

THE TYLER RATIONALE AND TYLER'S 1970s REVISION:

AN HISTORICAL RECONSIDERATION

by

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(Under the Direction of William Wraga)

ABSTRACT

Ralph W. Tyler is best known for *Basic Principles of Curriculum and Instruction*, his syllabus for Education 360 at the University of Chicago published in 1949. The significance of this text is considered far-reaching; it ranks as one of the most influential writings in curriculum development. This often-criticized problem solving rationale for curriculum development has elicited debate within the curriculum field for the past three decades, even to the point of some scholars calling for a reconceptualization of the field. The persistent criticism of Tyler's Rationale indicates the continuing importance of his 1949 book to the curriculum field.

This study describes the origins, features, and major interpretations of the Tyler Rationale, explores the similarities and differences between the Tyler Rationale and Tyler's unfinished 1970s Revision, and considers how Tyler's 1970s Revision can help us understand Tyler's Rationale. This

historical study utilizes Ralph Tyler Project archival documents at the University of Chicago in the Ralph Tyler Project collection, which include Tyler's 1970s Revision to *Basic Principles of Curriculum and Instruction*. A comparative analysis of Tyler's original 1949 Rationale and Tyler's 1970s Revision describes similarities between these texts, and also identifies clarifications and additions Tyler made to his thinking about curriculum development in the 1970s Revision. Some but not all of these clarifications and additions may have been in response to extant criticisms of his 1949 Rationale.

As part of a funded effort Tyler drafted a preface and six chapters, which elaborated chapter one of his 1949 Rationale. In the drafted chapters, Tyler clarified some aspects of the 1949 Rationale that had come under criticism, including the change of linearity of the four fundamental questions, using the learner, subject matter and contemporary life as sources for deriving objectives, and the use of philosophy and psychology as means for screening educational objectives.

The most notable change in Tyler's proposals for curriculum development was a greater emphasis on the learner as a source for deriving educational purposes. This change indicates Tyler's

increased commitment to the active participation of the student in the educational process.

INDEX WORDS: Ralph Tyler; Tyler Rationale; *Basic Principle of Curriculum and Instruction*; curriculum history

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DEDICATION

This work is first and foremost dedicated to my Lord and Savior, Jesus Christ. For without him, I am nothing. He has given me the strength, health, and wisdom I have needed to see this dissertation to completion. God alone deserves the glory.

To my husband - Randall Todd Stanley - You have been there to support me and encourage me throughout this process without complaining. I am thankful that God has given such a wonderful helpmate.

To my pumpkin - Aidan Todd Stanley - You have been so patient while mama worked on her paper. Although you really wanted me to lay on the couch with you and watch your shows, you seemed to understand the importance of this work. One day I hope you truly understand the importance of mama's work.

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CHAPTER 1

OVERVIEW OF THE STUDY

Background of the Problem

Although he published over 700 articles and sixteen books, Ralph Tyler is best known for his syllabus published in 1949 for Education 360 at the University of Chicago. The impact of *Basic Principles of Curriculum and Instruction* (Tyler, 1949) is considered far reaching. For example, Harold Shane (1981) surveyed 135 members of the Professors of Curriculum to determine what writings had the most influence on the school curriculum since Phi Delta Kappa was founded in 1906. Of the eighty-four curriculum specialists who completed and returned the survey, all but four rated *Basic Principles of Curriculum and Instruction* as a "major" or "considerable" influence in curriculum publications. Comparatively, John Dewey's *Democracy and Education* (1916) received all but five of the 84 votes. Also, the fact that *Basic Principles of Curriculum and Instruction* is translated into more than six languages attests to its international use. Goodlad (n.d.) stated, "The monograph may well rank as the number one cited item in the field of education in the last twenty to thirty years" (pp. 91-92). Goodlad named Tyler "the quintessential educator for all seasons whose Nebraska school days provided much of the reality base that differentiated his wisdom from the merely brilliant" (p.

80). McNeil (1990) admitted that Tyler's work "is regarded as the culmination of one epoch of curriculum making" (p. 388). Goodlad (1966) stated "Tyler put the capstone on one epoch of curriculum inquiry" (p. 5). McNeil further added, "Tyler's rationale for examining problems of curriculum and instruction summed up the best thought regarding curriculum during its first half-century as a field of study" (p. 390). Also, *Basic Principles of Curriculum and Instruction* has been called "the most influential curriculum book of the twentieth century" (Marshall, Sears, & Schubert, 2000, p. 3).

Significance of the Problem

The significance of the Tyler Rationale can be further supported by the amount of controversy that surrounds it. This controversy began in 1970 with Kliebard's analysis and continues today. Kliebard (1970) admitted that Tyler's Rationale "has been raised almost to the status of a revealed doctrine" (p. 259). He further stated, "Ralph Tyler deserves to be enshrined in whatever hall of fame the field of curriculum may wish to establish" (Kliebard, p. 270). However, he advised the field of curriculum to recognize Tyler's Rationale for what it truly is: "Ralph Tyler's version of how a curriculum should be developed - not the universal model of curriculum development" (Kliebard, p. 270).

Approximately twenty years after its publication, Kliebard offered many criticisms of Tyler's Rationale. Kliebard (1970) criticized Tyler for failing to provide boundaries to be used in deciding what should be included in the curriculum: "The Rationale offers little by way of a guide from curriculum-making because it excludes so little" (p. 267).

Kliebard was not the only one who criticized Tyler's Rationale. The reconceptualists began to offer up criticisms of the Rationale by suggesting that the Rationale had constricted curriculum thought (Pinar, 1975). Pinar (1978) stated that the "traditionalist" espoused the controlling methods of instruction. Hlebowitsh (1992) noted the reconceptualists encouraged curriculum scholars to recognize that "the Tyler Rationale is tyrannically behavioristic in its quality and is logically anchored in a line of thought that celebrates superimposing an industrial mentality upon the school of curriculum" (p. 533).

Some of the other criticisms included (a) the concept of selecting behavioral objectives before developing the curriculum and (b) possibly leaving curriculum-development in the hands of a less-qualified group at the local schools, instead of being mandated by the state and industrial interests (McNeil, 1990).

Interestingly, Hlebowitsh (1992) noted, "Tyler, while acknowledging what he believes to be a misperception of his Rationale, never responded substantively to Kliebard's 1970 reappraisal nor to the radical criticism which followed it" (pp. 533-534). Why would Tyler remain silent? Hlebowitsh, after receiving a personal correspondence from Tyler on August 23, 1990, concerning the criticisms, stated:

Because Tyler saw his Rationale as an outline of questions that must be considered in developing a curriculum and because his critics framed no alternative method for studying questions relevant to curriculum planning, Tyler declined to criticize the positions taken against him. (p. 533-534)

However, over 50 years after its publication, the Tyler Rationale remains a central document in the curriculum field.

Meanwhile, twenty-five years after the publication of *Basic Principles of Curriculum and Instruction*, Tyler began revising and expanding his *Basic Principles of Curriculum and Instruction* and the drafts are located under the auspices of the Ralph Tyler Project at the University of Chicago. To date, and despite the continued significance and controversy of the Tyler Rationale, the archival materials for this unpublished revision remains unexamined. Given the implications and significance of the

Tyler Rationale, an examination of these archival materials is justified and longer overdue.

Purpose of the Study

The purpose of this study is to determine the extent to which Tyler's 1970s Revision illuminates understanding of the Tyler Rationale. This study will document and explain the origins of the Tyler Rationale, examine the interpretations and controversies of the Tyler Rationale, and document the changes Ralph Tyler made to this original rationale in his work on the 1970s Revision. Finally, this study will provide current and future curriculum leaders with useful knowledge for the improvement of curriculum and instructional practices.

Research Questions

This study will attempt to answer the following questions:

1. What were the origins of the Tyler Rationale?
2. What are the features of the Tyler Rationale?
3. What are the major interpretations of the Tyler Rationale?
4. What are the similarities and differences between the Tyler Rationale and Tyler's 1970s Revision?
5. How does the work of the Tyler's 1970s Revision help us understand the Tyler Rationale?

Scope of the Study

This study will consist of the following five steps:

1. Provide an overview of the origins and importance of the Tyler Rationale.
2. Document and explain the interpretations and controversies surrounding the Tyler Rationale.
3. Examine the Ralph Tyler Project, archived at the University of Chicago, to document and explain the changes Tyler made to his rationale in his writing of the 1970s Revision.
4. Explain how Tyler's 1970s Revision helps us understand the Tyler Rationale.
5. Present implications for future curriculum research and practice.

Methodology

In this study, historical method of research will be utilized. The purposes of historical research include making people aware of what has happened in the past so they may learn from past failures and successes, learning how things were done to see if they might be applicable to today's problems and concerns, assisting in predictions, testing hypotheses concerning relationships and trends, and understanding present practices and policies in education (Fraenkel & Wallen, 1996). According to Tanner and Tanner (1990), historical facts and

events alone do not produce an educational history. To them, the why of what happened is as important as the historical events. They state, "the why is important if the history is to contribute insights into problems of present concern to educators" (Tanner & Tanner, p. 3). When contemplating a historical question for research, the researcher must consider the purpose behind the question.

