

Chapter 2

Contemporary Approaches for Curricular Development

Chapter 2 Outline

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Introduction

Often curricula are developed or designed in a philosophical void. There are no prevailing ideologies to guide the curriculum managers or those responsible for oversight of the process. It is possible to develop a curriculum which is useful and wholesome without such guiding principles, but it is far more likely that the curriculum and curricular processes will succeed if there are overarching philosophies. Three such design philosophies are described in this chapter. While it may seem that this process is the entire “curricular development” process, it is really an incremental process of identifying and articulating the key elements, driving forces, rationale, and philosophies at each stage but with the first strategies being the most important. If a curriculum is begun incorrectly, it will be flawed throughout. If it is begun correctly, flaws may develop but they are less likely to be fatal.

Systems Approach

Finch and Crunkilton define a system as “a collection of elements, interacting with each other to achieve a common goal.”¹ Later we will talk about “Individualized Instruction” as a system revolving around the student. Here, however, we are describing the process which results in the development of the curriculum.

Perhaps one of the most well-known and widely used curriculum-development models which approximates a systems approach is that described by Tyler.² In suggesting the foci for the determination of educational or curricular objectives, Tyler suggested that the curricular developers look to three sources of information and insight:

Student	First, though not exclusively, curricular planners should look to the student and student needs to help determine the range of topics and material to be addressed in a curriculum. The range of needs includes social, psychological, physical, recreational, occupational, and educational. In essence, the students' needs and abilities are screened to determine the type of courses and curriculum needed.
Society	Tyler advised that the environment in which the students must thrive should have a role to play in the development of a curriculum. "Society" was used as a proxy for health, family, vocation, religion, civic issues, and community. For our purposes, agencies, organizations, communities, states, and other entities outside the learner or participant but exerting a strong influence on him or her would be the critical variable in this stage of planning. ³
Subject Matter	The subject matter exerts a strong influence on the curriculum, even in the planning stage. Tyler comments on the value of "subject matter experts" in the development of new courses and new curriculum but he infers that they are also keeping the other two elements - students and society - in mind as they recommend and refine new courses of study.

Tyler then recommended that curriculum planners "screen" the objectives which rise from the consideration of students, society and subject. The "screen" he suggested was both a philosophical screen and a psychological screen.⁴ The philosophical screen assists in determining the values inherent in the educational and social philosophy of the curriculum. The psychological screen considers the theory of learning and the level of change sought in the learner (later we will describe the Taxonomy of Learning Objectives which roughly approximates this screening process) which must be considered in the developing the curriculum.

According to Tyler, once the sources for the course and curricular needs have been screened, the curricular planner can then develop precise instructional objectives. Tyler's model represents an elementary "system" of developing curricula in that it conforms to the definition of a "system" as described above and includes several independent components - students, society, subjects - in the evolutionary process of development. It is not a very elaborate model but it does generally describe the systems approach. A much more elaborate and appropriate model is the one developed by Oliva.⁵

This model has some of the same attributes as the Tyler model and he gives credit to Tyler and others for informing the process he used to develop this system of curricular development. Oliva's model has seventeen steps in the process or system. He represents the model in a schematic which is rather complex and we will describe it here in steps rather than reproducing all of the interactional components.⁶

- Step 1 Specification of needs of students in general
- Step 2 Specification of needs of society

Step 3	Statement of aims and philosophy of education
Step 4	Specify the needs of students (or participants)
Step 5	Specify the needs of the particular community (or organizations and agencies)
Step 6	Specify the needs dictated by the subject matter
Step 7	Specify the curricular goals of the school (or overarching organization)
Step 8	Specify the curricular objectives
Step 9	Organize and implement the curriculum
Step 10	Specify instructional goals
Step 11	Specify instructional objectives
Step 12	Select instructional strategies
Step 13	Begin selection of evaluation techniques
Step 14	Implement instructional strategies
Step 15	Make final selection of evaluation techniques
Step 16	Evaluate instruction and modify instructional components
Step 17	Evaluate the curriculum and modify curricular components

These seventeen steps, labeled briefly above, are laden with implications, decisions, work, and information. Stated briefly and succinctly, they represent a system in flow and process. Each step in the system or process requires significant scrutiny if the curriculum is to succeed. Our purpose here is to describe the process as an approach which can be used to develop a curriculum. While this description is not sufficient to operationalize the process, it is important in gaining a broader understanding of the complexity, flow, and decisions inherent in the system or process.

There are several subcategories of Oliva's model which are useful in our preliminary discussion. He identifies steps as "planning phases" and "operational phases." Steps 1 through 8 are planning steps while step 9 is both a planning and operational step. Steps 10 through 13 are planning steps, Step 14 is an operational step, Step 15 is a planning step, and Steps 16 and 17 are operational steps.

He further differentiates between curricular steps and instructional steps in the process or system. Each has a planning and operational component as well. It is important to separate the curricular design process from the instructional delivery process but it is also important to maintain a linkage

between the two in the development and the revision phases. Olivia links each of the seventeen steps in his process in a linear fashion but he also has a feedback loop from the final step, “Evaluation of Curriculum” to step 11, “Specification of Instructional Objectives.” Thus the implementation phases feed back into the planing phases so that future iterations of implementation of courses and curricula can be informed by the observations and evaluations.

