

Education, Knowledge & Curriculum

Dr. Isabeau Iqbal, EDST 403/307

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Education, Knowledge & Curriculum (EDST 403)
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Plan for the afternoon

- Curriculum – definitions, influences on
- A bit about me... (Isabeau)
- Introduction to course (EDST 403)
- Where does the question of knowledge emerge in education?
- Introduction to core knowledge
- Out of class writing activity

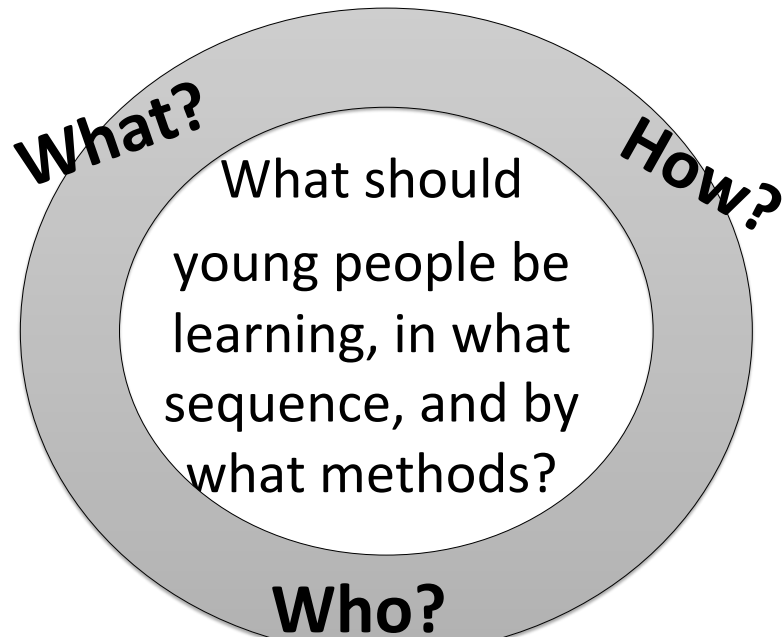
2

Learning objectives

By the end of this class, you should be able to:

- Recall, without reference to the syllabus, at least 2 course goals.
- List 10 or more influences on the curriculum
- Explain the concept of pedagogical content knowledge and be able to briefly describe the relevance of this concept to your teaching.
- Know the names of 2 or more new classmates.

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school boards, children, parents, government, accrediting agencies, professional organizations, technology, politics, tradition, laws, religion, race, gender, ethnicity, socioeconomic status, how society defines function of school, expectations, cultural waves, market forces, demographic trends, environmental factors, nature of learning, workload, physical facilities, scheduling, textbooks, standardized tests, assessment, the teacher...

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Knowledge in your Practice

Where does the question of knowledge emerge in education?

What is teachers' relation to knowledge?



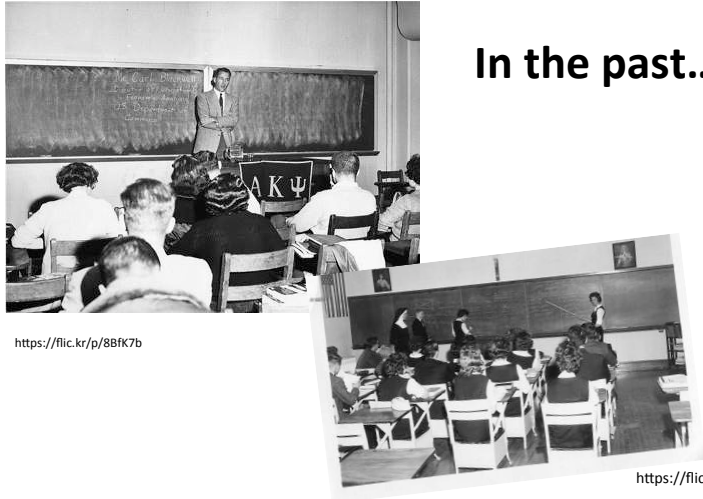
<https://flic.kr/p/aZiSsn> McKinley High School Students participating in SNAP!