Once the researcher defines the question or problem, the search for relevant sources begins. According to Fraenkel and Wallen (1996), "Just about everything that has been written down in some form or other, and virtually every object imaginable, is a potential source for historical research" (p. 435). They divide the sources into four different groups: documents, numerical records, oral statements and records, and relics (Fraenkel & Wallen, 1996). Documents encompass any kind of information that is in written or print form. Examples of documents would include, but are not limited to, reports, books, legal records, newspapers, diaries, bills, artwork, notebooks, and magazines (Fraenkel & Wallen). Numerical records include any type of quantitative records. These could include test scores, attendance figures, census reports, school budgets, and other records of the like (Fraenkel & Wallen). Oral statements offer another valuable source to historical research. Oral interviews, or oral histories, make up an important part of oral

statements. Other forms would include tales, myths, legends, songs, and "other forms of oral expression that have been used by people down through the ages to leave a record for future generations" (Fraenkel & Wallen, p. 435). The final category of historical sources is the relic. A relic is any object that can provide either physical or visual information about the past.

When using historical sources, it is important for the researcher to identify whether the source is a primary or secondary source. The difference between these sources is point of view. A direct witness of the event is a primary source. In contrast, a document or oral statement made from the retelling of someone else is a secondary source. According to Fraenkel and Wallen (1996), they are "one step removed" (p. 437) from the event. Therefore whenever possible, historians try to use primary sources since the retelling is known first hand. In the present study, primary sources attained from the University of Chicago will be utilized. These include manuscripts, interviews, and correspondences by Ralph Tyler concerning the Tyler Rationale and Tyler's 1970s Revision. Secondary sources will be used when primary sources are unavailable.

Once the historical sources have been gathered and read, the researcher must summarize the information. Fraenkel and Wallen describe this part of the historical process as anything but a neat, orderly sequence of steps. Often the reading of the

historical sources and the writing take place simultaneously.

Historian Edward J. Carr provides a description of this step in research:

[A common] assumption [among lay people] appears to be that the historian divides his work into two sharply distinguishable phases or periods. First, he spends a long preliminary period reading his sources and filling his notebooks with facts; then, when this is over he puts away his sources, takes out his notebooks, and writes his book from beginning to end. This is to me an unconvincing and implausible picture. For myself, as soon as I have got going on a few of what I take to be the capital sources, the itch becomes too strong and I begin to write - not necessarily at the beginning, but somewhere, anywhere. Thereafter, reading and writing go on simultaneously. The writing is added to, subtracted from, re-shaped, and cancelled, as I go on reading. The reading is guided and directed and made fruitful by the writing; the more I write, the more I know what I am looking for, the better I understand the significance and relevance of what I find.

(as cited in Fraenkel & Wallen, 1996, p. 437)

After the summarizing has taken place, the researcher is ready for the final step.

The final step in the historical method is presenting and interpreting the information as it relates to the question being studied. Since the historian was not there to experience the event, he/she must interpret and reconstruct it. With this reconstruction, the event becomes, to some extent, a creation of the historian. According to Tanner and Tanner (1990), "Historians are no different from anyone else; they see things from their own perspectives...however meticulous the scholarship, there is in the historian's mind a view of history that controls the selection and arrangement of facts" (p. 4). The reader must not accept the interpretation presented by the writer. However, without the interpretation, the asserted history fails.

Like all other forms of research, the historical method consists of both advantages and limitations. The main advantage of this research is that it allows topics and questions to be investigated that could not be studied in any other form. It is the only research method that allows evidence from the past to be studied in order to answer questions. Also, as stated earlier, many different types of evidence can be used in this method. This advantage provides for a richer source of information that would be unavailable if studied uses other methodologies.

However, with the advantages of the historical methods come limitations. Within this methodology, it is difficult to control for the threats to internal validity (Fraenkel & Wallen, 1996). The sources being used to study the research question can be limited. Also, often there is no way to check the validity and reliability of the available sources. Because the history is to be recreated and interpreted by the author, there is the possibility of researcher bias. Fraenkel and Wallen conclude, "Because so much depends on the skill and integrity of the researcher - since methodological controls are unavailable - historical research is among the most difficult of all types of research to conduct" (p. 440).

Although the historical method may be difficult to conduct, it is important that researchers continue to utilize this method. In education many of the "new" innovations are merely "recreations" of past experiences, which have been tried and failed. In order to keep educators from "reinventing the wheel," the area of curriculum history must be studied. As Tanner (1982) noted, "Our strength lies in our experience. Our misfortune lies in our failure to see it" (p. 42).

Assumptions of the Study

The following assumptions apply to this study:

1. The primary source documents are authentic.
2. Sufficient documentation exists to conduct this study.

Limitations of the Study

In historical research, certain limitations may exist. Within this methodology, it is difficult to control threats to internal validity (Fraenkel & Wallen, 1996, p. 440). The sources being used in this study could be limited by available documents. Within this study, the limitations could include (a) accessibility of historical records and (b) the use of secondary sources when primary sources are unavailable.

Organization of the Study

Chapter 1 provides an overview of the study, including the purpose of study, justification of the study, research questions, scope of the study, methodology, limitations, assumptions, and organization of the study. Chapter 2 will provide an overview of the origins and content of the Tyler Rationale. Chapter 3 will review the interpretations and controversies concerning the Tyler Rationale. Chapter 4 and Chapter 5 will examine primary sources of the Ralph Tyler Project archived at the University of Chicago and document and explain the changes Tyler made during his rewriting of the Tyler

Rationale. Chapter 6 will summarize the study and offer conclusions and recommendations for understanding the Tyler Rationale and for curriculum practice, as well as implications for further research.

Chapter 2

THE ORIGINS AND FEATURES OF THE TYLER RATIONALE

This chapter examines the origins of Tyler's *Basic Principles of Curriculum and Instruction*, also known as the Tyler Rationale. The chapter begins by highlighting some of the major accomplishments of Tyler's career which contributed to the development of the rationale. The historical context, curriculum in the 1930s, and the Eight-Year Study will be examined as they relate to the Rationale. Finally, the Tyler Rationale will be summarized and explained.

Ralph Tyler's Career

Kiester (1978) wrote, "Trying to put a handle on Tyler's career is a little like trying to decide whether Shakespeare should be described as a poet or a dramatist" (p. 29). Tyler's career, spanning over seven decades, included the publication of over 700 articles and fourteen books. During that time, Tyler was involved in almost "every facet of education from curriculum design to advanced research to educational policy" (Kiester, 1978, p. 29). In addition, Kiester noted some of Tyler's major accomplishments: Tyler "has written the leading textbook in curriculum design; fathered the concept of behavioral objectives; put educational evaluation on a scientific footing, founded the prototype social sciences as a think tank; and

assisted Robert Hutchins in restructuring the University of Chicago" (p. 29). Some of Tyler's other accomplishments included: university examiner and dean of social sciences at the University of Chicago, his role in the Eight-Year Study, founding role in the National Academy of Education, as well as director of the Center for Advanced Study in the Behavioral Sciences at Stanford University (Rubin, 1994). Also, Tyler served as: advisor to six U.S. Presidents (Roosevelt, Truman, Eisenhower, Kennedy, Johnson, and Nixon), research advisor to the U.S. Office of Education, first president of the National Academy of Education, vice-chair of the National Science Board, as well as contributor to the policy of the Elementary and Secondary Education Act of 1965 (Schubert & Schubert, 1986). When asked, Tyler identified two major landmarks in his career: his role in the Eight-Year Study and the founding and directing of the Center for Advanced Study in Behavioral Sciences for 13 years (Kiestler, 1978). Rubin (1994) observed, "Few public figures blend extraordinary capacities and vision to fashion a career that can truly be called awesome in its breadth and significance. Ralph Tyler was this sort of rarity" (p. 784).

Historical Context

When Tyler generated his Rationale, the United States was in the midst of the Great Depression, which changed the demographics as well as the function of the American public

school. During this time, "Democracy was in jeopardy and Americans' most basic beliefs about education were shaken" (Kridel & Bullough, 2007, p. 36).

In 1910, approximately 17% of high school enrollments represented 14 - 17 years olds (Tyler, 1986). By 1929, high school enrollments represented about 25% of this same age group. During the Depression, the percent doubled to 50% (Nowakowski, 1983.) By the 1940s, high school enrollment represented 79% of students aged 14-17 (National Center For Education Statistics, n.d.). With an increase in the number of students entering high school, curriculum problems soon developed. The college entrance curriculum that had served most of the students in the past was no longer meaningful to the new population of high school students. "The other common program, the Smith-Hughes Vocational Education Program, was highly selective" (Nowakowski, 1983, p. 25). This vocational program was for students who were planning for an occupation in "garage mechanics, homemaking, or agriculture" (Nowakowski, 1983, p. 25). Therefore, many of the instructional needs of the high school students were not being met with the current curriculums.

In 1937, John Ward Studebaker, the U.S. Commissioner of Education, gave an address to the American Vocational Association entitled "Education for the 85 Percent" (Tyler, 1986). During this address, it was noted that only 20% of the

high school students would benefit from a college preparatory program and 20% from a vocational curriculum, leaving 60% of the high school population needing life-adjusting education (Tyler, 1986). The high school curriculum was outdated and could no longer provide for the needs of the students in the 1930s. Maxine Davis, a journalist, after taking a three-month cross-country trip traveling over 10,000 miles across the United States and interviewing young people, began to refer to the youth of America as the "lost generation" (Kridel & Bullough, 2007, p. 34). In *The Lost Generation - Portrait of American Youth Today*, Davis commented, "They are, on the whole, concerned with preparing (youth) to enter college, although they know that all but a few hundred thousand ... boys and girls in the secondary schools, the last three years of high school are all the education they will ever have" (as cited in Kridel & Bullough, 2007, p. 34). Also, Davis expressed concerns that "the schools no longer represented democratic institutions" (as cited in Kridel & Bullough, 2007, p. 35). It was the "educational needs of a very small portion of the adolescent population" which was determining "the curriculum for nearly all" adolescents (Kridel & Bullough, 2007, p. 35). According to Kridel and Bullough, "America was at risk, and democracy was threatened as fewer young people found meaningful connections

with the wider society" (p. 35). Such was the state of America and public schools when Tyler began to formulate his Rationale for curriculum development.