Olivia’s model is useful as a systems orientation establishing a flow of actions, both planning and implementation, from the earliest to the latest and back into the planning process. His discussion of the model, however, loses its utility for our purposes when we go beyond the process or the system he suggested. He describes one of the early steps, for example, the philosophy of education, as fitting into one of the various types or groups accepted for traditional educational organizations:⁷

Reconstructionism	Education (schools) achieve improvements in society by becoming an active agent of change in addressing cultural and social change.
Perennialism	The real purpose or philosophy inherent in education is the educational process and the everlasting effects of learning. Conversely, the immediate effects are inconsequential.
Essentialism	Educational philosophy is comprised of two major components: cognitive and behavioral. While both are focused on preserving the essential values of the society, the cognitive components maintain the intellectual disciplines which have served society so well since the days of Aristotle. The behavioral components or principles “casts the learner in a passive role as the recipient of the many stimuli to which he or she must respond.” ⁸
Progressivism	An approach which emphasizes the active learning of the individual, rather than the passive learning, but individualizes the learning process to meet the needs and attributes of each learner. It is consistent with individualized learning programs and informal classrooms, experimental psychology, an emphasis on the gestalt, and a shoring up of the self-esteem of the learner.

Clearly, each of these philosophies or approaches has viability and credibility in the broad educational process. We are interested in a narrower, more urgent focus here, training initiatives for a particular area of concern, and a different type of learner than those who are accommodated in K-12, baccalaureate, and post-baccalaureate education. Ours is more consistent with professional education. It is still important, however, that a philosophy be articulated for a training initiative or training program.

Finch and Crunkilton⁹ point out that “philosophy can and often does serve as a foundation for curriculum content” and that fact should not be ignored. It is an important step in the systems approach to developing and designing a curriculum.

For a training program to be successful, it must have a philosophical basis. This can be operationalized as any of the following:

Belief Statement:	A statement of purpose or goals of the initiative, agency, organization overseeing the training or developing the curriculum. ¹⁰
Aims and Rationale	“A clear set of statements which succinctly encapsulate the objectives of the course or programme”. ¹¹
Goals and Objectives:	Helps “direct the choice of curricular content and the assignment of relative priorities to various components of the curriculum” and they “suggest what learning methods will be most effective.” ¹²

It is the last of these operationalized versions of “philosophy” which comes closest to our purposes. That descriptions of the “goals and objectives” of a program of study is consistent with medical education and training. It is not important to spend time differentiating between goals and objectives because the difference is typically one with little distinction. Goals and objectives represent the “end toward which an effort is directed.”¹³ It is the purpose of the initiative or it can be seen as the mission of the program.

Once we have identified the philosophy, purpose, goals and objectives, or whatever other terms we might use for the “end” toward which the training initiative is directed, the other steps in the systems approach become clearer.

Interestingly, the philosophy or purpose actually helps to set limits or boundaries of the definitions of the “needs of students” and the “needs of society” in Olivia’s systems process. If the training programs needs and the participant’s needs are not as broadly defined as the typical elementary/secondary/post-secondary educational enterprise, it will be apparent when the initiative develops its statement of purpose or philosophy.

The steps which follow the development of the goals and objectives, according to Olivia, are consistent with “needs assessment,” “curriculum development,” “training delivery,” and “evaluation, quality control, or assessment.” These are the steps we have adopted in this document and steps which we feel are appropriate for a systems process of curricular development.

The systems model which has been called an “Integrated System for Workforce Curricula”¹⁴ is consistent with our purposes and does not preclude the use of two other approaches discussed later in this chapter. According to the Integrated Systems model, there are three general content groups:

Core of basic Knowledge, skills, and abilities;

Broad technical knowledge, skills, and abilities; and

Specialized technical knowledge, skills, and abilities.

In addition to describing the integrated systems approach, which is consistent with the “spiral” approach discussed later, the authors suggest that “school-site” learning can apply to the core and general or “broad technical” areas but as one moves into more specialized knowledge, skills, and abilities, it becomes more important to have “work-site” learning opportunities.

Two other “systems” approaches which are important to describe are actually types of “outcome-based” models. These two, performance-based and competency-based, are important in defining the outcome expected or desired as a result of the educational or training process.

Performance Based Instructional Approach

An important and enduring approach was articulated by Pucel¹⁵ when he described Performance-based Instructional Design. This approach is not inconsistent with that of the “systems approach” described above. It simply provides a different framework upon which to base the training or education. While performance-based education is discussed in the section on curriculum development, it is important here to point out that it may serve as a “systems approach” which is useful in a training environment.

Pucel has seven steps in his system or process of performance-based instruction:

Program Description	The content or purpose of the program of study. May include contextual information regarding the environment of the learner or the issues to be addressed in the education.
Content Analysis	The identification of knowledge, skills, activities, attitudes, functions and process which form the possible topics or areas of instruction/curriculum.
Content Selection	Prioritizing the knowledge, skills, abilities, attitudes, functions and processes which are most important and which must/should/could be a part of the initiative.
Content Sequencing	Ordering the elements of the instruction/curriculum in a logical fashion, taking care to recognize relationships between and among the elements, and organized in a fashion from least complex to most complex.
Lesson Structuring	Developing behavioral objectives, and learning objectives, for each course, element, module or group. Within each element, developing a “lesson flow” based on the objective, information, demonstrations, practice, and evaluation.
Lesson Delivery Format	Determining the most appropriate method for delivering the information or lesson in the traditional format, modularized format, programmed instruction, or computer-assisted instruction.