<https://flic.kr/p/8pMJsz>

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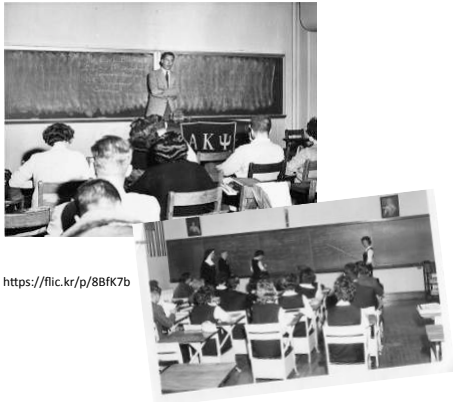
In the past...



<https://flic.kr/p/8BFk7b>

<https://flic.kr/p/8NZLk1>

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<https://flic.kr/p/8BFk7b>

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Teacher candidates were tested on whether they had knowledge of...

- Arithmetic
- Grammar
- Geography
- History
- Algebra
- Physiology
- Composition
- Reading
- Etc, etc, etc
- Theory and practice of teaching

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The screenshot shows a web page with a navigation menu at the top: "Becoming a Teacher", "Certificate Services", "Standards", "Teacher Education", and "Professional Conduct". Below the menu is a breadcrumb trail: "Home > Standards > Public School". On the left, there is a sidebar with links: "Overview", "Public School", "Independent School", and "Questions and Case Studies". The main content area is titled "Standards for the Education, Competence and Professional Conduct of Educators in BC". It states that these standards are established by the British Columbia Teachers' Council for individuals who hold a certificate of qualification. There are two numbered points:

- 1. Educators value and care for all students and act in their best interests.**
Educators are responsible for fostering the emotional, esthetic, intellectual, physical, social and vocational development of students. They are responsible for the emotional and physical safety of students. Educators treat students with respect and dignity. Educators respect the diversity in their classrooms, schools and communities. Educators have a privileged position of power and trust. They respect confidentiality unless disclosure is required by law. Educators do not abuse or exploit students or minors for personal, sexual, ideological, material or other advantage.
- 2. Educators are role models who act ethically and honestly.**
Educators act with integrity, maintaining the dignity and credibility of the profession. They understand that their individual conduct contributes to the perception of the profession as a whole. Educators are accountable for their conduct while on duty, as well as off duty, where that conduct has an effect on the education system. Educators have an

On the right side, there are two sections: "Related Forms" and "Related Links". "Related Forms" lists two documents for download: "Standards for the Education, Competence and Professional Conduct of Educators in BC" (373 Kb) and "Les normes régissant la formation, les compétences et l'éthique professionnelle des enseignantes et enseignants de la Colombie-Britannique" (381 Kb). "Related Links" states: "There are currently no related links."

<http://www.bcteacherregulation.ca/standards/StandardsDevelopment.aspx>

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Standards for the Education, Competence and Professional Conduct of Educators in BC

1. Educators value and care for all students and act in their best interests.
2. Educators are role models who act ethically and honestly.
3. Educators understand and apply knowledge of student growth and development.
4. Educators value the involvement and support of parents, guardians, families and communities in schools.
5. Educators implement effective practices in areas of planning, instruction, assessment, evaluation and reporting.
6. Educators have a broad knowledge base and understand the subject areas they teach.
7. Educators engage in career-long learning.
8. Educators contribute to the profession.

Reference: <http://www.bcteacherregulation.ca/standards/StandardsDevelopment.aspx>

Teachers' Content Knowledge

How do you, as a teacher, decide what to teach?



<https://flic.kr/p/2GHQzo>

Reference: Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.

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Teachers' Content Knowledge

- How do you decide what content to teach? To exclude?
- How do you represent what you know?
- How do you use your knowledge to generate explanations?
- How do you question students about their knowledge?
- How do you test your students on the content?

Reference: Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.

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Teachers' Content Knowledge

Influences:

- The explanations you provide
- The ways you confront flawed textbooks (i.e. inadequate explanations, poor examples)
- How you deal with problems of misunderstanding

<https://flic.kr/p/ce2C7>

Reference: Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.



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Sources of Teacher Knowledge

- What are the sources of your teacher content knowledge?
 - How did you come to know what you know?
- How are new and existing knowledge combined?

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(Some of the) Tasks Involved in Teaching French

- presenting and explaining grammar rules
- responding to students' "why?" questions
- finding examples to make a specific grammar point
- recognizing what is involved in using a particular representation
- Connecting a topic to prior/future years
- Explaining grammar goals & purposes to parents
- Appraising, adapting the grammar content of textbooks
- Modifying tasks to be easier/harder
- Asking productive questions
- And more...