Curriculum in the 1930s

Not only was America and democracy at risk, the fundamental purpose of education and curriculum was being questioned. Tanner and Tanner (1990) referred to this period as "the crisis years for the curriculum" (p. 215). Debates focused on the purpose of education and the type of curriculum needed in order to fulfill that purpose. Some favored a child-centered curriculum. Others called for a curriculum centered on social reconstruction in order to rebuild society and prevent future economic crises.

With America in the depths of the Great Depression, the schools were being called upon to find a solution for the current crisis as well as to become proactive in order to prevent future crises. Educational theorists were at odds concerning what type of curriculum would be needed in order to reconstruct society while at the same time meet the needs of the individual students.

The reconstructionists, under the leadership of George Counts, called for a reconsideration of the school's role in society. Counts, in a series of speeches, summoned progressive educators "to address the great crises of the times, fashion a new vision of human destiny based on social welfare, and

challenge the schools to the task of giving the rising generation the means toward realizing such a vision" (Tanner & Tanner, 1995, p. 324). In his 1932 book, *Dare the School Build a New Social Order?*, Counts proposed that schools "should not simply transmit the cultural heritage or simply study social problems, but should become an agency for solving political and social problems" (Oliva, 1992, p. 194).

With the idea of rebuilding a new social order, the Progressive Education Association (PEA) became a house divided. On one side of the association, educators believed that "'social mindedness' required the direct and realistic study of social issues;" while on the other side, educators believed that "'social mindedness' would result if schools emphasized cooperation instead of competition and group mindedness instead of individuality" (Tanner & Tanner, 1990, p. 224). Debates surrounded this topic, asking whether the use of prescribed beliefs was education or indoctrination.

Boyd Bode, an experimentalist at Ohio State University, wrote, "'the remedy for shortcomings of the progressive education movement is not to prescribe beliefs but to specify the areas in which reconstruction or reinterpretation is an urgent need'" (as cited in Tanner & Tanner, 1990, p. 221). For Bode, education failed when "it teaches any rule, law, or standard as a fixed belief" (Schubert, Schubert, Thomas, &

Carroll, 2002, p. 65). In his book, *Progressive Education at the Crossroad*, Bode (1938) criticized the weaknesses of progressive education:

Progressive education is confronted with the choice of becoming the avowed exponent of democracy or else of becoming a set of ingenious devices for tempering the wind to the shorn lambs. If democracy is to have a deep and inclusive human meaning it must also have a distinctive educational system. (as cited in Schubert et al., 2002, p. 67)

The 1930s has been described as "the decade of experimentalists" (Schubert et al., 2002, p. 70). According to Schubert et al., (2002), this was due partly to the "plethora of literature" (p. 63) produced by the experimentalists as well as the significant influence of their writings. The ultimate aim of experimentalism was "'to develop individuals who can intelligently manage their own affairs, at times 'alone,' more usually in shared or joint enterprises'" (Tanner & Tanner, 1990, p. 219). To the experimentalists, the school would be a vital instrument in creating experimental minds through the experimental method. According to Tanner and Tanner (1990), experimentalism and democracy shared an important key concept: "an improved life and better society through the reconstruction of shared experiences" (p. 220). Because experimentalism called

for the "testing of plans of possible action," Tanner and Tanner (1990) noted, "It is hardly surprising... that experimentalisms... became the dominant educational philosophy of the 1930s" (p. 220).

The Eight-Year Study

The Eight-Year Study was conceptualized during a conference held by the Progressive Education Association (PEA) in 1930; despite its name, it evolved over a twelve year period from 1930 to 1942 (Kridel & Bullough, 2007). Also known as the Thirty School Study, the Eight-Year Study arose from "two rather innocuous goals: 'To establish a relationship between school and college that would permit and encourage reconstruction in the secondary school,' and 'to find, through exploration and experimentation, how the high school in the United States could serve youth more effectively'" (Kridel & Bullough, 2007, p. 3). During the PEA conference, it was determined that a small number of schools would be encouraged to design curriculum that would serve the needs of high school students of that period. The 30 schools and school systems would be given eight years to implement and execute new educational programs. During those eight years, the schools were free of any state or college entrance requirements in order to provide freedom for experimentation. One stipulation was placed upon the agreement by the colleges and state departments. There would be an

evaluation program established to measure success. The evaluation program consisted of three major areas of focus. First, detailed records were kept of each student's performance in order for colleges to make wise admission decisions. Second, there was a follow up for those who went to college to see how well they performed on their college work, as well as a follow up program for those who went directly from high school to an occupation to see how well they did. Finally, a feedback loop was established to help the schools measure what students were learning as the schools continued to design the programs of study.

The first year of the Eight Year Study was 1933-34. However, it soon ran into crisis. The directing committee planned "to use the General Culture Test developed by the Cooperative Test Service for the Pennsylvania Study of School and College Relations" (Nowakowski, 1981, p. 10). At the end of the first year, the schools discovered that these evaluations were not valid since they did not measure the focus of the new curriculum. Basically, these evaluations measured recall information about the things presented in the previous widely used textbooks. The schools spoke out saying that the recall information was not what they were trying to teach, and these tests were not a fair means of evaluation. While meeting at the Princeton Inn in June of 1934, the schools gave an ultimatum

that they would not continue with this study if they were to be assessed by the present evaluation system. Boyd Bode, a member of the directing committee, as well as a well-known philosopher of education at Ohio State University offered a suggestion:

We've got a young man in evaluation at Ohio State who bases evaluation on what the schools are trying to do. He works closely with them and doesn't simply take a test off the shelf. Why don't you see if he will take responsibility for directing the evaluation?" (Nowakowski, 1983, p. 26)

Ralph Tyler was interviewed and agreed to accept a half-time position as director of evaluation for the Eight Year Study. This would begin Tyler's involvement with this famous study.

As Tyler began working with the evaluation staff to help schools in the area of evaluation, Harold Alberty began working with the curriculum staff to aid in the development of curricula. Five years after the study began, schools started to comment about the difference in support they were receiving from the evaluation and curriculum staff. Wilford Aikin, the director of the Eight-Year Study, interviewed the different heads of participating schools that reported, "... the evaluation staff is so much more helpful than the curriculum staff" (Tyler, Schubert, & Schubert, 1986, p. 94). Alberty explained this difference by stating that, "Tyler has a rationale for evaluation and there isn't any rationale for curriculum"

(Nowakowski, 1983, p. 26). As Tyler was having lunch with his right-hand associate, Hilda Taba, he told her, "Shucks, we can produce a rationale for them" (Tyler et al., 1986, p. 94). It was then that Tyler sketched out on a napkin what is now often called "the Tyler Rationale." This outline developed into *Basic Principles of Curriculum and Instruction*, which Tyler often referred to as the little book.

Although the Eight Year Study was one of the most important and comprehensive curriculum experiments ever carried on in the United States, it was a casualty of World War II. The study established beyond question that those high school students involved in the study were not handicapped in college due to their participation. In fact, Chamberlin, Chamberlin, Drought, and Scott (1942) wrote:

Those students who graduated from the most experimental schools were striking more successful than their matches. Differences in their favor were much greater than the differences between the total Thirty Schools and their comparison group. Conversely, there were no large or consistent differences between the least experimental graduates and their comparison group. (p. 209)

Aikin (1942) identified the following three conclusions:

First, the graduates of the Thirty Schools were not handicapped in their college work. Second, departures from the prescribed pattern of subjects and units did not lessen the student's readiness for the responsibilities of college. Third, students from the participating schools which made most fundamental curriculum revision achieved in college distinctly higher standing than that of students of equal ability with whom they were compared. (p. 117)

In terms of curriculum, Aikin (1942) noted five conclusions from the report:

1. First, every student should achieve competence in the essential skills of communication - reading, writing, oral expression - and in the use of quantitative concepts and symbols.
2. Second, inert subject-matter should give way to content that is alive and pertinent to the problems of youth and modern civilization.
3. Third, the common, recurring concerns of American youth should give content and form to the curriculum.
4. Fourth, the life and work of the school should contribute, in every possible way, to the physical, mental, and emotional health of every student.

5. Fifth, the curriculum in its every part should have one clear major purpose. That purpose is to bring to every young American his great heritage of freedom, to develop understanding of the kind of life we seek, and to inspire devotion to human welfare. (p. 138)

The Eight Year Study would have been more far-reaching if its findings had not been published in 1942 when the news of war was in the forefront. Laurel Tanner (1986) identified six contributions of the study, which included:

1. The results of the study undoubtedly accelerated the movement of the high schools away from the heavy domination of college entrance requirements.
2. There was widespread acceptance of the idea that schools could develop educational programs that would interest the students, meet their needs, and at the same time provide them with needed preparation for success in college.
3. Widespread acceptance of the concept of educational evaluation as a means for appraising attainment of the several major objectives of an educational program.
4. The in-service workshop was developed during the experiment to give time and assistance to teachers in

developing instructional programs and materials and in gaining new knowledge and skills for their work.