Evaluation Procedures	Assessing the performance based on the knowledge, skills, and abilities which were intended to be enhanced or developed through the instruction. Performance is the product and the thing to be enhanced or developed so it is the thing to be assessed to determine the adequacy and appropriateness of the instruction and curriculum.
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These steps are not sequential ones but rather are integrated ones. Content analysis includes content assessment and sequencing prior to the development of the lessons, lectures or courses, which is the product of the “content analysis” step. Similarly, “lesson delivery formatting” is actually an intermediate step in the whole process of “lesson structuring” and evaluation feeds back into lesson structuring.

A key value of this approach is the determination of the knowledge, skills, and abilities which are to be affected or effected. The *performance* of those abilities becomes the objective, the curricular elements, and the evaluation components of the curriculum. Performance-based instruction is an intuitive but valuable description which is even more valuable in a training environment.

Performance-based instruction is especially useful for activities (knowledge, skills, and abilities) which are to be group endeavors. A group or team can perform tasks and accommodate needs which can be assessed objectively based on the accomplishments and performance. The next type of approach described, competency-based instruction, is applicable to individual efforts but more difficult to apply to groups or teams.

Competency-based Instructional Model

McGaghie, et al.¹⁶ describe medical education as traditionally and primarily “subject-centered.” This type of instruction is typically didactic and consumes all of the undergraduate educational experience of physicians as well as two to four years of basic and preclinical science. “All students study the same material, in the same setting, within the same time-frame.” Often the ensuing clinical instruction is handled in a similar though less formal fashion.

Competency-based instruction is different from traditional instruction in several ways:

First, such a curriculum is organized around functions required in the practice of the discipline or topic being taught;

Second, it is grounded in the supposition that the students invited and allowed to attend the instruction are of such quality that they are capable of mastering the performance objectives; and,

Third, the processes of learning and displaying mastery, as well as the process of teaching, are both able to be assessed and evaluated.

If an educational or instructional focus meets these three criteria, it may be taught in a competency-

based format. “Mastery learning,” of which competency-based instruction is synonymous, “means that, given adequate preparation, unambiguous learning goals, sufficient learning resources, and a flexible time schedule, students can with rare exceptions achieve the defined competencies at high levels of proficiency.”¹⁷

Clearly, competency-based instruction requires the prior identification of the elements of competence or mastery of a subject or activity. This identification can occur through self-reports, observations, or task analyses. The critical elements and the sequencing of the elements can be based on critical incidents or expert opinions. Whatever the approach, a performance model is necessary in order to judge the process which forms the “context” in which the activity occurs. “The argument has now been fully developed that professional performance does not occur within a vacuum” but takes place in the context of activities and environs. Proficient professional performance can be described as a flow or process. Once this has been done, the instructional components are apparent. Teaching, tutoring, or making recognizable the process or flow and the steps in the process, allows the teaching or training of a professional so that they can competently perform a task, whether it be examination, surgery, or diagnosis.

Competency-based instruction is a process or system but the steps vary from discipline to discipline. The process can best be determined using the techniques mentioned, such as observation or expert opinions.

Process of Curricular Program Development

In a seldom-cited but quite insightful book,¹⁸ Jerome Bruner proposed that the educational process conforms to a “spiral curriculum” which moves from general to specific in a very organized fashion. He later described the basis for his thoughts:

I was struck by the fact that successful efforts to teach highly structured bodies of knowledge like mathematics, physical sciences, and even the field of history often took the form of a metaphoric spiral in which at some simple level a set of ideas or operations were introduced in a rather intuitive way and, once mastered in that spirit, were then revisited and reconstructed in a more formal and operational way, then being connected with other knowledge, the mastery at this stage then being carried one step higher to a new level of formal or operational rigor and to a broader level of abstraction and comprehensiveness. The end state of this process was eventual mastery of the [connectivity] and structure of a large body of knowledge.¹⁹

In spite of constructing a very long and complex sentence, Bruner effectively described the development of cognition within a discipline or, arguably, a technical skill or ability. We can see this “spiral curriculum” process reflected in almost any K through 12 curriculum in the nation. That is not to say that Bruner was responsible for the sequencing or continuity, only that he described it succinctly and graphically. Bruner’s description of the continuity of curriculum development is useful here as well. It provides us with a description and depiction of a process which addresses generality, complexity and abstractness.

Dowling²⁰ adopts the “spiral curriculum” approach to curricular development for technical training.

In doing so, he augments Bruner's description with the conceptual framework of Reigeluth and Stein's "Elaboration Theory of Instruction" published in 1983. This theory includes two key elements used by Dowling:

- courses should be organized in a simple-to-complex, general-to-detailed, abstract-to-concrete manner; and,
- in order for a student to progress from one level to another more complex level, certain requisite skills must first be mastered.²¹

Both the Spiral Curriculum and the Elaboration Theory are rather intuitive and easy to recognize. They do, however, provide us with a framework which can be used to construct instruction in a complex field of training.

Dowling describes curriculum design as the process of "selecting the scope and sequence of the technical content covered by a curriculum." Similarly, "instructional design is concerned primarily with selecting optimal methods of instruction to bring about the desired changes in student knowledge and skills, as delineated by the learning objectives."²² We will address the issues of learning objectives and competencies later but the process described by Dowling allows us to envision and conceptualize a holistic approach to training. In his model, it is critical that the linkages and progressiveness of the curriculum and courses be recognized and articulated to the participants. Dowling states:

One concern during the teaching of complex job-oriented tasks is to control the flow of information to the students so they do not become overwhelmed with too much information too quickly. ... students are taught not only factual information, but are provided advanced organizers in the form of linkages and interrelationships between pieces of information. This elaborate association helps create a network (schema) between the pieces of information, which, in turn, facilitates the use of higher-order thinking skills by the student.²³

The Curriculum Spiral aids in the development of courses, development of a curriculum, scheduling of courses, and evaluation of mastery of skills. Each of these elements are useful in the processes described in this document.

