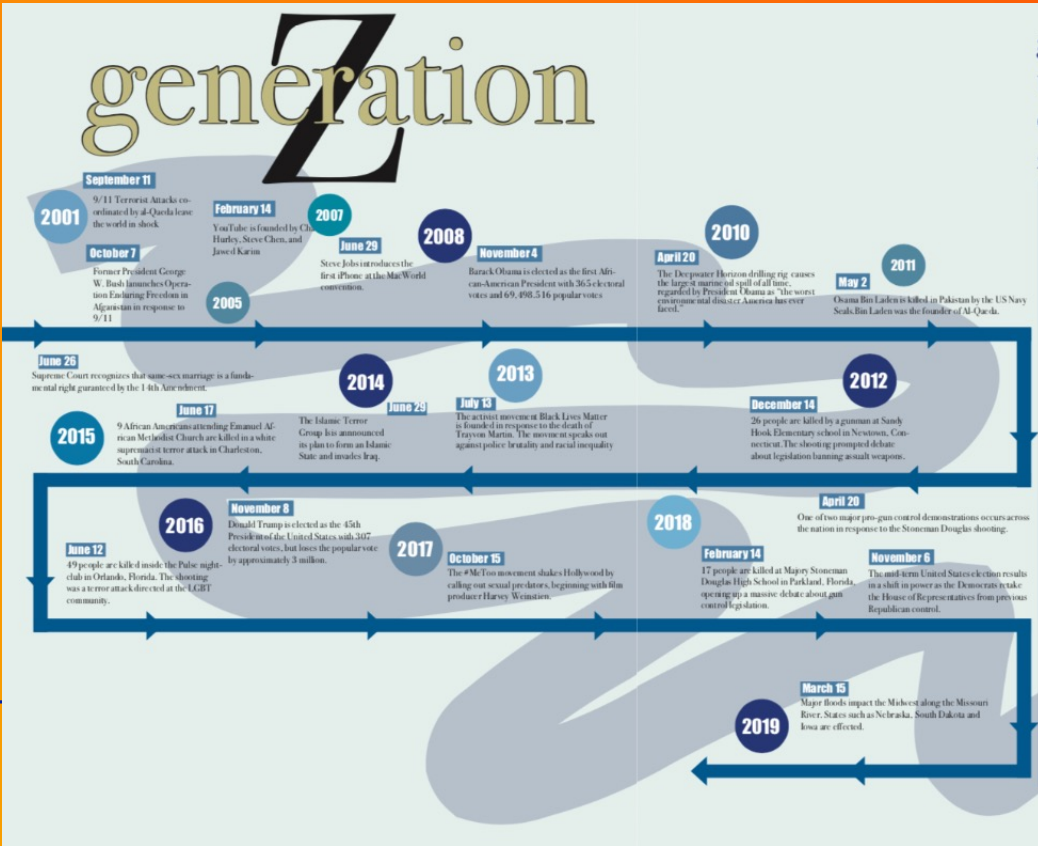


Our Students

Generation Z (Gen Z)
[jə-nə-'rā-shən 'zē]

The generation of people born from 1997 to 2012.

Investopedia



generation z timeline of events 2001 - 2019

by Nore Rodriguez

The term cultural milieu refers to the social and cultural background one emerges from, the ideas and customs one internalizes. Of course, everyone has a different biography, as we are all part of different ethnicities, families, and economic backgrounds. However, we all have been exposed to a specific cultural radiation that we internalize subconsciously. The culture we grew up in is quite different from our parents and is what truly defines as Generation Z.

One key difference is that Generation Z is known for being open minded and political involved.

"We have way more technology (than my parents). The culture has become way more accepting of different people," Freshman Jack Jimenez said. "My generation is mostly cool with everyone just being themselves no matter what that is. If you aren't straight or don't want to be the gender you were born as, lot of us will be cool with it."

"When my parents were my age there were a lot more problems," Junior Kyle Elder said. "People discriminated each other more because the color of their skin, and their sexual orientation."

"I think there have been improvements in terms of race culture and sexual assault awareness but there is still so far to go," Freshman Coleigh Hemmer said. "Generation Z is definitely the most socially 'woke' generation, because we have to be. The March for Our Lives was organized entirely by members of Gen Z because it's our lives that are on the line and with global warming it's us that will be affected."