5. Recognition that behaviors significant to the development of children - attitudes and values - can be tested, despite the difficulty of measuring them.

6. It was a mistake to apply to progressive programs standardized tests that were based on traditional subject matter. (p. 34)

As a result of the findings and contributions of the Eight-Year Study, Tyler turned his attention to the development of *Basic Principles of Curriculum and Instruction* in order to guide students of curriculum development as they sought to find answers concerning educational purposes, experiences, organizations, and evaluations.

Introduction to *Basic Principles of Curriculum and Instruction*

Basic Principles of Curriculum and Instruction (1949) was prepared as a syllabus for Education 360 at the University of Chicago. Tyler (1976) pointed out that *Basic Principles of Curriculum and Instruction* was "intended to be a guide for the thinking and planning of students, most of who were mature professionals working on problems of curriculum and instruction in their own institutions or organizations" (p. 61). In the

introduction of *Basic Principles of Curriculum and Instruction*, Tyler was careful to point out what the syllabus was and what it was not. It was an attempt "to explain a rationale for viewing, analyzing, and interpreting the curriculum and instructional program of an educational institution" (Tyler, 1949, p. 1). The book outlined "one way of viewing an instructional program as a functioning instrument of education" (p. 1). *Basic Principles of Curriculum and Instruction* suggested methods of studying the four fundamental questions presented in the book:

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? (p. 1)

On the other hand, Tyler (1949) did not attempt to answer these questions "... since the answers will vary to some extent from one level of education to another and from one school to another" (pp. 1-2). Tyler added that this book was "not a textbook, for it does not provide comprehensive guidance and readings for a course" (p. 1). Finally, he stated that *Basic Principles of Curriculum and Instruction* was "... not a manual for curriculum

construction, since it does not describe and outline in details the steps to be taken by a given school or college that seeks to build a curriculum" (p. 1). However, Tyler recommended procedures, which "... constitute a rationale by which to examine problems of curriculum and instruction" (p. 2).

Basic Principles of Curriculum and Instruction was 128 pages long and organized into five chapters. The first four chapters dealt with the four fundamental questions Tyler posed concerning curriculum. The fifth and final chapter dealt briefly, in three pages, with how a school or college staff may work on building a curriculum.

Educational Purposes

Chapter one focused on the selection of educational purposes. Tyler (1949) devoted almost half of the book, 60 pages, to the selection of educational purposes because "they are the most critical criteria for guiding all the other activities of the curriculum-maker" (p. 62). Chapter one was organized into six main sections. In the first three sections, Tyler (1949) identified three different sources from which to obtain educational purposes: the learners themselves, contemporary life outside of school, and subject specialists. He believed that "no single source of information is adequate to provide a basis for wise and comprehensive decisions about the

objectives in school" (p. 5). Sections four and five examined the use of philosophy and psychology as screen for the selection of objectives. Section six outlined different ways of stating objectives in order to facilitate the selection of learning experiences.

To begin with, Tyler noted what educational objectives were and their importance. For Tyler (1949), "Education is a process of changing the behavior patterns of people" (p. 6). Although to some people, this statement sounded behaviorist: Tyler meant behavior in the "broad sense" of the term to include "thinking and feeling as well as overt action" (p. 6). These behavioral or educational objectives are "... consciously willed goals... ends that are desired by the school staff... not simply matters of personal preference of individuals or groups" (p. 3). These objectives provide "... the criteria by which materials are selected, content is outlined, instructional procedures are developed and tests and examinations are prepared" (p. 3). Although Tyler stated, "In the final analysis objectives are matters of choice ... the considered value judgments of those responsible for the school," (p. 4) he outlined three different sources and two screens to aid in the selection of the objectives.

The first source Tyler suggested was the study of the learners. He noted, "A study of the learners themselves would seek to identify needed changes in behavior patterns of the students which the educational institution should seek to produce" (Tyler, 1949, p. 6). Tyler believed that it was essential for education to "provide opportunities for students to enter actively into, and to deal wholeheartedly with, the things which interest him" (p. 11). Therefore, when studying this source, Tyler suggested examining the needs of the students as well as their interests.

Tyler (1949) addressed two different definitions of the term need. The first definition represented "a gap between some conception of a desirable norm" (p. 7). In other words, "Need ... is the gap between what is and what should be" (p. 8). The second definition represented "tensions in the organism which must be brought into equilibrium for a normal healthy condition of the organism to be maintained" (p. 8). These needs could include physical, social or integrative needs.

In addition to examining the needs of the learner, Tyler suggested that studies be conducted to determine the interest of the learner. He argued, "Education is an active process" which "involves the active efforts of the learner himself" (Tyler, 1949, p. 11). Therefore, if the student's interests are used as

a "point of departure," it was likely that the student "will actively participate in them and thus learn to deal effectively with these situations" (p. 11).

Tyler (1949) recommended the use of teacher observations, student interviews, parent interviews, questionnaires, tests, and records as methods to investigate the learners' needs and interests in order to identify educational purposes. Tyler noted that since there were many different aspects of the learner's life that could be studied, it was important to classify the areas into particular groups and study those groups carefully. Furthermore, he explained, "objectives are not automatically identified by collecting information about the students" (p. 15). The school must examine the data and derive the objectives that are consistent to the purpose and philosophy of the school.

Second, Tyler identified contemporary life as a source for obtaining educational purposes. The need for studying contemporary life as a source for objectives developed after the Industrial Revolution due to the massive increase in knowledge. Schools were no longer able to teach all the information that scholars considered important for learning; therefore, it was necessary to identify those aspects of contemporary life which would be beneficial for students to know.

Tyler offered two arguments for analyzing contemporary life. Because of the complexity and continuous changes in contemporary life, school must focus on the critical aspects of society and not waste students' time learning things that were important years ago but were no longer significant. The second argument focused on the findings concerning the transfer of training. According to those findings, the student was "much more likely to apply his learning when he recognized the similarity between the situations encountered in life and the situations in which the learning took place" (Tyler, 1949, p. 18).

Subject matter specialists were the third source Tyler identified for deriving objectives. This source was identified as the most common source for objectives since schools, colleges, as well as textbook manufacturers relied heavily on the subject matter specialists. Tyler criticized the subject matter specialists' reports published by the Committee of Ten which outlined certain educational objectives. To Tyler, the Committee of Ten was seeking the answer to the wrong question. Instead of asking, "What should be the elementary instruction for students who are later to carry on much more advanced work in the field?" Tyler (1949) suggested the Committee of Ten should have been asking, "What can your subject contribute to

the education of young people who are not going to be specialist in your field?" (p. 26).

According to Tyler, the subject specialists' knowledge was important in the consideration of objectives. Tyler identified two different functions of this knowledge. The first function centered on the "broad functions a particular subject can serve" (Tyler, 1949, p. 27). The second function focused on the "particular contributions the subject can make to other large functions which are not primarily functions of the subject concerned" (p. 28).

When utilizing the three sources Tyler acknowledged, too many possible objectives would be identified. In the next two sections Tyler (1949) recommended identifying "a smaller number of consistent highly important objectives" (p. 33). In order to accomplish this, Tyler proposed screening "the heterogeneous collection of objectives ... to eliminate the unimportant and the contradictory ones" (p. 33). For this process, two screens would be used.

"The educational and social philosophy to which the school is committed" (Tyler, 1949, pp. 33-34) would serve as one screen. Through the use of this screen, objectives would be culled "by identifying those that stand high in terms of values stated or implied in the school's philosophy" (p. 34). Tyler

noted that in order for this screen to be most helpful, the school's philosophy "needs to be stated clearly and for the main points the implications for educational objectives may need to be spelled out" (p. 37). According to Tyler, "Those objectives in harmony with the philosophy will be identified as important objectives" (p. 37).

The second screen, which included the use of psychology of learning, would be used to cull the objectives. Tyler (1949) believed, "Educational objectives are educational ends; they are results to be achieved from learning. Unless these ends are in conformity with conditions intrinsic in learning they are worthless" (pp. 37-38). The proposed learning objectives can be checked against the psychology of learning and either accepted as appropriate objectives or rejected. Objectives are rejected if they are "unattainable, inappropriate to the age level, too general or too specific, or otherwise in conflict with the psychology of learning" (p. 43).

Once the objectives have been identified, Tyler noted that the form in which they are written was important. He cautioned about writing objectives in terms of what "the instructor is to do" (Tyler, 1949, p.44). He asserted, "These statements may indicate what the instructor plans to do; but they are not really statements of educational ends" (p. 44). Objectives

written in form of "listing topics, concepts, generalizations, or other elements of the content" were not effective ways to write objectives, as well as objectives written in a "form of generalized patterns of behavior which fail to indicate more specifically the area of life or the content to which the behavior applies" (pp. 44-46).

According to Tyler (1949), "The most useful form of stating objectives is to express them in terms which identify both the kind of behavior to be developed in the student and the content or area of life in which this behavior is to operate" (p. 46). The educational objectives are two-dimensional and focus on the "behavioral aspect and the content aspect" (p. 47). Tyler provided a chart to illustrate how objectives should be formed (p. 50).

Selecting Learning Experiences

In chapter two, Tyler turned his attention to the selection of learning experiences. For Tyler (1949), learning experiences referred to "the interaction between the learner and the external conditions in the environment to which the learner can react" (p. 63). In other words, the student must be actively involved in the learning process. Tyler stated, "It is possible for two students to be in the same class and for them to be having two different experiences" (p. 63) even with similar

external conditions. Tyler outlined five general principles for selecting the learning experiences in order to select the learning experiences that were "likely to produce the given educational objectives" and "evoke or provide within the student the kind of learning experiences desired" (p. 65).