Germinal Approaches to Curriculum Development

Often at the initial stages of a discipline or an initiative, there is insufficient information or a "body of knowledge" to serve as the predicate for a polished approach to curriculum development. This has been true in the development of all disciplines or perspectives.

Work-related training or "education for work" ²⁴ has existed for at least the last 4000 years. Apprenticeships have been the primary method of instructing in professions and trades. Apprentices to scribes in Egypt had a bifurcated field of study where they first learned to read and write then, through apprenticeships, worked with experienced scribes to complete their education. Apprenticeships were expensive, labor-intensive methods of training others. The industrial

revolution of the early 1800s made it necessary to abandon the apprenticeships for many jobs since the greater need was for unskilled labor. The contrast between the highly trained apprentices and the untrained workers was evident and there was a growing need for some other methods for training larger numbers of people to perform tasks, and train them inexpensively.

In the United States, the Smith-Hughes Act of 1917 firmly established technical and vocational training, but without much insight on the developmental approaches or methods which were appropriate. Similarly, the Perkins Vocational and Applied Technology Education Act of 1990 was established to recognize and remedy the degree to which the U.S. was lagging other countries in the development of skills to meet the technological revolution which was gaining momentum. This legislation and the subsequent 1994 School-to-Work Opportunities Act established delivery systems but only implied the methods to be used to develop curricula.

Curriculum, as described here, is the interrelated instruction and directed experiences surrounding knowledge, skill or ability in a particular field of study or performance. Instruction is the organized interaction between experienced teachers and learners for the purpose of improving knowledge, skills and abilities in a particular field of study or performance. The interaction need not be face-to-face.

Much of the literature makes the distinction between training and education. While that distinction often invites invidious comments from both camps, the purpose here is to show the development of knowledge, skills, and abilities in sometimes technical and specialized fields of study, sometimes general and non-technical topics. Whether that is labeled “education” or “training” would not affect the outcome. Generally we will refer to the approach to be used and the curriculum to be developed as “training” since it relatively focused and not designed to augment or supplement traditional undergraduate or graduate degrees, but concrete examples of the differences are presented below.

The literature is firm in the notion that training curricula can be developed using any of several approaches. It can be developed in the *abstract* or it can be developed based on an assessment *current knowledge* including projections of *current and future needs*. Abstract development is the least reliable and valid of the approaches. It may be the necessary approach if curricula must be developed in an entirely new area of inquiry, devoid of instructional history and information. To use this approach when information is available but not being utilized or considered is irresponsible curriculum planning. It would be somewhat arrogant for any organization to assert that it knows what training is needed and for whom, without regard for the needs, gaps and capacities of the persons and agencies receiving the training. We believe that such an approach would be recognized by the recipient as indefensible, therefore shunned or certainly not embraced.

The assessment of current knowledge, current needs, and future needs represents the appropriate predicate for a viable training initiative. This assessment is essential for the development of a valid curriculum on any subject. Having delineated the elements to be considered, there are two general approaches that can be used in the actual design of the training curricula:

Rational Process. If there is insufficient time or insufficient information on which to proceed but it is essential to proceed quickly, a rational approach, informed by

experts, often referred to as “Subject-Matter Experts,” on the subject, may be the most viable method to use. This method, however, should be restricted to the initial approaches and not the revision and continued development of the curricula. If the experts on the subject are sufficiently knowledgeable, representative, unbiased, and articulate, the initial curricula should be appropriate and valid. This method is an established one in the development of curricula in training and education. It relies upon the strength of those experts who recommend and design the elements, based on their intuitive and experiential views of needs and gaps.

Seldom is it advisable to adopt and continue an informal approach, described as the “Rational Approach” above, for a long period of time. It is inconceivable that a discipline of study and instruction would be sophisticated enough to continue to exist yet be simple enough for a small group of experts to understand and fathom all of the intricacies which might exist or develop for all of the groups requiring instruction. An “Assessment Process” should be considered as the field of study is making the transition to a fully developed stage.

Assessment Process. The assessment of needs and gaps may be completed formally, using proper methodology, which can serve as the most defensible method of designing any curricula, or it can be conducted informally. While both methods will be described more fully in the “Assessment” chapter of this document, it is important to note here that the informal method is a reliable and valid method to use in the developmental or transitional phases of a curriculum or program of study. What is suggested ultimately is a general assessment, based on the sound, reliable, valid methodology such as that used in a sophisticated task analysis. Typically, the clientele or “end-users” are asked to respond to structured (sometimes unstructured but focused) questions regarding their activities, needs, frequency of occurrence, and gaps in knowledge, skills, and abilities. The curricula, if based on this method, are insured to be responsive to the needs of those receiving the instruction. Subject-matter experts still have a key role to play in this method of curriculum development. The questions must be asked in ways that are performance-based, not terminology based. The responses must also be representative of the groups being surveyed (survey is used in the generic sense here and does not restrict the method of enquiry).