But why are we like this? Why is generation more open-minded? One can find the answer when they look at the most significant historical events that have occurred in our lifetimes.

Due to a lack of space, not every shooting or natural disaster that has occurred since 2001 can be listed on this timeline. This is not because we believe some were more "important than others", but because some events had more impactful aftermaths. The loss of human life is always significant and tragic.



Baby Boomers as learners

are collectivists who enjoy a democratic learning environment but also like learning new skills independently

These are generalized characteristics and vary person to person
(Levonius, 2015; Pol'akov' a and Klímov' a, 2019)

Gen X as learners

are independent, self-directed, tech-savvy, open-minded and comfortable with authority

These are generalized characteristics and vary person to person
(Levonius, 2015; Lissitsa and Kol, 2016)



Millennials as learners

are comfortable with using network learning and e-learning, prefer participatory, experiential, activity-based group work and enjoy collaboration with peers

These are generalized characteristics and vary person to person

Cook and Macaulay, 2017



Gen Z as learners

are independent preferring less passive but more visual and kinaesthetic learning. They also desire convenience and are open to honest feedback

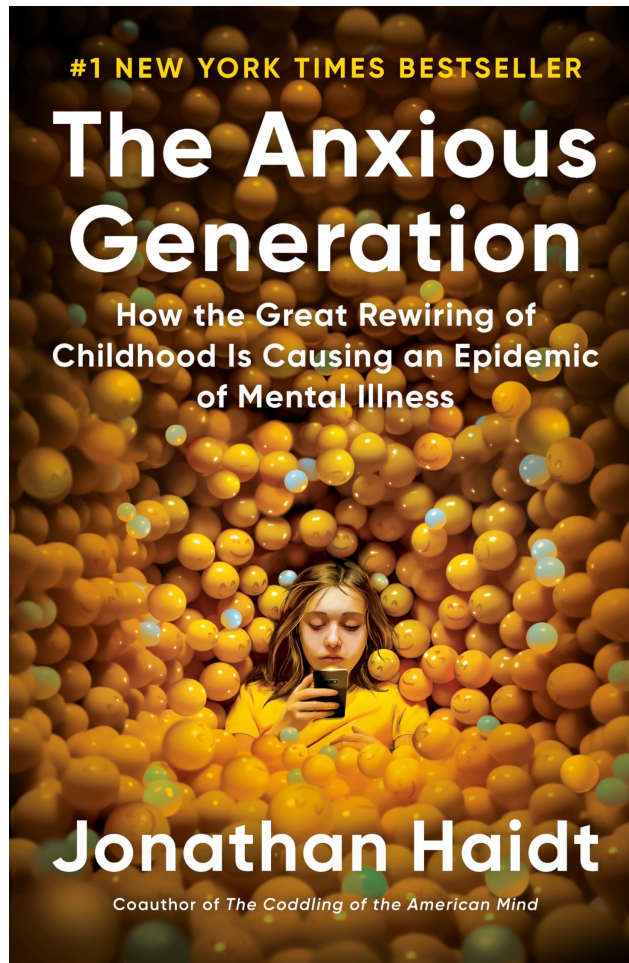
These are generalized characteristics and vary person to person

Issacs et al., 2020; Chicca and Shellenbarger, 2018



The Anxious Generation

Jonathan Haidt



Highlights causes and next steps



How we engage with each other may be as important as our learning preferences

1. Mix of collaborative and independent learners
2. Different relationships with authority
3. Differences in preferred communication



Specific Gen Z learning attributes

- Due to being digital natives they often have underdeveloped social skills
 - Lack in the art of conversation and may struggle developing rapport and in-person communication
 - Increased risk of depression, anxiety and insecurity
- Pragmatic and Entrepreneurial
 - Risk adverse and often have developed options or alternative plans
 - Concerned and cautious of the future (physical, emotional and financial security)



Shorey et. al 2021

Specific Gen Z learning attributes

- Open-minded and accepting of differences
- High social awareness
- Value close mentoring relationships
 - Approachable and friendly
 - Provide immediate and constructive feedback and set realistic expectations
 - Look for both personal and academic support from instructors