Adapted from Ball, Thames & Phelps. (2008). Content knowledge for teaching : What makes it special? *Journal of Teacher Education*, 59(5), 389-407
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Kinds of Teacher Knowledge

(1) Content knowledge

- What are the relevant facts/concepts?
- What is questionable?
- What topics are central? Which are peripheral?
- What is false? Invalid?

Reference: Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.

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Kinds of Teacher Knowledge

(2) Pedagogical knowledge

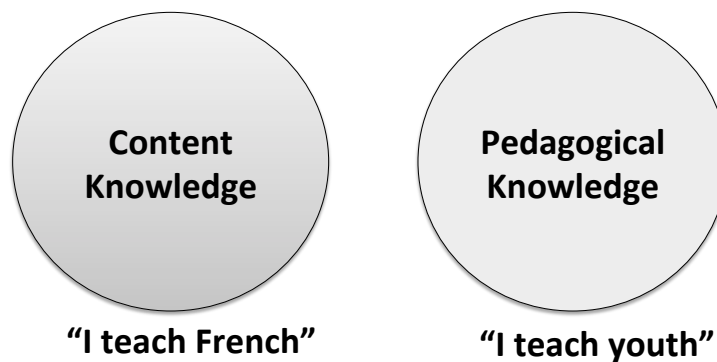
Pedagogical Knowledge is deep knowledge about the processes and practices or methods of teaching and learning and how it encompasses (among other things) overall educational purposes, values and aims.

(3) Curricular knowledge

Reference: <http://mkoehler.educ.msu.edu/tpack/pedagogical-knowledge-pk/> (see site for fuller definition)

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False Dichotomy



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Pedagogical Content Knowledge

The diagram consists of two overlapping circles. The left circle is labeled 'Content Knowledge' and the right circle is labeled 'Pedagogical Knowledge'. The overlapping area in the center is labeled 'Pedagogical Content Knowledge'. Below the left circle is the quote "I teach French" and below the right circle is the quote "I teach youth".

“I teach French” **“I teach youth”**

Credit: <http://reflectionsinthewhy.files.wordpress.com/2013/04/pk-pck-ck.jpg>

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Pedagogical Content Knowledge

The diagram is identical to the one on slide 19, showing two overlapping circles for 'Content Knowledge' and 'Pedagogical Knowledge' with their intersection labeled 'Pedagogical Content Knowledge'. Below the left circle is the quote "I teach French" and below the right circle is the quote "I teach youth". A grey arrow points from the bottom towards the intersection of the two circles.

I teach French to youth.

Credit: <http://reflectionsinthewhy.files.wordpress.com/2013/04/pk-pck-ck.jpg>

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Pedagogical Content Knowledge

- What makes learning this topic easy/difficult?
- What conceptions/pre-conceptions do my learners have about this topic?
- How do I make this understandable to my learners?
- What are the most powerful analogies, illustrations, examples, explanations, and demonstrations...?

Reference: Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.

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Core Knowledge



Image core earth:

<http://www.digitaltrends.com/cool-tech/did-you-know-the-earth-produces-44-trillion-watts-of-heat/#!PxS9Z>

Image core apple: <http://misguidedchildren.com/humor/2013/11/the-core-charge/7251>

In-class activity (on your own)

Source: Dias, P. (1992). Cultural literacy, national curriculum: What (and how) does every Canadian student really need to know? *English Quarterly*, 24(3-4), 10-19.

On your own, READ the following:

- p.10-11 (excluding the last sentence on page 11)
- p.14 (Starting at "Reading and Knowing") to p.16 (top) to the sentence "The question remains...from secondary school?"

As you read, consider & jot down some responses to:

1. What are Hirsch, Cheney, Ravitch, and Finn promoting and what is their rationale for doing so?
2. What are Dias' main concerns with respect to what Hirsch & company are advocating? What is Dias advocating for?

Once you finish reading the pages above and taking notes on Questions 1-3, form a group of 3-4 people.

Discuss your answers to Questions 1, 2 & 3:

1. What are Hirsch, Cheney, Ravitch, and Finn promoting and what is their rationale for doing so?
2. What are Dias' main concerns with respect to what Hirsch & company are advocating? What is Dias advocating for?
3. What are some of the pros and cons of having a common and pre-determined set of required knowledge that students (K-12) must attain?

In point form, write your group's response to each question.