This process can be used in concert with or subsequent to the “Rational Process” mentioned above. An initial curricula, lesson plan, syllabus, or technique may be based on a “rational process” and subsequent curricula, plans, syllabi, or techniques based on the more reliable, valid, and defensible “assessment process.”

Another method incorporating the two would be an evolutionary approach using a “generic” curriculum designed to inform the clientele of the subject so that the subsequent assessment would be more likely to identify the issues associated with the topic. This would be particularly useful in esoteric areas where it is likely that the clientele “does not know what they do not know” and could

not respond precisely to the issues in a general assessment. It would be essential, however, to follow the generic curriculum with an assessment to determine the most appropriate instruction to be offered subsequently.

The Development of a Discipline: A Case Study

Most of the literature addresses the refined or established methods which should be used to develop a curriculum. There are several reasons the literature is largely silent on the germinal or transitional approaches to curriculum development. Seldom are there emerging disciplines, outside the academic enterprise. Within academe, there are generally opportunities to “test” courses and curricula prior to implementing them. Additionally, courses and disciplines normally grow out of other, well-established fields of study. In fact, criminal justice or criminology represents one of the most recent fields of study and an example of the development of a discipline. The development of the curriculum and discipline of criminal justice is presented here as an example of the exigencies and time-frame such a curricular development can expect. The refined discipline present today is the result of more than 70 years of development. This development has used many of the same approaches suggested in this document.

The academic discipline of criminal justice can be traced to the early part of the twentieth century when August Vollmer taught the first crime-related courses at the University of California at Berkeley. In 1929 the University of Chicago also created a police training program as a part of the curriculum in the department of political science. Some of the courses offered by these programs were Police Administration and Police Procedure.

Various institutions initiated police science or criminal justice courses at a steady pace up to 1965. These programs were modeled after the Berkeley and Michigan State University programs, both founded by August Vollmer, and the emphasis was on training individuals to administer the criminal justice system. The criminal justice discipline experienced a phenomenal growth rate in the late 1960s and early 1970s. By 1973 the number of institutions offering criminal justice programs, as reflected by the institutions participating in the Law Enforcement Education Program, had reached almost 700. Unfortunately, the rampant growth in criminal justice education programs has caused some to question the credibility of the discipline due to the lack of a well-founded theoretical base.

Just as there are differences in the educational approaches to disciplines, there are sometimes differences in the disciplines themselves. It is critical to recognize the differences, and make concrete decisions about courses. For example, the discipline of criminal justice is viewed by some as being totally separate from the study of criminology. Others view the former as being an integral aspect of the latter. Criminal justice is seen by some as *applied criminology*, and for others it is an area for academic concern on the part of criminologists. Whether the two areas-criminal justice and criminology - are seen as one discipline or two mutually exclusive disciplines, none can ignore the fact that the two are closely intertwined.

The main difference in the two perspectives seems to be the usage of and emphasis upon the law. Criminology views the law as that which designates the area of study - criminal behavior. "Criminal behavior is behavior in violation of a criminal law. No matter what the degree of immorality,

reprehensibility, or indecency of an act, it is not a criminal act unless it is outlawed by the state."²⁵ Criminal justice, on the other hand, is a "legal entity." "All the agencies, offices, and programs in criminal justice exist by law and are controlled by the legal process."²⁶ Where criminology uses the law as a tool to define its area of interest, criminal justice is formed and defined by the criminal law. As a result, criminal law courses are integral, perhaps the most integral of all courses, in criminal justice education.

The emphasis in criminal justice begins with the legal definition of crime. This reflects or compliments the perspective of the Classical School: "The doctrine of the Classical School is *nullem crimen sine lege*, that is, without a legally defined harm there is no crime."²⁷ The focus of concern is upon the act and who committed it. Perhaps the fact that criminal justice is classical and criminology is positivistic accounts for the lack of continuity, and sometimes open animosity, between the two perspectives. While it might be interesting to describe the development of criminology as a theoretical field of study, space here will not be used. In the opinion of the author, a valuable description of that discipline is contained in *The Evolution of Criminology*.²⁸ A final example of the relatively recent development of a related discipline - criminal justice - is instructive.

Criminal justice education was initially characterized by a large degree of diversity and lack of direction.²⁹ There was an obvious need for convergence of curricula and some specificity as to where criminal justice education has been, is, and where it is going.

Criminal justice education, that is, the merging of higher education and criminal justice, probably began in the early twentieth century with the initiation of the Berkeley Police School in 1908 by August Vollmer. It was the first formal effort to train policemen in the United States and many of the instructors were drawn from the University of California at Berkeley.³⁰ Vollmer, the foremost figure in American policing history, believed that "the professional policeman would be distinguished from his predecessors by the level of his formal training both before and after recruitment and that new ideas from the universities could provide valuable insights into the causes of crime and the means for preventing it."³¹

Vollmer's interest in educating policemen provided the impetus for criminal justice education and in 1916 the first crime-related courses were taught in an institution of higher education--the University of California at Berkeley.³² At the Los Angeles campus of the University of California in 1918, a group of police administrators initiated a workshop for police which included visits to various social agencies in Los Angeles. Yet it was not until 1923 that the first degree with even a minor in a criminal justice field was issued. It was a Bachelor of Arts degree of Economics with a minor in Criminology and was awarded by the University of California at Berkeley to a police officer.³³

The next major advance in criminal justice education occurred in 1929 when the University of Chicago created a police training program as a part of the curriculum in the Department of Political Science. "August Vollmer was appointed Professor of Police Administration and taught several technical police courses in police related areas."³⁴ This police training program only lasted three years, but it marked the first effort to place police "training" courses in an undergraduate curriculum.³⁵ In 1930, a former Berkeley police officer and graduate of the University of California

initiated a complete program of police education at San Jose State College. This marked the first complete program of police education which was considered a major academic field that was included in the regular curriculum.³⁶ The method used to develop the curriculum was similar to the "rational process" model described above but clearly there were "subject matter experts" involved in the process.