The first principle for selecting learning experiences stated, "A student must have experiences that give him an opportunity to practice the kind of behavior implied by the objectives" (Tyler, 1949, p. 65). For example, if the objective was to develop an understanding of the laws of gravity, the learner must be given the experiences of working with the law of gravity.

The second principle stated, "The learning experiences must be such that the student can obtain satisfaction from carrying on the kind of behavior implied by the objective" (Tyler, 1949, p. 66). If the learning experiences are designed unsatisfyingly, the chances of the desired learning occurring are unlikely.

Third, "the learning experiences must be within the range of possibility for the student involved" (Tyler, 1949, p. 67). In other words, the teacher must know where the student is in terms of prior knowledge and experiences and begin there,

because if the learning experience is too difficult, the learning will not be successful.

Fourth, there are many possible "experiences that can be used to attain the same educational objectives" (Tyler, 1949, p. 67). This allows the teacher to use his/her creativity when planning learning activities. Tyler added, "It is not necessary that the curriculum provide for a certain limited or prescribed set of learning experiences in order to assure that the desired objectives are attained" (p. 67).

Finally, the fifth principle for selecting learning experiences is that "the same learning experience will usually bring about several outcomes" (Tyler, 1949, p. 67). Since the learning experiences can bring about both positive and negative learning objectives, the teacher must be cognizant of both positive and negative learning taking place. Not only did Tyler provide general principles for selecting learning experiences, he included four characteristics of learning experiences that are useful in attaining various types of outcomes.

Next, Tyler provided examples of certain kinds of learning experiences. The first characteristic Tyler (1949) noted was using "learning experiences to develop skill in thinking" (p. 68). "Thinking" in this context implied "relating two or more ideas," (p. 68) not just simply recall of information. Examples

of these types of learning experiences would be the use of inductive, deductive, and logical thinking. The learning experience would utilize various problems to stimulate students' interest. These types of problems would not be ones easily answered through the reading of textbooks or other reference materials. The problems would require "the relating of various facts and ideas in order to reach a solution," and when possible, "set up in the kind of environment in which such problems usually arise in life" (p. 69).

The second characteristic was learning experiences that were "helpful in acquiring information" (Tyler, 1949, p. 72). Developing understanding and knowledge are the focus of these learning experiences. The information being acquired could include "principles, laws, theories, experiments, and the evidence supporting generalizations, ideas, facts, and terms" (p. 72). For Tyler, the information being learned must be "viewed as functional," not as "an end in itself" (p. 72). Tyler noted information should be acquired when information is connected with something else. He stated, "It is not desirable to set up learning experiences solely to memorize material" (p. 75).

The third characteristic was learning experiences that were "helpful in developing social attitudes" (Tyler, 1949, p. 75).

Attitudes were defined as "a tendency to react even though the reaction does not actually take place" (p. 75). Tyler outlined four different ways to develop attitude: assimilation, emotional effects of certain kinds of experiences, traumatic experiences, and direct intellectual process. It is important to note that Tyler stated, "It should be clear that there is no way by which persons can be forced to have different attitudes" (p. 79). The change in attitude, according to Tyler, "comes from either new insight and new knowledge about the situation or from the satisfaction or dissatisfaction he has obtained" (p. 79). Learning experiences should be established to provide opportunities for "insight and for satisfactions" (p. 79).

The fourth characteristic was learning experiences that were "helpful in developing interests" (Tyler, 1949, p. 79). Tyler noted, "Interests are of concern in education as both ends and means" (p. 79). Interests can serve as the "objective" or as "the motivating force in connection with experiences to attain the objectives" (p. 79). Interests are important objectives to consider since "what one is interested in largely determines what he attends to and frequently what he does" (p. 79).

Organizing Learning Experiences

In chapter three, Tyler (1949) focused his attention on "organizing the learning experiences for effective instruction" (p. 83). Tyler began by explaining organization. He pointed out "in order for the educational experiences to produce a cumulative effect, they must be organized in such a way as to reinforce each other" (p. 83). Further, "organization greatly influences the efficiency of instruction and the degree to which major educational changes are brought about in the learners" (p. 83). Tyler (1949) continued by noting that when organizing learning experiences, one must consider the vertical, learning over a period of time, and horizontal, learning from one area to another, relationships. Both of these relationships are important. The vertical and horizontal experiences provide greater depth and breadth in the development of learning.

With these two broad organizational structures, Tyler (1949) identified three criteria for effective organization: "continuity, sequence, and integration" (p. 84). Tyler defined continuity as "the vertical repetition of major curriculum elements" (p. 84). For example, if in math the development of place value is an important objective, it would be necessary to ensure that there are recurring opportunities for place value skills to be practiced and developed.

Sequence was similar to continuity in that it calls for recurring experiences on the objective. However, sequence takes it one-step further in that it calls for "each successive experience [to] build upon the preceding one but to go more broadly and deeply into the matters involved" (Tyler, 1949, p. 84). The use of sequenced learning experiences emphasized higher order learning not mere repetition.

Finally, integration referred to the "horizontal relationship of the learning experiences" (Tyler, 1949, p. 85). Tyler noted it is important to see how the learning experiences can relate to the other subject areas so that unity in the student's outlook, skills, and attitude are increased.

Not only must continuity, sequence, and integration be considered when organizing learning experiences, but also in planning the curriculum for any school or field of study, it is important to decide upon certain elements for organization. These elements or "threads" are often "concepts, values and skills" within a content area (Tyler, 1949, p. 87).

Once the major elements have been decided, for example, place value in math or interdependence in social studies; several organizing principles can be utilized to achieve the continuity, sequence, and integration of the learning

experiences. Tyler (1949) noted several organizing principles including:

1. chronological
2. increasing breadth of application
3. increasing range of activities included
4. use of description followed by analysis
5. development of specific illustrations followed by broader and broader principles to explain these illustrations
6. attempt to build an increasingly unified world picture from specific parts which are first built into larger and larger wholes. (p. 97)

Tyler concluded chapter three by examining some of the organizational structures for learning experiences. Tyler (1949) noted three different structural levels for organization: largest, which included specific subjects, broad fields, core curriculum; intermediate, which included course sequences; and lowest, which consisted of the lesson or unit. According to Tyler, in order to achieve "desirable organization, any structural arrangement that provides for larger blocks of time under which planning may go on has an advantage over a structural organization which cuts up the total time into many specific units" (p. 100).

Evaluating Learning Experiences

In chapter four, Tyler turned his attention to evaluation. He began by clarifying the need for evaluation. Evaluation was "a process that finds out how far the learning experiences as they were developed and organized actually produced the desired results" (Tyler, 1949, p. 105). Through this process, the program's strengths and weaknesses can be identified.

When examining evaluation, Tyler identified two important aspects. First, evaluation must appraise the student's behavior, since according to Tyler (1949), "it is the change in these behaviors which is sought in education" (p. 106). Second, evaluation must include at least two appraisals. Tyler pointed out that it is important to appraise the students before and after the learning experiences in order to measure the amount of change. This can be accomplished through the use of pre-test and post-test. Tyler noted that these two appraisals are not enough. He explained that some of the behavioral changes occur during the learning experiences; however, the learning objectives are soon forgotten. Tyler called for follow-up studies of graduates in order to see "the permanence or impermanence of the learnings" (p. 107).

Since the collection of evidence was part of the evaluation process, Tyler identified several appropriate methods of

evaluation. Of course, paper and pencil tests are one way of gathering the experience of learning. Tyler was quick to point out that this method is not the only valid measure. He stated, "There are a great many other kinds of desired behaviors which represent educational objectives that are not easily appraised by paper and pencil devices" (Tyler, 1949, p. 107). He gave the example of personal-social adjustment. With this objective, it was easier and more valid to use "observations of children under condition in which social relations are involved" (p. 107) than it would be to use a paper and pencil test. In addition, Tyler noted that interviews, questionnaires, collections of actual products, and samples of students' work or behaviors are all appropriate methods of evaluation.

Clearly defined objectives are the starting place for the evaluation process. Clearly defined objectives are "absolutely essential" (Tyler, 1949, p. 111). Tyler noted:

...unless there is some clear conception of the sort of behavior implied by the objectives, one has no way of telling what kind of behavior to look for in the students in order to see to that degree these objectives are being realized. (p. 111)

Once these objectives have been defined, it was important to identify the types of situations that would allow the

students to demonstrate the objectives learned. This included finding "situations which not only permit the expression of the behavior but actually encourage or evoke this behavior" (Tyler, 1949, p. 112). Next, the type of evaluation instrument to be used must be examined. Tyler (1949) pointed out that "it is very necessary to check each proposed evaluation device against the objectives in order to see whether it uses situations likely to evoke the sort of behavior which is desired as educational objectives" (p. 113). Tyler continued by noting that if there was no available evaluation unit, it might be necessary to create one. If this were the case, the instrument would need to be piloted to see whether it served as a convenient way of gathering evidence. Also, one must consider the reliability and validity of the instrument being used.