Shorey et. al 2021

A quick word on Mentoring

The Tasks of a Mentor

NOTIFY: see what the mentee cannot see and share it with him or her

CLARIFY: provide some clarification on the focus for the mentee

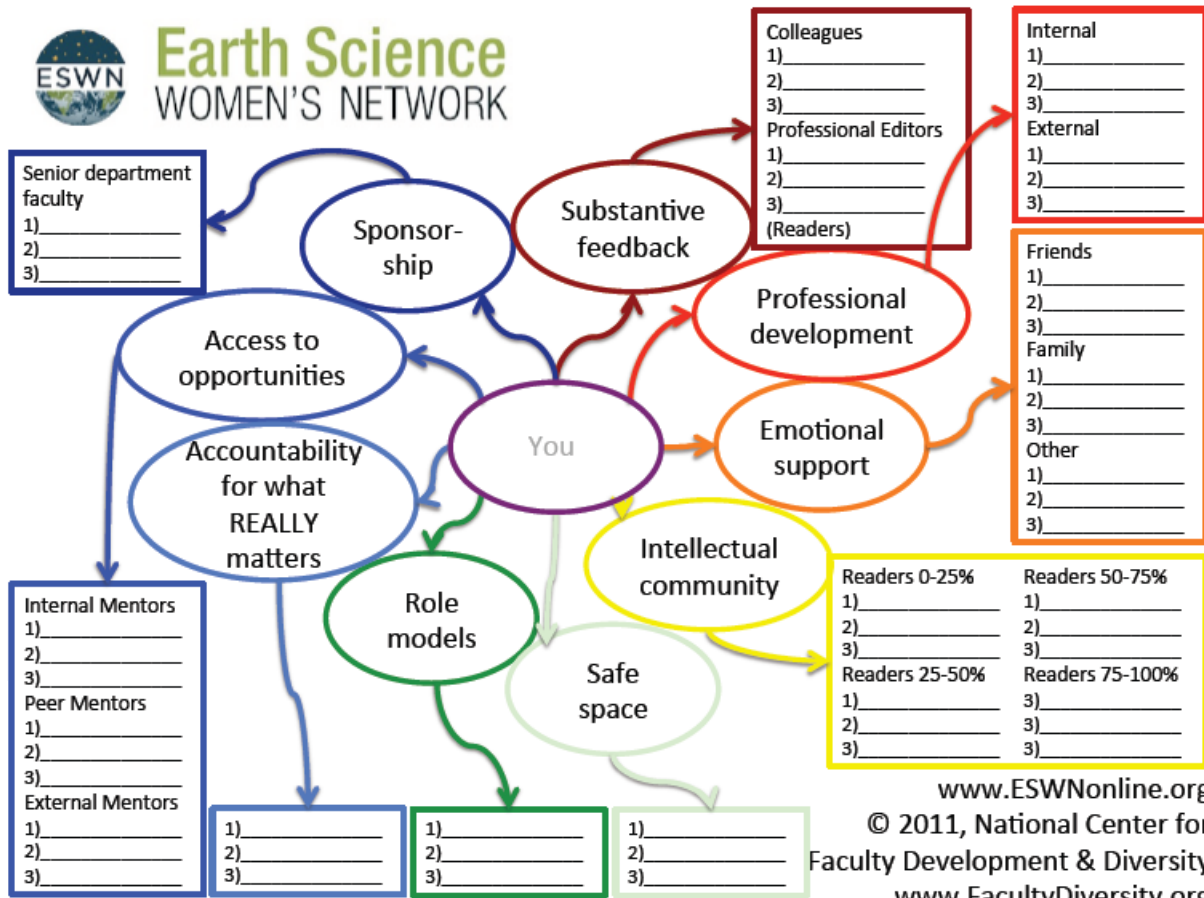
DEMYSTIFY: offer direction; clear action steps

FORTIFY: encourage the mentee to take those necessary steps

INTENSIFY: hold mentee accountable until progress is made

Adapted from Life Giving Mentors: A Guide for Investing Your Life in Others, by Tim Elmore, 2008

We will all have many mentors in our lives



www.ESWNonline.org
 © 2011, National Center for Faculty Development & Diversity
 www.FacultyDiversity.org



