Methods of Analysis
Curriculum Analysis
Stephen Petrina (2022)

Although curriculum analysis (CA) is one of the most common practices of curriculum design, research, and theory, it is one of the least understood. More specifically, the methods of CA are arbitrary or unclear. This stems partially from disagreements over whether CA should emphasize autobiographical, cultural, or social content and processes. The "reconceptualization" movement of the 1970s turned interests toward autobiographical and psychological dimensions while the balance of curriculum studies continue to emphasize cultural, political, and social dimensions. For instance, Pinar (2010) defines his method of CA, which he dubbed "currere," as "an autobiographical means to study the lived experience of individual participants in curricular conversation" (p. 178). Reconceptualists under-historicized and overexaggerated previous traditions' tendency to analyze curricular activities and content at the expense of student experiences and interiority.

CA is as ancient as formal education itself but was modernized in form of the "curriculum survey," a core component of school surveys in the late 1800s and early 1900s. Reconceptualists took issue with Bobbitt's (1918) method of CA but he was merely restating what had become common practice. Flexner's (1910) *Medical Education in the United States and Canada* popularized curriculum surveys and from there on for the next twenty years it seemed like each school in every city and town was submitted to a curriculum survey or analysis. "For a school curriculum is an organic thing in whose continuity and interrelations its educational virtue resides," Flexner (1910) reasoned. "One subject bears upon another; one year reinforces another. A curriculum has, as such, unity, purpose, method" (p. 34). For the most part, from the 1910s one analyzed or surveyed a curriculum to make or revise a curriculum.

Indeed, Tyler (1949) introduced his method of analysis with an aim of rationalizing curriculum making. "The rationale developed here begins with identifying four fundamental questions," he insisted, "which must be answered in developing any curriculum and plan of instruction:"

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?
4. How can we determine whether these purposes are being attained?

Inasmuch as this reduction of CA to four essential questions was a concern, the key contribution of the reconceptualization movement was in severing CA from curriculum development. In other words, CA is a method for understanding curriculum and not just preliminary to designing curriculum. Another insight was reconceptualizing curriculum as a verb or process as opposed to a noun or thing, as Flexner and other analysts described it. As Hultgren (2004) concludes, "curriculum, then, can be seen as a cultural construction (curriculum as lived) and not merely as an abstract concept outside human experience (curriculum as plan)" (p. 2).

In the most comprehensive guide available, Posner (1992/2004) defines CA as

> an attempt to tease a curriculum apart into its component parts, to examine those parts and the way they fit together to make a whole, to identify the beliefs and ideas to which the developers were committed and which either explicitly or implicitly shaped the curriculum, and to examine the implications of these commitments and beliefs for the quality of the educational experience. (p. 14)

Shadowing Tyler and many other analysts, he stresses that CA "takes the form of a set of answers to questions" (p. 14). He frames CA with 45 questions but concedes that "a complete and detailed curriculum analysis addressing all five sets of questions is rarely required in practice" (Figure 1) (p. 22).
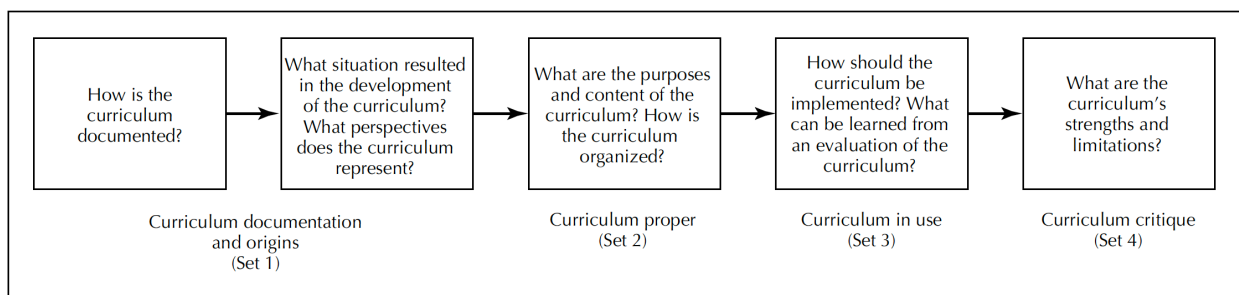

Figure 1. Posner's (2004) process for CA (p. 19).

Curriculum analysts tend to take this step of questioning or problem-posing quite seriously. Beyer and Apple (1988, p. 5) propose eight different questions, which challenge analysts to address underpinnings of curriculum (i.e., Epistemological, Political, Economic, Technical, Aesthetic, Ethical, and Historical). These types of questions and models focus reasoning processes. Of course, CA requires that one necessarily adds and subtracts questions.