In fact, it is important to note that all of the major strides in criminal justice education to the early 1930's were direct results of the Berkeley influence which is synonymous with the name of Chief August Vollmer. This period of criminal justice education has received various names such as the "imitative period" and the "germinal period,"³⁷ but a more fitting title would be the "Berkeley Era." Ironically, the last phase of the Berkeley Era involved the initiation of the Bachelor Degree Program in Criminology at the University Of California at Berkeley in 1933. After 17 years of offering criminology courses, the University of California could issue its first degree. This program, of course, was organized by August Vollmer. The curriculum was not limited to technical subjects but was divided into three areas of emphasis--technical, legal and social.³⁸

In 1935, the Michigan State University established a complete curriculum in police administration.³⁹ It was a five-year program which involved the cooperation and coordination of the Michigan State Crime Commission, Michigan State College (now Michigan State University), and the Michigan State Police. The program included three years and one term of course work at Michigan State College, eighteen months of training and internship with the Michigan State Police and six months in residence with another law enforcement agency. The program expanded and in 1938 there were 194 new enrollees. During that year the program was altered to three years of academic work and one year of in service training. In 1940, courses in forestry and conservation were added to broaden the alternatives of students. "In 1943, the twenty-three graduating students entered military service. In 1944, few of the remaining undrafted civilians could meet the strict physical requirements of Police Administration."⁴⁰ This ended the momentum of the academic-training combination in criminal justice education.

The evolution of criminal justice education to this point reflects the influence of its germination within the academic environment. The first efforts in 1916 were intended to provide training for the practical and the technical aspects of training accomplished by educators. The contemporary era began at the Michigan State University. In this era a definite distinction was made between criminal justice education and criminal justice training.

Between the commencement of the contemporary period in criminal justice education and the early 1960's, crime-related programs tended to consolidate, expand and gradually take shape as an academic discipline. Foster reports that a "trend that has occurred during the decade of the 1960's is that of the new programs' focus, not on preparation for service in a single component of the criminal justice system, but on developing the criminal justice system generalist."⁴¹ By 1965 there were 64 institutions offering criminal justice education programs.⁴² At this point, it appears that criminal justice education is progressing at an orderly rate and direction. This "orderly" expansion ceased and a phenomenal growth occurred in criminal justice in the mid-1960's. Foster states "Since the mid-1960's, crime-related degree programs have experienced a growth pattern unparalleled in American higher education."⁴³

In 1964, President Johnson signed the Law Enforcement Assistance Act which created the Office of Law Enforcement Assistance. This office was designed to foster new methods for reducing crime dealing with criminals through federal aid. In 1967, the President's Commission issued task force reports on every phase of the criminal justice system. The general report, The Challenge of Crime in a Free Society, recommended, among other things, that all police departments establish minimum educational requirements of the baccalaureate degree for supervisory and executive ranks. Just prior to the release of the Commission findings, the Office of Law Enforcement Assistance began encouraging law enforcement education by awarding curriculum development grants to two- and four-year institutions throughout the United States.

The actions gained momentum in 1968 with the passage of the Omnibus Crime Control and Safe Streets Act which incorporated the Office of Law Enforcement Assistance with the Law Enforcement Assistance Administration. This agency was responsible for carrying out programs "of academic educational assistance to improve and strengthen criminal justice" professionals.⁴⁴

By 1973, the number of institutions offering criminal justice programs as reflected by the institutions participating in the Law Enforcement Education Program had reached almost 700.⁴⁵ A logical question, and a prominent question in many circles, is whether educational institutions would be able to maintain the orderly direction prevalent prior to the 1960's. Today there are more than 900 academic programs in criminal justice and criminology. This is actually fewer than were in existence by the late 1970's. The retrenchment and reduction of programs is due to faulty curriculum development and uncertain foundations on which to build programs.

The "rational process" of curriculum development seen earlier was not followed by an "assessment process" in many colleges and universities. Some programs were uncertain as to the appropriate focus - training or education - and the uncertainty contributed to the demise of many of the programs. What we will ultimately describe here is a training initiative, but one which is based on sound educational theory and good practice. There will develop, undoubtedly, a debate as to the efficacy of training versus education, particularly within the cognitive domain. For that reason, we will further describe the differences in training and education and the development of a professional curriculum. It becomes even more important when we discuss evaluation methods and assessment objectives.

Technical versus Academic

The first set of educational models to be discussed is the least complex. It is the dichotomy of training versus education or, as one writer terms it, "technical model" versus "academic model."⁴⁶

The dichotomy does not actually form a continuum, but rather resembles two baskets in which education programs may be placed, based on their thrust and emphasis.