Teaching Recommendations for Gen Z

- Effective communication
 - Communication Styles Assessment Resource
- Provide reassurance and a listening ear
 - Help guide through tough conversations with patients
 - Provide a safe space to discuss disturbing content and situations
- Create a collaborative environment

Shorey et. al 2021



**So how does
this affect
student
performance in
the clinic?**



See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/329680414>

Doctor of Physical Therapy Student Experiences During Clinical Education: Patient Safety, Error, and the System

Article in *Journal of Physical Therapy Education* · December 2018

DOI: 10.1097/JTE.0000000000000072

- Recommend being explicit about clinic safety culture
 - Timing and reinforcement of orientation materials, especially those related to documentation and reporting of errors and emergency procedures
 - Talk about patient safety, steps taken to protect patient rights, ethical decisions made in routine patient care
 - Highlight need to speak up when they have a patient safety concern. They often feel nervous speaking up to authority
- Regular check-ins regarding communication
 - Do they and are they communicating effectively with you, the team, documenting safety in their notes

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/329680414>

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- Widespread variability in CI supervision
- Developing their professional identity
 - Responsibility as an emerging clinician
- Student Stress
 - Are their conversations about breaks, how questions are asked, how much sleep are they getting, how much time outside of clinic are they documenting, studying etc. May be part of help facilitating work/life balance

Clinical Instructors' Experiences Working with and Assessing Students Who Perform below Expectations in Physical Therapy Clinical Internships

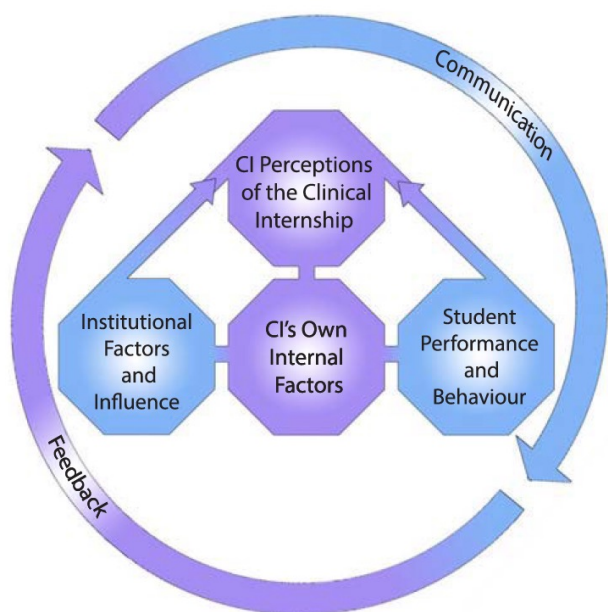


Figure 1 Impact of external factors on CIs' perceptions and the importance of communication.

Student Performance Below Expectation

- (1) unable to perform an assessment or treatment in a safe manner
- (2) unable to sustain a specified caseload, adjusted for level of education and training
- (3) demonstrating a lack of critical thinking skills
- (4) demonstrating a lack of professionalism when interacting with patients, families, the CI, or any member of the health care team

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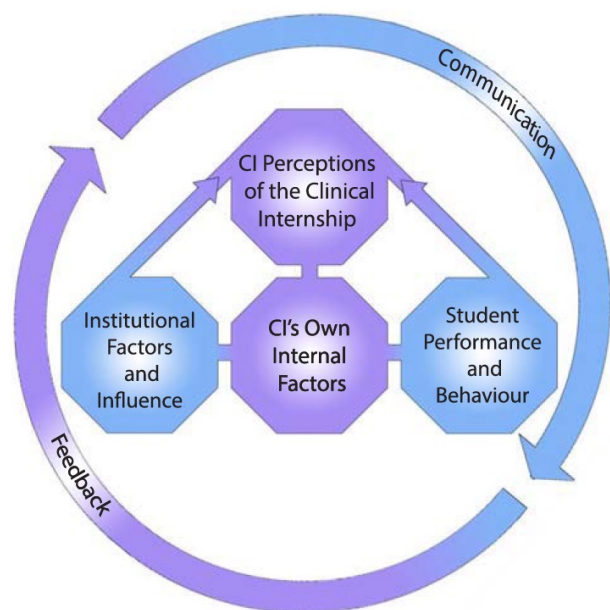


Figure 1 Impact of external factors on CIs' perceptions and the importance of communication.