One way to think about or get started in CA is to consider the common model used for book and film reviews (e.g., cinemanalysis) or content analysis and discourse analysis (DA). This begins with the descriptive question "what is said?" or "what is there?" and proceeds through the critical question "what is not said?" or "what is not there?" to the normative or judgmental "what ought to be said?" or "what should be there?" Ninnes and Burnett (2003) add a sub-critical question: "Analysing discourses involves exploring what is said, what is not said, and what cannot be said" (p. 282). So in CA, we can ask of the curriculum under analysis:

1. What is there (i.e., said, portrayed, represented, stated, etc.)?
2. What is not there (i.e., said, portrayed, represented, stated, etc.)
   a. What cannot be there (i.e., said, portrayed, represented, stated, etc.)?
3. What ought to be there (i.e., said, portrayed, represented, stated, etc.)?

The model helps keep curriculum analysts, critics, and reviewers accountable to what authors or designers actually say through curricula. But it also empowers analysts to add or give voice to what is left unsaid through critique and judgment. To be sure, a persistent criticism of autobiographical CA is the inability of self-analysts to deflate their egos (Petrina, 2019).

1. What is Analysis?
    a. Posner (1992/2004, p. 14): analysis refers to 'teasing apart' or 'breaking down into component parts'.
    b. Pinar (2010, p. 178): *ana* means up, throughout; *lysis* means a loosening.
    c. Johnson (1933, p. 570): The dictionaries tell us that analysis is the process of separating a thing or a concept into its constituent parts, in order to arrive at the essential or ultimate elements, causes or principles; that it is the tracing of things back to their sources; and that it is designed to clarify and test knowledge. The chemist analyzes a complex substance to determine its precise composition. For the purposes of our discussion I would define scientific analysis as "the process of separating observations, arguments and conclusions into their constituent parts, tracing each part back to its source and testing its validity, for the purpose of clarifying and perfecting knowledge."
    d. Noyes (1940, p. 501): Analysis is the process of breaking down the data into their constituent elements, which thereby become new data. The individual datum at one level becomes analyzed into a compound of unlike data at the next lower level.
2. What is Curriculum?
    a. *Cur•ric´u•lum, n., pl., curriculums* or *curricula*, [l. a race course, career, from **currere**, to run; figurative use.] a specific course of study or, collectively, all the courses of a study in a university, college, or school. From *Webster's New Universal Unabridged Dictionary* (1979).
    a. The Latin *curriculum* has for about four centuries been translated into "course of study." But that is a translation and not necessarily a definition. Commonly, curriculum refers to course outlines, instructional materials and methods, activities for learning, and basically all student experiences related to school. A definition for curriculum that I use is *materials, messages, and methods rendered pedagogical or experienced in the course of learning.* In shortened form, I define curriculum as *the vehicle of learning.*
    b. Pinar (1975, p. 400): The study of currere, as the Latin infinitive suggests, involves investigation of the nature of the individual experience of the public: of artifacts, actors, operations, of the educational journey or pilgrimage.
    c. Posner (1992/2004) works through seven common notions of curriculum and distills these into a process for CA.
3. What is Curriculum Analysis?
    d. Teachers necessarily practice implicit forms of CA in their everyday planning and an essential step toward inquiry and research is formalizing CA as a method.
    e. Posner (1992/2004) defines CA as
        i. an attempt to tease a curriculum apart into its component parts, to examine those parts and the way they fit together to make a whole, to identify the beliefs and ideas to which the developers were committed and which either explicitly or implicitly shaped the curriculum, and to examine the implications of these commitments and beliefs for the quality of the educational experience. (p. 14)
    f. Beyer and Apple (1988, p. 5) propose eight different questions, which challenge analysts to address underpinnings of curriculum (i.e., Epistemological, Political, Economic, Technical, Aesthetic, Ethical, and Historical).
        i. *Epistemological*. What should count as knowledge? As knowing? Should we take a behavioral position and one that divides knowledge and knowing into cognitive, affective, and psycho-motor areas, or do we need a less reductive and more integrated picture of knowledge and the mind, one that stresses knowledge as process?
        ii. *Political*. Who shall control the selection and distribution of knowledge? Through what institutions?
        iii. *Economic*. How is the control of knowledge linked to the existing and unequal distribution of power, goods, and services in society?
        iv. *Ideological*. What knowledge is of most worth? Whose knowledge is it?

> v.   *Technical*. How shall curricular knowledge be made accessible to students?
> vi.   *Aesthetic*. How do we link the curriculum knowledge to the biography and personal meanings of the student? How do we act "artfully" as curriculum designers and teachers in doing this?
> vii.   *Ethical*. How shall we treat others responsibly and justly in education? What ideas of moral conduct and community serve as the underpinnings of the ways students and teachers are treated?
> viii.   *Historical*. What traditions in the field already exist to help us answer these questions? What other resources do we need to go further? (p. 5)

g.   Dmitriyev and Lerner (1990) suggest different levels for CA:

> i.   The curriculum can be considered on five levels: a theoretical level, to do with its composition; the level of subject or discipline, to do with the general outline of the branch of activity (as it is represented in syllabuses and teaching manuals); and the level of resource material, to do with concrete items of information and learning activities. These three levels all form a part of the curriculum planning that is undertaken before the teaching process begins. The fourth level is the level of actual teaching: here the planned curriculum just mentioned is modified in accordance with learning conditions and situations. The last level has to do with what students actually learn, with what becomes incorporated in their minds and personalities as a result of teaching. Comparisons between what is intended and what is accomplished are always important, both in research and in practice. (p. 234)

h.   Hall (2013) frames a series of CA questions around a BEKA model: benchmarking, evidencing, knowing and applying. Benchmarking compares curriculum against external standards; evidencing drills further into the data in relation to objectives and content mapping, resource mapping, and assessment analysis. Knowing involves interviews with stake holders to uncover deeper understanding. Lastly applying establishes what students actually know and are able to apply. (p. 345)

i.   CA is in most cases inquiry-based and Whyte's (2016) procedure is helpful in its simplicity:

> i.   Ask a question (inquiries begin with the unknown)
> ii.   Collect evidence (filter data to find what's relevant, that's evidence)
> iii.   Create rules (proposition or general truths that link evidence to the conclusions)
> iv.   Formulate tentative conclusions (hedge or qualify conclusions with certain conditions)

j.   In its outlook for curriculum design through 2030, the OECD (2020, p. 14) recommends a systems philosophy for curriculum analysis. This is a reminder of various contexts of any curriculum of interest.
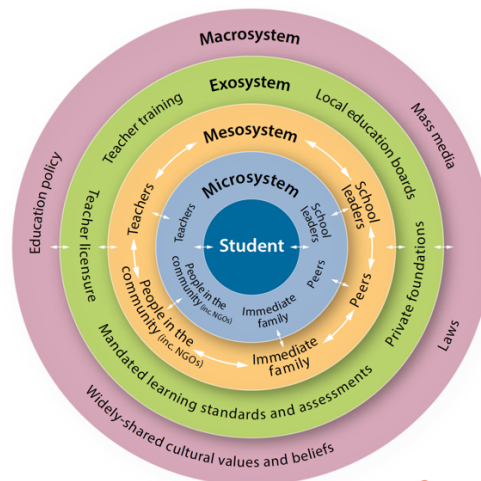
k. Currere
    i. In *Curriculum Theorizing*, chapters titled "The Analysis of Educational Experience" and "Search for a Method," Pinar (1975) describes the method of currere (pp. 384-395, 415-424).
        1. Currere was introduced as "a method that will allow us to 'bracket' the educational aspects of our taken-for-granted world. That is, we must attend to the contents of consciousness as they appear" (p. 406).
        2. "the problem initially is to get under one's exteriorized horizontal thinking, to begin to sink toward the transcendental place, where the lower-level psychic workings, those psychic realms determined by conditioning and genetic code, are visible" (p. 407).
        3. "When sufficient data has accumulated (and the question of when may well be left to the investigator) the analysis begins" (p. 408)
        4. "This process of turning inward to examine one's currere will lead to a generalized inner-centeredness and hopefully initiate or further the process of individuation, leading to a gradual formation of the transcendental ego" (p. 410).
        5. Pinar (1975, p. 400): I propose yet another meaning of the word, one stemming from its Latin root, *currere*. The distinction is this: current usages of the term appear to me to focus on the observable, the external, the public. The study of *currere*, as the Latin infinitive suggests, involves investigation of the nature of the individual experience of the public: of artifacts, actors, operations, of the educational journey or pilgrimage.
        6. (p. 415): As we know, discipline inquiry requires both a subject and a method for inquiry. That this book is subtitled *The Reconceptualists* suggests dissatisfaction with established research methods and, by implication, with that area that is traditionally researched in the field of curriculum.
    ii. "So finally," he says in 1975, "we can characterize the method. It is (a) regressive, because it involves description and analysis of one's intellectual biography or, if you prefer, educational past; (b) progressive, because it involves a description of one's imagined future; (c) analytic, because it calls for a psychoanalysis of one's phenomenologically described educational present, past, and future; and (d) synthetic, because it totalizes the fragments of educational experience (that is to say the response and context of the subject) and places this integrated understanding of individual experience into the larger political and cultural web, explaining the dialectical relation between the two" (Figure 2) (p. 424).
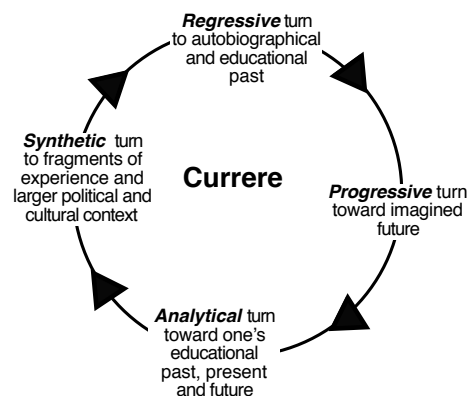
Figure 2. Method of currere. Adapted from Pinar, 1975, p. 424.

l. TBA

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