Technical Model. The "technical model" of criminal justice educational programs according to Mathias, "is primarily concerned with the preparation of persons to enter directly into the criminal justice system without any training."⁴⁷ This model is made up entirely of "how to" instruction with little or no indication as to "why." This type of training is intended to "develop mechanical skills while engendering little insight into the underlying concepts and value systems which comprise the assumptions of the relative worth of any given aspect of human behavior."⁴⁸ Its objective is to

produce a practitioner who acts or reacts unthinkingly to a given situation for which he has been trained. The technical model is characterized by: "(1) practical, vocationally oriented courses. . .; (2) hands-on instructional techniques; and (3) instructors who generally come from agency backgrounds. ..and often lacking typical academic credentials."⁴⁹

The training model might be that model preferred by the elements and personnel of the criminal justice system. It would provide courses very similar to what the personnel have already experienced in their pre-service training, and, therefore, would result in a minimum of change. The value of the initiative is the degree to which additional information is provided, insuring that education and professionalization are taking place. Also, organizations may prefer the technical model because a participant in this type of program would be able to immediately implement the training. This utility, however, is predicated on the proper and appropriate course development and curriculum development approaches.

The faculty of the technical model programs, as described above, would most likely possess an agency background or experience rather than academic credentials since the instruction would be applied training rather than theoretical concepts. The most available source of persons with this agency background is the criminal justice system itself. For that reason, it is likely that the faculty of technical programs would be full-time criminal justice practitioners and part-time instructors.

Academic Model. The other half of the dichotomy of criminal justice educational programs is called the "academic model. " It is based on the assumption that "a liberal arts education is the optimal preparation for citizenship in general"⁵⁰ and that universities and colleges function to provide the liberal arts education to everyone, thus making them generalists who can be trained to perform tasks more ably with such an education. Although this seems to be a very "unfocused" approach, it is based on and consistent with the mission of the organization - the college or university - and is then applied to the discipline of criminal justice. The assumption inherent in a liberal arts education having utility to the discipline of criminal justice is not without foundation. The Task Force Report on Police, in 1967, stated, "It is nonsense to state or to assume that the enforcement of law is so simple that it can be done best by those unencumbered by the study of the liberal arts."⁵¹ In essence, the Task Force served as a panel of experts or subject matter experts and rendered their opinion as to the appropriate curriculum.

The courses taught in this type of environment would center around the "why" or theoretical foundation of criminal justice practice. Such education "is designed to prepare professionals who will exercise a great amount of discretion and good judgement in a highly charged political environment." The theoretical orientation is necessary because it "engenders the ability to generalize, to base responses in a given situation upon an understanding of the broader context of an individual's role. The development of this ability is what educational institutions do best."⁵²

The orientation of an academic program in criminal justice would be to require a foundation of liberal arts education, and then build on it a systemic criminal justice education. Since the criminal justice curriculum would be holistic in nature, the curriculum would conform to a systems approach or a "spiral" described earlier.

The faculty of a criminal justice program conforming to the academic model would be comprised of those holding adequate academic credentials and perhaps practical experience, but if one of these characteristics had to be forfeited, it would be the experience. This type of education would "require a person to take more than a superficial look at techniques in which he is trained or will be trained. It would emphasize the theoretical basis of behavior with little emphasis on the "practice" of justice other than the intellectual, critical thinking processes applied to the justice issues. The result of this type of education would be an examination of present practices and the formulation of alternatives. This is supported by Law Enforcement Assistance Administration⁵³ recommendation that:

Faculty members possess at least a Master's Degree; Some members should possess doctoral degrees. The hierarchy for evaluation purposes is as follows:

- (1) Most desirable: degrees and experience
- (2) Second most desirable: degrees without experience
- (3) Third most desirable: experience without degrees

The academic and the technical models of criminal justice education provide the extremes of specialized educational programs. By identifying these two models, it is possible to examine programs and say that they resemble one or the other, but this is not adequate for an evaluation of criminal justice education. It is possible that many programs are marginally academic, or it may be that a program which has the curriculum emphasizing some parts of both would be more advantageous.

An appropriate discussion of criminal justice education goes into more detail in delineating models of curriculum. Tenney⁵⁴ recognizes that criminal justice, unlike most other professions, places its education process at the undergraduate level rather than the graduate level. He states:

no sophisticated individual would presume that the holder of a baccalaureate degree with a major in psychology, or sociology, or English, or history is particularly professional in these fields. His professionalization will come, if at all, in Graduate School and beyond.⁵⁵

This graduate education includes a considerable training thrust, as described by Tenney. This is very obvious in graduate curricula in law and medicine. Tenney contends that there are three models of criminal justice education rather than two.

Training Model. Training courses are those directed toward providing the student with the ability to perform certain skills.

They are directed primarily to the mastery and application of particular rules, to the development of particular mechanical skills in the operation of particular items of equipment or to the development of skill in the performance of particular maneuvers concerning which

little or no discretion is involved.⁵⁶

With some courses, it is obvious that they are oriented toward training. Examples are self-defense and firearms training. In other cases, the manner of teaching and content determine its character.

Professional Model. Tenney's intermediate classification of curriculum is the professional model which seeks to provide at the undergraduate level, that education and training which other professions provide at the graduate level. Professional courses should seek to achieve at least one of three objectives:

the course should be directed toward achieving a goal or set of goals;
an awareness of alternative methods of achieving these goals should circumstances vary; or
the course should develop a foundation of expertise in certain subject areas.

The differences between the person exposed to the training model and one exposed to the professional model is "the trained individual may be identified by what he knows; the professional individual is recognized not only by what he knows but how he behaves as well."⁵⁷

Social Science model. Courses classified as "social science" are designed to prepare the student for study rather than to prepare him to function in the system. These courses teach students about a particular subject, but are not designed to enable them to work in the area being studied.