CI = clinical instructor.

So OW, et al 2019



Enablers and Barriers to Failing Students

- (1) Concerns about remediation opportunities
- (2) Perceived lack of support by institution to fail students
- (3) Concerns reflects poorly on CI
- (4) Time to improve if an early clinical
- (5) Clarity on institution expectations



Clinical Instructors' Experiences Working with and Assessing Students Who Perform below Expectations in Physical Therapy Clinical Internships

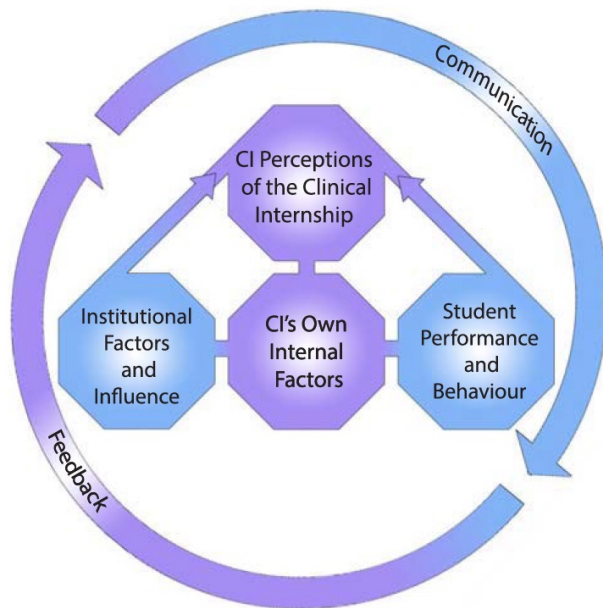


Figure 1 Impact of external factors on CIs' perceptions and the importance of communication.

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So OW, et al 2019

Major Themes

- (1) Emotions and perceptions
- (2) Importance of communication

Clinical Instructors' Experiences Working with and Assessing Students Who Perform below Expectations in Physical Therapy Clinical Internships

Table 2 Recommendations for CIs, Students, and Academic and Clinical Facilities during Clinical Internships

CIs	Students	Academic and Clinical Facility
<ul style="list-style-type: none"> • Communicate concerns about students' performance to them as early as possible. • Give accurate feedback and assessment at midterm to inform students of their current performance and provide opportunities for remediation. • Contact the university early on if you are concerned; this will ensure that student performance is documented and allow more time for focused and collaborative remediation. • Make students aware that a lack of progress, rather than isolated incidents, constitutes a failing grade. • Document student performance regularly and thoroughly to reduce potential conflict when delivering feedback at midterm and final evaluations. 	<ul style="list-style-type: none"> • Engage in open communication with your CI as early as possible. • Reflect on your learning preferences and any past experiences that may affect your performance. • Disclose your needs and any special considerations early to optimize your learning experience. • Your professionalism, along with your knowledge and skills, are heavily weighted in the recommendation for your final grade; be sure to maintain them. • Think broadly – consider the impact of the lessons learned during your clinical internships on your path to becoming a registered health professional. • Consider failure as a learning opportunity rather than an indication of inadequacy. 	<ul style="list-style-type: none"> • Investigate opportunities to disclose information about past student underperformance to better equip CIs. • Debrief the sites and the CI who worked with SPBE to discuss the effective and ineffective strategies used and future remediation for the students. • Implement courses that include teaching clinical reasoning. • Provide clearer information on what sort of student performance constitutes a failing grade.

CI = clinical instructor; SPBE = students performing below expectations.