Once the results of the evaluation are obtained, the data would need to be analyzed in order to identify the strengths and weaknesses of the instructional program. This problem solving process would require examination of possible explanations for evaluation data. Based on the data collected, modifications to the curriculum could be needed. Tyler (1949) summarized:

What is implied in all of this is that curriculum planning is a continuous process and that as materials and procedures are developed, they are tried out, their results

appraised, their inadequacies identified, suggested improvements indicated; there is replanning, redevelopment, and then reappraisal; and in this kind of continuing cycle, it is possible for the curriculum and instructional programs to be continuously improved over the years. In this way we may hope to have an increasingly more effective educational program rather than depending so much upon hit and miss judgment as a basis for curriculum development.

(p. 123)

In effect, in his *Rationale*, Tyler outlined a problem-solving approach to curriculum development.

Application of the Rationale

Tyler (1949) concluded *Basic Principles of Curriculum and Instruction* in chapter five by examining "how a school or college staff may work on curriculum building" (p. 126). He pointed out that if a school is facing curriculum reconstruction, it was important to establish teacher buy-in and participation. Every teacher needed to have "an adequate understanding" of the learning objectives and "the kinds of learning experiences that can be used to attain these objectives" (p. 126). The process would be similar for a small or large school. The staff must work together to "conduct studies of the learners, studies of the life outside the school,

as well as examine the reports of the subject specialist" (p. 127). Next, the school must work as a whole to formulate "its philosophy of education and work out a statement of psychology of learning" (p. 127). The results of the information learned would be used to select the learning objectives for the school. Then, the learning experiences must be planned. Teachers who teach the same subject at different grade levels can work together to help horizontally plan learning experiences. Although Tyler pointed out that it was preferable to have a "school-wide attack" in order to get a "rational revision of the curriculum" (p. 128), revision can be made at a single subject, or a single grade. If a partial attack is utilized, the school should plan "with relation to the other parts of the instructional program which are not to be modified" (p. 128).

In the concluding paragraph of *Basic Principles of Curriculum and Instruction*, Tyler answered the question of "whether the sequence of steps to be followed should be the same as the order of the presentation in this syllabus" (Tyler, 1949, p. 128). Tyler answered emphatically, "No" (p. 128). He maintained, "The concern of the staff, the problems already identified, the available data are all factors to consider in deciding on the initial point of attack" (p. 128). Tyler concluded by emphasizing:

The purpose of the rationale is to give a view of the elements that are involved in a program of instruction and their necessary interrelations. The program may be improved by attacks beginning at any point, providing the resulting modifications are followed through the related elements until eventually all aspects of the curriculum have been studied and revised. (p. 128)

By implementing this problem solving approach to curriculum development, Tyler outlined how any school could build an instructional program.

Summary

This chapter examined the origins of Tyler's *Basic Principles of Curriculum and Instruction* as well as highlighted some of Tyler's major accomplishments. The historical context during which the Rationale was generated was considered. The curriculum of the 1930s and the Eight-Year Study were discussed as they related to the Rationale. The features of the Tyler Rationale were summarized and explained.

Tyler began generating the Rationale during a time when America was suffering from the Great Depression and the purposes of education were being questioned. The schools were implementing outdated curriculum, which benefited only a select few, and educational theorists could not agree on the type of curriculum that would benefit society while at the same time meet the needs of individual students. As a way to promote

flexibility in the curriculum, the Eight-Year Study was conceptualized. While the schools were developing the curriculum, they soon discovered there was no rationale for curriculum like there was for evaluation. Tyler, in response to this need, sketched an outline for his Rationale on a napkin over lunch. This outline later developed into Tyler's, which is often referred to as the Tyler Rationale.

Basic Principles of Curriculum and Instruction was composed of 128 pages, focusing on the "four fundamental questions, which must be answered in developing any curriculum and plan of instruction" (Tyler, 1949, p. 1). The four fundamental questions included:

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? (Tyler, 1949, p. 1)

Chapter 1 answered the question, "What educational purposes should the school seek to attain?" (Tyler, 1949, p. 3). This was the longest chapter consisting of about 60 pages, because Tyler believed "they are the most critical criteria for guiding all the other activities of the curriculum-maker" (p. 62). Chapter 2 answered the question, "How can learning experiences be selected which are likely to be useful in attaining these objectives?" (p. 63). Chapter 3 focused on the question, "How

can learning experiences be organized for effective instruction?" (p. 83). Chapter 4 answered the question, "How can the effectiveness of learning experiences be evaluated?" (p. 104). Chapter 5 was the shortest chapter, consisting of only three pages. In this concluding chapter, Tyler answered, "How a school or college staff may work on curriculum building" (p. 126). It is important to note that in the concluding paragraph, Tyler emphasized that the order of steps in the syllabus are not linear. This statement has often been overlooked, leading to misinterpretations of the Rationale.

CHAPTER 3

REVIEW OF THE MAJOR INTERPRETATIONS AND CONTROVERSIES CONCERNING
THE TYLER RATIONALE

This chapter reviews some of the major interpretations and controversies concerning the Tyler Rationale. The impact of Tyler's *Basic Principles for Curriculum and Instruction* (1949) is considered far reaching. Kliebard (1970) noted, "The most persistent theoretical formulation in the field of curriculum has been Ralph Tyler's *Basic Principles for Curriculum and Instruction*" (p. 259). Goodlad (n.d.) stated that the Tyler Rationale "may well rank as the number one cited item in the field of education in the last twenty to thirty years" (pp. 91-92). Nevertheless, the Tyler Rationale is not without its critics. The series of exchanges between Kliebard and Hlebowitsh are perhaps the most well known. Also important to note are the ideas of Pinar, Slattery, Marsh and Willis, Wraga, Tanner and Tanner, Eisner, Schubert, and Henderson in the continuing debate concerning the Rationale.

Kliebard's Reappraisal

In 1970, twenty years after the publication of the Tyler Rationale, Kliebard offered a reappraisal of Tyler's curriculum development process. In his "Reappraisal: the Tyler Rationale," Kliebard (1970) examined the selection of educational objectives, the selection and organization of learning experiences, and evaluation.

Most of Kliebard's reappraisal focused on the selection of educational objectives. Tyler identified three sources from

which objectives could be attained: the learner, contemporary life, and subject-matter specialists. Kliebard (1970) noted that much of the popularity surrounding Tyler's Rationale was due in fact to the use of all three sources for educational objectives, since they "encapsulate several traditional doctrines in the curriculum field over which much ideological blood had been spilled" (p. 260). However, Kliebard was critical of this approach. He contended, "...simple eclecticism may not be the most efficacious way to proceed in theorizing" (p. 260). Kliebard maintained, "...when faced with essentially the same problem of warring educational doctrines, Dewey's approach is to creatively reformulate the problem; Tyler's is to lay them all out side by side" (p. 261).

Kliebard (1970) began his analysis of the three sources by focusing on the subject-matter specialists, which he asserted was "curiously distorted and out of place" (p. 261). He stated, "Tyler begins the section by profoundly misconceiving the role and function of the Committee of Ten" (p. 261). He claimed, "What the Committee of Ten proposed were not objectives, but four programmes: Classical, Latin-Scientific, Modern Languages, and English" (p. 261). He continued by emphasizing, "Unless Tyler is using the term 'objective' as being synonymous with 'content', then the use of the term 'objectives' in the context of the report of the Committee of Ten is erroneous" (p. 261). Kliebard pointed out that one of the questions answered by the Committee of Ten was whether the subject matter should be treated differently based upon the students' future destination.

The committee voted unanimously against making such a distinction. They passed a resolution that "instruction in history and related subjects ought to be precisely the same for pupils on their way to college or the scientific school, as for those who expect to stop at the end of grammar school or at the end of high school" (National Education Association, 1893, p. 165).

Kliebard (1970) described Tyler's interpretation of the Committee of Ten report as "more than a trivial historical misconception," stating that "it illustrates one of his fundamental presuppositions about the subjects in the curriculum" (p. 262). Kliebard explained, for Tyler, subject-matter performed "'certain functions'" (p. 262). The first function would serve as a way to identify a field of study. The second function served as "an instrument for achieving objectives drawn from Tyler's other two sources" (p. 262). According to Kliebard, "The suggestions from subject-matter specialist are really not a source in the sense that the other two are" (p.262). To him, "Subject-matter is mainly one of several means by which one fulfills individual needs such as vocational aspirations or meets social expectations" (p. 262).

Kliebard next turned his attention to Tyler's section on the needs of the learner as a source for objectives. Kliebard (1970) stated, "Although it is less strained and more analytical than the one on subject matter, it is nevertheless elliptical" (p. 262). He pointed out that Tyler proceeded from the assumption that "education is a process of changing behavior

patterns of people" (p. 262). Kliebard questioned this idea of education by asking how education would be different from other means of changing behavior, such as, "hypnosis, shock treatment, brainwashing, sensitivity training, indoctrination, drug therapy, and torture" (p. 263). Kliebard stated, "Given such a definition, the differences between education and these other ways of changing behavior are not obvious or simple" (p. 263).

