

Peer Observation: Content Knowledge

Content Knowledge

The instructor

- _____ makes statements that are accurate according to the standards of the field
- _____ incorporates current research in the field
- _____ identifies sources, perspectives, and authorities in the field
- _____ identifies *diverse* sources, perspectives, and authorities in the field
- _____ communicates the reasoning process behind operations and/or concepts

--Linse adaptation of Chism, Peer Review of Teaching

Content knowledge

- Selection of class content worth knowing and appropriate to the course
- Provided appropriate context and background
- Mastery of class content
- Citation of relevant scholarship
- Presented divergent viewpoints

--Bandy, "Peer Review of Teaching," Vanderbilt Center for Teaching

Knowledge of Subject & Discipline-Specific Language

| Substandard Tier | Tier 1 | Tier 2 | Tier 3 |
|---|---|--|--|
| Performing Below Minimum Level | Performing at Minimum Level | Performing at Proficient Level | Performing at Excellence Level |
| ○ Instructor does not appear to understand course content. | ○ Instructor's factual statements are consistent with current knowledge in the field. ○ Instructor correctly answers questions about course-level content. | ○ Instructor answers questions confidently, clearly, and simply. | ○ Instructor ties current content to topics or knowledge from the profession and/or more advanced courses. |
| ○ Instructor does not use, or incorrectly uses, discipline-specific and/or academic language. | ○ Instructor uses discipline-specific and academic language. | ○ Instructor explains use of discipline-specific terms. | ○ Instructor facilitates the use of discipline-specific language by students. |

--USC Classroom Teaching Observation Checklist

Appropriateness of instructional materials

- Content that matches course goals
- Content that is rigorous, challenging
- Content that is appropriate to student experience, knowledge
- Adequate preparation required
- Handouts and other materials are thorough and facilitated learning
- Audio/visual materials effective
- Written assignments

--Bandy, "Peer Review of Teaching," Vanderbilt Center for Teaching

Mastery of Content Knowledge (content (current and accurate), explanations (clear, include examples), connections among topics, use of technical language, how questions are answered)

| Does Not Meet Expectations | Meets Expectations | Exceeds Expectations |
|---|---|--|
| <ul style="list-style-type: none"> Content discussed or used in class was outdated, inaccurate, overly exaggerated, and/or unrelated to course (e.g. personal life). Explanations were unclear. Connections between different concepts presented in the class were unclear. Used lots of jargon, technical language, and/or complex vocabulary and did not provide clear explanations of the meanings of the terms. Student questions were answered incorrectly. Did not notice or correct erroneous student contributions. | <ul style="list-style-type: none"> Content discussed or used in class was accurate and current to developments in the field. Explanations were clear and difficult concepts were broken down and were accompanied by appropriate real-world examples to facilitate learning Connections between different concepts presented in the class were clear. Jargon or technical language was only used when appropriate and came with a clear explanation of the meaning of the term(s). Student questions were answered correctly or said "I don't know" instead of bluffing or making up an answer Corrected erroneous student contributions. | <ul style="list-style-type: none"> Content discussed or used in class was cutting-edge and/or involved connections to current events. Instructor modeled disciplinary thinking (i.e., demonstrated thought processes through think-alouds) Connections to the broader field were presented/clarified. Jargon or technical language was accompanied by a clear explanation AND was utilized in a variety of ways and in connection with a variety of examples, leading to likely vocabulary development for students. Corrected erroneous student contributions and labeled student errors as an opportunity for growth. |

--Masland & Chambers (2020)

Propositional Knowledge

- The lesson involved fundamental concepts of the subject.
- The lesson promoted strongly coherent conceptual understanding.
- The teacher had a solid grasp of the subject matter content inherent in the lesson.
- Elements of abstraction (i.e., symbolic representations, theory building) were encouraged when it was important to do so.
- Connections with other content disciplines and/or real world phenomena were explored and valued.

Procedural Knowledge

- Students used a variety of means (models, drawings, graphs, concrete materials, manipulatives, etc.) to represent phenomena.
- Students made predictions, estimations and/or hypotheses and devised means for testing them.
- Students were actively engaged in thought-provoking activity that often involved the critical assessment of procedures.
- Students were reflective about their learning
- Intellectual rigor, constructive criticism, and the challenging of ideas were valued.

--RTOP/Reformed (Science & Math) Teaching Observation Protocol

Math/Science Content

- The mathematics or science content chosen was appropriate and worthwhile for this course.
- The significance of the math and science content, including how it fits into the "big picture" of the discipline, was made explicit to the students.
- Content delivered through direct instruction by the professor is consistent with deep knowledge and fluidity with mathematics or science concepts of the class.

- Professor written content information was accurate (i.e. information written on board, in hand-outs and on tests and quizzes).
- The professor's depth of subject matter knowledge was evidenced throughout the non-direct instruction (i.e. fluid use of examples, questioning strategies to guide student learning, discussions and explanations of concepts, etc.).
- Elements of mathematical/scientific abstraction (e.g., symbolic representations, theory building) were included when it was important to do so.
- Mathematics and science were portrayed as a body of knowledge influenced by human decisions and influencing human society.

--UT Observation Protocol for Physics