Mentoring Resources for the Evolving Clinician



Communication Styles Assessment

Style 1: Energizer: Direct/Fast-Paced, Results Oriented

1. **Characteristics:** Pragmatic, Direct, Impatient, Decisive, Quick, Energetic
2. **Discussion Topics:** Results, Objectives, Performance, Efficiency, Progress, Decisions, Responsibility, Feedback, Achievements
3. **Priorities:** Action, Accomplishment
4. **Time:** Right now

Skills: Highly productive, energetic, enthusiastic, good at making decisions

May come across as: Impatient, insensitive, miss details

Communicating with an Energizer

- Brevity is key, talk in bullet points
- Focus on results first
- Emphasize practicality of idea
- Make direct eye contact and be confident
- Use visual Aids
- Walk and talk

Style 2: Systemizer: Indirect/Slow Paced, Results Oriented

1. **Characteristics:** Logical, Analytical, Organized, Systematic, Factual, Cautious
2. **Discussion Topics:** Facts, Procedures, Planning, Organizing, Controlling, Testing, Trying things out, Analysis, Observations, Proof, Details
3. **Priorities:** Facts, Order, Details
4. **Time:** Past, Present, and Future

Skills: Organize information well, less prone to mistakes

May come across as: Picky, aloof, critical

Communicating with a Systemizer

- Focus on facts and data
- Provide proof and methodology to back up proposal
- Keep discussion/proposal in logical order (background, current situation, results)
- Provide written documentation
- Do not rush

Style 3: Associator: Indirect/Slow Paced, Relationship Oriented

1. **Characteristics:** Friendly, Warm, Empathetic, Emotional, Perceptive, Sensitive, Spontaneous
2. **Discussion Topics:** People Needs, Motivation, Teamwork, Communication, Feelings, Self-Development, Awareness, Relationships
3. **Priorities:** Relationships, People
4. **Time:** Past

Skills: Perceptive, friendly, team players

May come across as: Unassertive, emotional, slow

Communicating with an Associator

- Allow for personal talk, build rapport
- Connect results to relationships and people
- Seek their opinions/ideas
- Discuss past results and successes

Style 4: Innovator: Direct/Fast Paced, Relationship oriented

1. **Characteristics:** Charismatic, Creative, Difficult to Understand, Full of Ideas, Provocative
2. **Discussion Topics:** Concepts, Innovation, New Ways, New Methods, Improvement, New Ideas, Opportunities, Possibilities, Big Picture, Potential
3. **Priorities:** Relationships, People
4. **Time:** Future

Skills: Visionary, Creative, See big picture

May come across as: Difficult to understand, unrealistic, unproductive

Communicating with an Innovator

- Allow time for brainstorming
- Talk about big picture and what idea could mean
- Stress uniqueness of an idea or topic
- Follow up meeting with brief to-do list



(Based on the work of P Case "Teaching for the Cross-Cultural Mind" Washington, DC, SIETAR, 1981)

The 1-minute CI

Encompasses three specific aspects of clinical teaching. Is meant to be an efficient way of engaging your student in a busy clinical environment.

1. **Get a commitment:** Ask the student to commit to a decision (diagnosis, plan of care, specific intervention.)

”What do you think is going on with this patient?”

“What is the most important problem to be treated today and why?”



The 1-minute CI

2. Probe for supporting evidence: Ask the student brief questions to understand their thinking process and evidence for their decision making.

“What tests/measures (or interventions) did you complete and why did you choose them?”

”What is your differential diagnosis for this patient’s presentation?”

“Is there anything that you need to know in order to move forward with this patient”



The 1-minute CI

3. Reinforce what was done well and correct mistakes:

This gives the student valuable feedback and helps to improve future performance. Ideally, this feedback is given as soon as possible after the performance is complete. Getting the student's perspective on their performance is also helpful.

“What went well?”

“What would you do differently if you encountered this clinical situation in the future?”



Formative Student Assessment Weekly “check-in” Meetings

For students in the UF DPT program, there are two summative assessments during their clinical experience - Midterm and Final via the Clinical Performance Instrument (CPI.)

A great way to provide your student with a formative assessment throughout the experience is to do a weekly “check-in” meeting.



Formative Student Assessment Weekly “check-in” Meetings

Advantages:

1. Provides regular formal communication each week.
2. Helps to set expectations early and often.
3. Can be used to identify performance deficiencies and to set goals.
4. Written comments and goals can be utilized for midterm and final CPI assessments. This reduces the amount of time spent completing the CPI.



This is a sample weekly check in or planning form. Your clinic may already have a specific form that is used.