Kliebard noted that the use of the learners' needs, as a basis for curriculum development, was not a new idea, but had been a consistent element in the literature since the 1920s. Kliebard (1970) pointed out "Tyler astutely recognized that the concept of need has no meaning without a set of norms" (p. 263). However, Kliebard goes on to state, "this formulation [of needs] is virtually identical to what Bobbitt referred to as 'shortcomings' in the first book written exclusively on the curriculum, published in 1918" (p. 263). Furthermore, Kliebard distinguished the difference between the two by noting Tyler's definition of need as being related to some "acceptable norms," which he explained was "neither self-evident nor easy to formulate" (p. 263). In Kliebard's analysis,

Given the almost impossible complexity of the procedure and the crucial but perhaps arbitrary role of the interpreter's value structure or 'philosophy of life and of education,' one wonders whether the concept of need deserves any place in the process of formulating objectives. Certainly, the concept of need turns out to be of no help in so far as

avoiding central value decisions as the basis for the selection of educational objectives, and without that feature much of its appeal seems to disappear. (p. 264)

Kliebard ended his section on the selection of education objectives by explaining his view of contemporary life as a source for objectives. Kliebard (1970) explained Tyler's idea of "dividing life into manageable categories and then proceeding to collect data of various kinds which may be fitted into these categories" (p. 265) as being very similar to Franklin Bobbitt's model. Though, he indicated that Tyler was more aware of the criticism that had been directed toward this way of formulating objectives. Kliebard concluded "Tyler's implicit response" was to "argue that in his rationale studies of contemporary life do not constitute the sole basis for deriving objectives, and, of course, that such studies have to be checked against 'an acceptable educational philosophy'" (p. 265).

Next, Kliebard analyzed Tyler's use of the philosophical screen as a source for identifying educational objectives. He proposed that Tyler's use of the philosophical screen was a way to cover up the deficiencies which the three sources created when formulating objectives. According to Kliebard (1970), "It is philosophy after all that is the source of Tyler's objectives and that the stipulated three sources are mere window dressing" (p. 266). Kliebard continued, "It is Tyler's use of the concept

of a philosophical screen, then, that is most critical in understanding his rationale, at least in so far as stating the objectives is concerned" (p. 266). He added, "Tyler's proposal that educational objectives be filtered through a philosophical screen is not so much demonstrably false as it is trivial, almost vacuous" (p. 266). To Kliebard, the use of a philosophical screen was another way to suggest that someone has to identify the educational objectives to be studied out of the long list of recommended objectives generated by the learner, contemporary life, and subject-matter specialist. Kliebard concluded this section on philosophical screens by stating, "Tyler's central hypothesis that a statement of objectives derives in some manner from a philosophy, while highly probable, tells us very little indeed" and "offers little by way of a guide for curriculum making" (p. 267).

Kliebard's (1970) appraisal of the "selection and organization of the learning experiences" (p. 267) was brief compared to his discussion concerning the "selection of educational objectives" (p. 260). In fact, Kliebard's explanation of learning experiences was only one paragraph long as compared to seven pages of discussion concerning the selection of objections.

First, he noted what he called a "crucial problem in connection with the concept of a learning experiences"

(Kliebard, 1970, p. 267) and expressed that Tyler did not elaborate on this issue. The problem, according to Kliebard was "how can learning experiences be selected by a teacher or a curriculum maker when they are defined as the interaction between a student and his environment" (p. 268). Kliebard defined the learning experience as a "function of the perceptions, interests, and previous experience of the student" (p. 268). In contrast, he pointed out that Tyler believed that the teacher can control the learning experiences through the "manipulation of the environment in such a way as to set up stimulating situations - situations that will evoke a kind of behavior desired" (Tyler, 1949, p. 42). Kliebard (1970) associated this type of learning environment with Pavlovian conditioning. However, he does not elaborate on this topic.

Finally, Kliebard turned his discussion to evaluation by quoting Tyler (1949): "The process of evaluation is essentially the process of determining to what extent the educational objectives are actually being realized by the program of curriculum and instruction" (as cited in Kliebard, 1970, p. 268). Kliebard referred to this type of evaluation as product control and linked it back to Bobbitt's ideas of evaluation in the 1920s. In addition, he noted different challenges that could arise through the use of this type of evaluation in the field of curriculum.

One of the difficulties Kliebard (1970) mentioned was in "the nature of an aim or objective and whether it serves as the terminus for activity in the sense that Tyler Rationale implies" (p. 268). Kliebard questioned, "Is an objective an end point or a turning point?" (p. 268). He emphasized Dewey's argument concerning objectives as turning points. "Ends arise and function within action. They are not . . . things lying outside activity. They are not ends or termini of action at all. They are terminals of deliberation, and so turning points in activity" (Dewey, 1922, as cited in Kliebard, p. 268). In other words, according to Kliebard, a model for curriculum and instruction would start with the activity and not the statement of objectives. For Kliebard, the process of evaluation would be "one of describing and of applying criteria of excellence to the activity" (p. 269).

Kliebard (1970) concluded his reappraisal by stating:

The Tyler rationale is imperishable. In some form, it will always stand as the model of curriculum development for those who conceive of the curriculum as a complex machinery for transforming the crude raw material that children bring with them to school into a finished and useful product. (p. 270)

Although Kliebard stated, "For his moderation and his wisdom as well as his impact, Ralph Tyler deserves to be enshrined in

whatever hall of fame the field of curriculum may wish to establish" (p. 270). Nonetheless, he warned the field of curriculum to view the Tyler Rationale for what it is, "Ralph Tyler's version of how a curriculum should be developed - not the universal model of curriculum development" (p. 270).

Hlebowitsh's "Reappraising Appraisal"

Approximately 20 years after Kliebard's publication of "Reappraisal: the Tyler Rationale," Peter Hlebowitsh (1992) responded to Kliebard's criticisms as well as those of other critics in "Amid behavioural and behaviouristic objectives: reappraising appraisals of the Tyler Rationale." Hlebowitsh cited two main reasons for his reappraisal: "the unjustified treatment of Tyler" along with questions that the criticisms raised against "the definition of the curriculum field" and the "historical interpretation of curriculum studies" (p. 534).

Hlebowitsh (1992) began his reappraisal with a section entitled, "The scientistic curriculum and the legacy of Bobbitt: heritage or heresy?" (p. 534). In this section, Hlebowitsh explored the accusations of "educational engineering" (p. 534) made against the Tyler Rationale. He noted Kliebard's (1975) explanation:

Almost all we have done in the questions of the role of objectives in curriculum development since Bobbitt's day is,

through some verbal flim-flam, convert Bobbitt's "ability to" into what are called behavioural objectives or operational terms and to enshrine the whole process into what is known as the Tyler Rationale. (as cited in Hlebowitsh, p. 534)

Furthermore, Hlebowitsh pointed out that according to Kliebard, the logic of the Tyler Rationale was in harmony with Bobbitt's proposal of curriculum in that curriculum was seen as "an endeavour to match student behavior with normed standards drawn from a multitude of highly specified activities" (p. 535). Hlebowitsh argued that Tyler and Bobbitt were more divergent than similar.

One area of distinction between the two models of curriculum development was in the number of objectives derived. Tyler called "for a small number of objectives," which would be structured "at high levels of generalizability" (Hlebowitsh, 1992, p. 535). On the other hand, Hlebowitsh pointed out that Bobbitt called for hundreds of objectives structured "at low, mechanical levels" (p. 535). Secondly, Hlebowitsh stressed that while Tyler proposed deriving objectives from different sources (learner, society, and subject matter), Bobbitt proposed deriving objectives from major areas of adult experiences. Through activity analysis, Bobbitt recommended that objectives be written as specifically as possible in order "to prepare

learners for specific tasks by a direct process of habit formation" (p. 535). Conversely, Tyler warned repeatedly against this approach and cautioned readers against interpreting the Rationale as a linear process.

Hlebowitsh (1992) acknowledged that certain statements within the *Basic Principles for Curriculum and Instruction* summoned "behaviouristic images" (p. 535). One such statement, as referenced by Hlebowitsh, was Tyler's characterization of education as, "a process of changing the behaviour patterns of people" (p. 536). Similarly, Hlebowitsh noted, "Tyler's suggestions that objectives can be drawn out of the relationship between present conditions and desirable norms seems to indicate that learning is a narrow affair that depends on the elimination of ambiguity and variance" (p. 536). Some critics of Tyler's Rationale, especially behaviorists, have misused these statements. Hlebowitsh cited Popham and Baker (1970) as an example of critics using the Tyler Rationale as "a linear curricular system" (p. 536), which Tyler warned against on the last page of *Basic Principles of Curriculum and Instruction*.

Hlebowitsh (1992) further explored the accusations of "specificity and precision in the construction of behavioural objectives" (p. 536), which he noted had not been correctly represented by the critics of Tyler's Rationale. Kliebard (1970) stated in reference to the Tyler Rationale, "We are asked

in effect to state certain design specifications for how we want the learner to behave, and then we attempt to arrive at the most efficient methods for producing that product quickly and, I suppose, cheaply" (as cited in Hlebowitsh, 1992, p. 536).

Hlebowitsh agreed with Kliebard's statement that "clarity in the specification of the behavioral objectives" (p. 536) was valued by Tyler. But, Hlebowitsh was quick to emphasize that it was not "in the name of efficiency or cost saving" (p. 536) that Tyler made these claims. Actually, Hlebowitsh noted that Tyler called for "few objectives that were highly generalizable as modes of thinking and social skill" (p. 536). In fact, Tyler (1949) stated, "Objectives are more than knowledge, skills, and habits. They involve modes of thinking, or critical interpretations, emotional reactions, interests and the like" (as cited in Hlebowitsh, 1992, p. 536). Furthermore, Tyler stated, "I tend to view objectives as general modes of reactions to be developed rather than highly specific habits to be acquired" (as cited in Hlebowitsh, 1992, p. 536). Hlebowitsh explained that it was not Tyler's intent to create a "content-neutral management model" (p. 536); but rather, to allow the philosophy of the school or different situational contexts to guide the curriculum.