Tenney's evaluation and classification of criminal justice education programs centered on the descriptions of courses of the various programs. A program was classified as training, professional or social science, if "a significant number of its courses" are of a certain variety. Tenney's material indicates he believed that most of the two-year programs in the crime-related discipline were training-oriented, while four-year institutions tended to have a professional orientation.⁵⁸ The debate between proponents of a liberal arts orientation and proponents of a professional or specialized orientation is viewed as one of the ancient and continuing debates in education.⁵⁹

Brubaker states that the issue is certainly a recurring one in discussions of the philosophy of education.⁶⁰ These statements point to the fact that there is no consensus as to the appropriate model of education. Some, such as Thomas Eynon, stand staunchly on the liberal arts in stating, "Higher education in criminology and criminal justice means university and education, not trade training."⁶¹ Yet Eynon views the reality of criminal justice education to be oriented toward training:

We lack good theories, so spend our time training instead of educating. Because we think that there is something special or unique about criminal justice, we have made the mistake of hiring uneducated practitioners as university teachers and have managed to continue transmitting folklore as "conventional wisdom."⁶²

The models described above indicate the diversity in curriculum design. In fact, the proliferation of programs in criminal justice since 1965 has resulted in and reflected a massive lack of direction and orientation. Organized curriculum design and evaluation seems to have been nonexistent and the void has been filled with a "helter-skelter" approach. Guidelines as to curriculum design need to be detailed and methods of evaluation proposed.

The development of courses in criminal justice has been evolving since Vollmer taught the first police science courses at the University of California, Berkeley in the late 1920s. In the ensuing seven decades, the discipline has still not reached the refined stage where there is a “paradigm” of criminal justice. In fact, Kuhn would suggest it is still a pre-paradigm discipline.⁶³ There is no “standard” curriculum, or even a core of courses which is accepted and replicated throughout the discipline.⁶⁴ This related experience would suggest that it is unrealistic to expect a curriculum in an esoteric discipline or field of study to develop into a refined and established curriculum in a short period of time. A final example from police education and training is instructive and validating.

Blended Education and Training: Specific Examples

A blended version of training and education can be seen in the description of the initiatives below. They represent some of the most respected and prosperous programs in the nation and serve as strong examples of the development of training initiatives with sound, reliable, and valid developmental processes.

In 1951, the University of Louisville initiated a police educational and training program called the Southern Police Institute. The development of this program was based on the recognition that the changing technology and demographics in the United States suggested the need for better trained law enforcement administrators. This program of study attracted police administrators from throughout the southern United States (originally it was believed that there would be Northern, Eastern, and Western Police Institutes, thus the name “Southern Police Institute”). Formed under the assistance of a Ford Foundation grant, the “curriculum” consisted of three fields of study which were believed to be appropriate for police administrators. Under the direction of John Klotter, a major figure in criminal justice education, and subsequent directors of the School of Justice Administration, University of Louisville, the courses were combined to form a curriculum which was considered the strongest in the instruction of police administrators. The curriculum was replicated and offered within the FBI Academy as the “National Academy” for police administrators. Dr. Richard Stephens (Colonel, U.S. Army, Retired) of the University of Louisville, utilizing his experience gained in curriculum development at the U.S. Army’s Military Police School, refined the curriculum and tailored it to meet the needs of the National Crime Prevention Program, University of Louisville. Similarly, other programs have refined the approaches to make them more applicable to other audiences, as was the case with the Administrative Officer’s Management Program, North Carolina State University, which emphasizes the research, development, public administration and budgeting aspects of police administration. Each of these programs has assessed, evaluated, and revised its curriculum many times.

All of the programs described - the Southern Police Institute, the FBI National Academy, and the Administrative Officer’s Management Program - began with the germinal approach described above. A select group of “experts” were convened to develop the first courses offered within the curriculum. Based on their knowledge of discipline, the definition of the target audience, the needs of that audience, and the resources available, courses were developed. SPI used a small group of experts, as did the FBI. The North Carolina State program used a large, diverse advisory board to develop, authenticate, and validate the curriculum.

During the transition, each of the programs refined and revised the curriculum, based on changes in the target audience, developments in the field of study, and the identification of “needs” based on surveys and analyses. The Southern Police Institute, for example, surveyed agencies to determine the specific needs and expectations. Surveys of participants were then conducted to determine the degree to which the existing program met the needs. Changes were then made in the curriculum based on the “gaps” that were exposed. Thus the program went from a germinal or developmental program in the 1950s and 1960s, through a transitional phase in the 1970s and early 1980s, to become a refined program, based on sound curriculum development methodology including educational objectives, in the late 1980s and 1990s. The linking of courses was consistent with the “Spiral Curriculum” described by Bruner⁶⁵ and the continual revisions were based on information gained from subject-matter experts as well as participants and instructors.

Summary

The implications for this type of instructional approach for our purposes are clear. It is important that the development of curricula and programs of instruction establish identifiable and assessable performance and competency standards. Once these are established, the process to attain the standards can be developed. The rate at which some individuals or groups accomplish the goals or objectives will vary, as will the time and resources. An individualized, non-didactic approach can accommodate those differences and still establish or judge the competency of the professionals.

It is far easier to say these things than to do them. The first step in the process of curriculum design is to determine the needs. Once this is done, the knowledge, skills, and abilities can be refined, as goals and objectives, and the system which best accommodates the knowledge, skills, and abilities can be identified. Next we will address the assessment of needs, how the assessment can be accomplished, and the implications.

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