Source: APTA CICP, Alexandria, VA. Sept 2005: Section IV-7

Weekly Planning Form^a

Dates: _____ Experience Week Number: _____

STUDENTS REVIEW OF THE WEEK

When completing this form consider the five (5) performance dimensions: quality of care, supervision/guidance required, consistency of performance, complexity of tasks/environment, and efficiency of performance.

CI'S REVIEW OF THE WEEK

When completing this form consider the five (5) performance dimensions: quality of care, supervision/guidance required, consistency of performance, complexity of tasks/environment, and efficiency of performance.

GOALS FOR THE UPCOMING WEEK OF _____

Student's Signature _____ CI Signature _____

^aAPTA Clinical Instructor Education and Credentialing Program, American Physical Therapy Association, Alexandria, Va. September 2005: Section IV-7.



Student “Downtime” Activity Recommendations

- Performing chart review for upcoming patients on your schedule
- Practicing skills (examination, interventions)
- Literature reviews on a clinical topic or patient case
- Inservice or project development
- Working with or observing another therapist
- Role play and practice social skills

What other activities do you have your students participate in if there is a patient cancellation or no-show on your schedule?

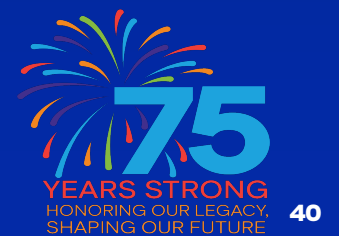


Student Reflection and Learning

Student reflection is a powerful learning tool and is easily implemented in the clinic.

There are three types of reflection:

- Reflection on action
- Reflection in action
- Reflection for action



Student Reflection and Learning

- Reflection on action – Occurs after the action has been completed. Provides the student an opportunity to look back on the experience to better understand it.

Example: Student delivers a therapeutic intervention to a patient and afterwards, CI asks “what went well with your performance and what would you do differently next time?”



Student Reflection and Learning

- Reflection in action - The student is asked to stop, think, and problem solve throughout an active clinical scenario.

Example: Student is performing a neurological examination on a patient and the CI may be asking them to interpret the findings and clinical significance **during** the examination.

“Thinking out loud”: This can be helpful for the CI to do for the student as well, particularly as it relates to patient examination structure.



Student Reflection and Learning

- Reflection for action – The student begins to anticipate situations before being faced with them and formulates plans in preparation for the clinical scenario.

Example: A student in acute care anticipates a "difficult" room set up and can visualize/articulate a plan for organizing the room prior to working with the patient.



Asking the “Right” Questions

Asking your student the “right” questions can be facilitated by considering Bloom’s Taxonomy for Learning, Teaching, and Assessment.

It is easy for CIs (particularly new CIs) to ask many questions associated with the “Remember” taxonomy (fact recall).

Asking the right questions requires an understanding of your learner and is enhanced when CIs regularly ask themselves reflective questions. - The reflective practitioner

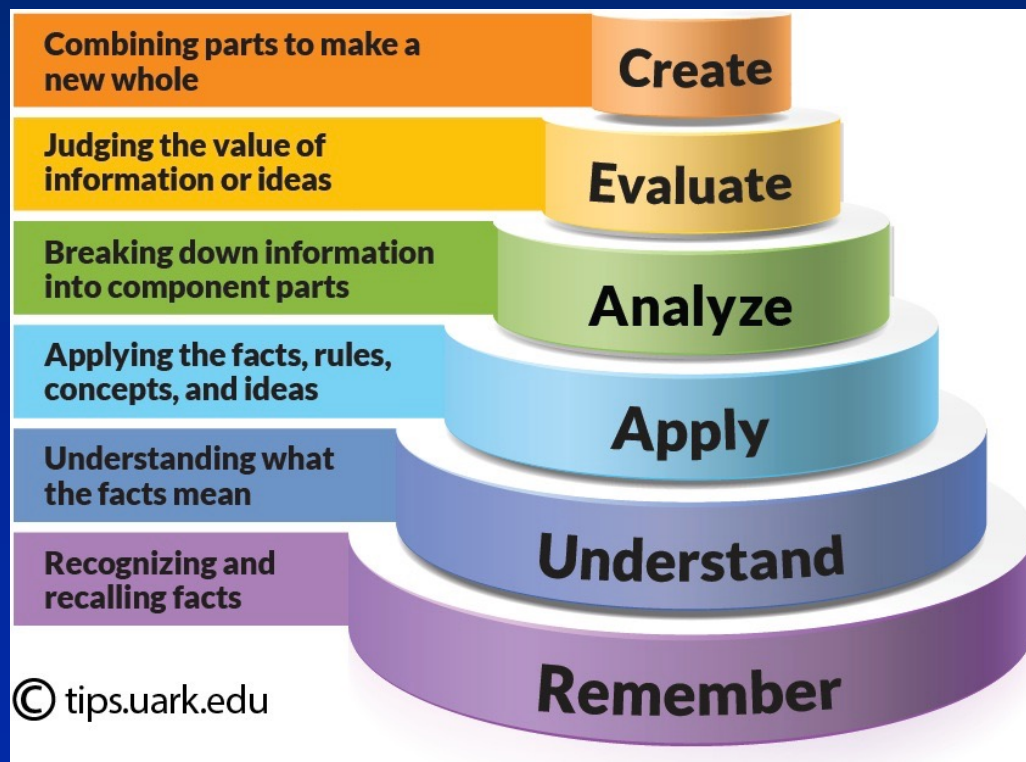


Image courtesy of Jessica Shabatura
www.tips.uark.edu/using-blooms-taxonomy/

Asking the “Right” Questions

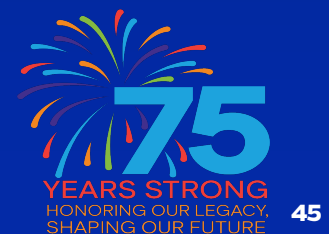


Remember: “What is the neurological level of the Achilles reflex?”

Understand: “What clinical information may be gained by testing a patient’s Achilles reflex?”

Apply: “Can you perform an effective Achilles reflex test?”

Analyze: “Can you compare the Achilles reflex response of a patient with an upper versus lower motor neuron lesion?”



Asking the “Right” Questions



Evaluate: “Is the Achilles reflex always an effective neurological test for an individual 60 years of age or older?” – Probably not as up to 1/3 of individuals 60 or older have an absent Achilles reflex response.

Reference: "Nervous system changes . . . and other stories." *BMJ*, 383 (2023). <https://doi.org/10.1136/bmj.p2222>.

Create: “Are there alternative neurological assessments other than Achilles reflex testing for individuals 60 or older?”



Providing Meaningful Feedback

Feedback is most effective when it is:

1. Positive
2. Specific
3. Supportive
4. Given in private
5. Honest
6. Timely
7. Based on behavior and/or performance not student personality traits



Providing Meaningful Feedback

Asking students to assess their own performance can serve as a “launching point” for giving feedback.

It is important to gauge the student’s response to your feedback. Defensiveness is not acceptable behavior and should be immediately addressed.



Strategies and Resources to Consider

Strategies

1. Weekly goals
2. Timing and review of expectations
(Clinical reasoning, professionalism, safety, caseload, efficiency)
3. Timing and specificity of feedback
(Does it promote reflection in-action and on-action?)
4. Talk about differences in communication
5. Check in on confidence, accountability, and responsibility moment
6. Role play and practice social skills

Resources

1. **ACAPT Student Readiness for the First Full-Time Clinical Experience**
2. **UF Clinical Education Website**

References

- Shorey S, Chan V, Rajendran P, Ang E. Learning styles, preferences and needs of generation Z healthcare students: Scoping review. *Nurse Educ Pract.* 2021 Nov;57:103247. doi: 10.1016/j.nepr.2021.103247. Epub 2021 Oct 26. PMID: 34768214
- So OW, Shaw R, O'Rourke L, Woldegabriel JT, Wade B, Quesnel M, Mori B. Clinical Instructors' Experiences Working with and Assessing Students Who Perform below Expectations in Physical Therapy Clinical Internships. *Physiother Can.* 2019 Fall;71(4):391-399. doi: 10.3138/ptc-2018-0081. PMID: 31762549; PMCID: PMC6855354.

What Questions (or comments) Do You Have?