It was the "issue of generalizability" that Hlebowitsh (1992) believed was "central to the understanding of the

Rationale, because it defused a large part of the argument that described the Tyler Rationale as a systems management device that imposed an industrial ideology on the school" (p. 537).

Hlebowitsh further noted:

If wide generalizability is the key, the outcomes of behavioural objectives cannot be viewed as serving as repressive, controlling function, but as a fundamental way to cultivate 'generalized modes of attack upon problems', as well as 'generalized modes of reaction to generalized types of situations'. (p. 537)

Hlebowitsh emphasized that even after the publication of *Basic Principles of Curriculum and Instruction*, Tyler continued to call for "generalized understanding ... stated clearly and appropriately as objectives" (p. 537) instead of specificity in the curriculum. Hlebowitsh noted that Tyler claimed, "Too little thought had been given to the nature of learning and the purposes of education" (p. 537). Hlebowitsh referenced Tyler's (1973) ideas concerning behavior which

... included all kinds of reactions people carry on - thinking, feeling, and acting... I was not using the term as it was used by the school of behaviourism, which restricted it only to overtly observable acts and ruled out much of human behaviour that is subjectively experienced but is not

directly observable by others. (as cited in Hlebowitsh, 1992, p. 537)

Hlebowitsh concluded, "to formulate a kindred relationship between the work of Bobbitt and Tyler is simply not the result of a carefully considered analysis" (p. 537).

Next, Hlebowitsh examined Kliebard's two main criticisms concerning the relationship between Tyler's sources and Dewey's factors for identifying educational objectives. Kliebard claimed that Tyler laid out the sources side by side in order to formulate the objectives, while Dewey called for a more unified approach. Kliebard criticized the use of subject-matter specialists as a source for objectives. Hlebowitsh (1992) stated, "These distinctions are important because they helped Kliebard demonstrate that the Rationale was linear and fragmented in its treatment of the school experience" (p. 538). On the contrary, Hlebowitsh argued that Tyler cautioned against using a single source for the formation of educational objectives. He pointed out educational objectives are identified through the integration of all three sources as well as the philosophical screens.

Philosophy's role in the development of the curriculum was the next area Hlebowitsh addressed. Kliebard accused Tyler of inventing a neutral curriculum "model" that could "accommodate

any philosophical persuasion" (Hlebowitsh, 1992, p. 539).

Kliebard (1975) stated:

One may express a philosophy that conceives of human beings as instruments of the state and the function of the schools as programming the youth of the nation to react in a fixed manner when appropriate stimuli are represented. As long as we desire a set of objectives consistent with this philosophy (and perhaps make a brief pass at the three sources) we have developed our objectives in line with the Tyler rationale. (as cited in Hlebowitsh, 1992, p. 536)

However, Hlebowitsh argued that it was Tyler's intent for the local schools to decide upon the philosophical screens that would be used to answer the four fundamental questions in the Rationale, which would be directly based upon the local school's philosophical and psychological beliefs.

Further, Apple supported the idea of "neutrality of the Rationale" by classifying it as "a systems-management design that is concerned only with the methodology and certitude of outcomes" (Hlebowitsh, 1992, p. 539). Apple (1979) stated in reference to the Rationale, "Its conceptual emptiness enables its application in a supposedly 'neutral' manner to a range of problems requiring the precise formulations of goals, procedures and feedback devices" (as cited in Hlebowitsh, 1992, p. 539).

Conversely, Hlebowitsh (1992) argued the Rationale was a method in a "psycho-philosophic context" and not a "neutral methodological device" (p. 539). To Tyler, the use of the four fundamental questions served as "a frame of reference, not the imposition of universally precise rules" (Hlebowitsh, 1992, p. 539), for the development of the curriculum. Tyler (1981) stated, "Curriculum building is not a process based on precise rules, but rather it involves artistic design as well as critical analysis, human judgment, and empirical testing" (as cited in Hlebowitsh, 1992, p. 539). Furthermore, Hlebowitsh (1992) pointed out that the use of philosophy served more as "a foundation" for the development of the curriculum than as "an essential screen" since "different philosophical persuasions lead inexorably to different ways of treating the questions and the sources" (p. 539). Also, Hlebowitsh (1992) noted:

One might also argue that philosophical differences will lead many to ask questions not included in the Rationale, pointing, perhaps, to an alternative Rationale. Tyler has frequently stated that other procedures for curriculum development should be formulated and tested. The point here, however, is not to argue that the Rationale should be pre-eminent, but that it is not a creature of a systems-management mentality. (p. 544)

Not only did Hlebowitsh (1992) address the role of philosophy in building the foundation for the development of curriculum, he noted that philosophical judgments guide the planning of the learning experiences. He pointed out that philosophical judgments are significant because they draw attention to the socio-political functions of the school. Hlebowitsh (1992) stated, "...by facing questions about the school's role in the society, educationalists must consciously opt for certain objectives" (p. 540). Since the Rationale does not promote one philosophical thought over another, the individual schools retain the decision-making power to generate objectives and organize learning experience while the Rationale serves as the frame of reference. Hlebowitsh (1992) stated:

The neutrality of the Rationale, in this sense, demonstrates that there is no such thing as neutrality in the educational process; it highlights the fact that each institution must develop its own philosophy and that schooling may not be treated in a value-free way, thus making the neutral methodology that characterizes systems thought an abhorrent result in the Rationale. (p. 540)

Hlebowitsh concluded his discussion on the philosophic neutrality by identifying some philosophical concerns related to using the curriculum specialist, society, and the learner as sources for identifying learning objectives. Although

Hlebowitsh (1992) noted that Tyler later admitted that the three factors were not emphasized sufficiently, Hlebowitsh pointed out:

Still, in the original Rationale, Tyler made it clear that in curriculum planning, serious attention had to be given to the interests, activities, problems and concerns of the students in ways that contributed to the progressive ideal of the good person leading a good life. In all of the preceding ways, the Rationale was not a neutral delivery system that could accommodate a system methodology. (p. 540)

Next, Hlebowitsh (1992) turned his attention to address some of the other critics, Apple, Franklin, and Pinar, who attempted to place Tyler in the same category as others who believed that the purpose of the curriculum was to "cultivate an industrial (capitalist) society," as well as to serve as a "management device" (pp. 540-541). Pinar (1978) claimed that the four guiding questions used in the Tyler Rationale signal a "'managerial concern with smooth operations'" (as cited in Hlebowitsh, 1992, p. 541).

Hlebowitsh (1992) argued against this "smooth operations" claim by recalling the purpose of the Rationale, which was to serve as a "guiding framework for curriculum change" (p. 541). He reminded the reader that it was during the Eight-Year Study

that Tyler developed the framework for the Rationale in order to assist the 30 experimental high schools in developing a curriculum that was different from the traditional programs currently being implemented by the secondary schools. In addition, Hlebowitsh noted that the design of the Rationale was to raise "continuous questions about school operations and insists that these questions be responsive to emerging issues regarding the learner, the society and the subject-matter, as well as a psycho-philosophic context" (p. 541). Hlebowitsh further stated, "It is clear that the Rationale, as it was used in the Eight-Year Study, was not based on the presupposition that administrative authority is the exclusive ground for curriculum decision making" (p. 541). Instead, Hlebowitsh quoted Tyler's (1984) claim that curriculum "... could not be decided at the district level or in the principal's office and then given to teachers to implement. Hence, in the second year, the thirty schools established committees for the teachers to plan and develop curriculum" (as cited in Hlebowitsh, 1992, p. 541).

Another area of concern Hlebowitsh noted was Pinar's and Grumet's declaration of the Rationale's development throughout the years as a handbook of school efficiency. Pinar and Grumet (1981) stated:

Tyler's once thin, economical little book had, by the early 1960s, grown thick with items which a future school administrator responsible for the curriculum might want to know in advance. The management concern with smooth operations, with placating competing involvement groups, remains the consuming interest. (as cited in Hlebowitsh, 1992, p. 541)

Hlebowitsh countered this statement first by emphasizing that the original Rationale has never been altered. Second, Hlebowitsh (1992) addressed Pinar's and Grumet's claim of the Rationale placating "competing involvement groups" (p. 542) by stating that there is no evidence to support such a claim.

As Hlebowitsh explained, Tyler saw the importance of the dialog among the stakeholders of the curriculum. Through examinations of Tyler's writings, it was evident that he valued the teachers' input when developing the learning experiences. Counter to the claims of Pinar and Grumet, Hlebowitsh (1992) distinguished three functions of the Rationale: "... identified the problems to which the curriculum developers should be responsive; gave rise to leading questions, and to historically supported sources of data; and ... aimed to integrate the diverse interest groups concerned with curriculum" (p. 542).

Hlebowitsh concluded his reappraisal of the Tyler Rationale by analyzing the debate concerning curriculum theorizing.

Hlebowitsh (1992) noted that many of the arguments surrounding the Rationale deal with curriculum theory and how it related to practice. First, he corrected the notion that some scholars considered Tyler to be a traditionalist. Hlebowitsh (1992) wrote, "It is incongruous to call Tyler a traditionalist. Tyler's life work is distinguished by its progressive stand" (p. 544). Thus, when it came to the issue of curriculum theory, Tyler's Rationale followed suit with Deweyan tradition because as Hlebowitsh stressed the Rationale "frames curriculum planning as an inquiry which considers ends as open points for deliberation, but which simultaneously upholds sensitivity to the nature of the learner, the values and aims of the society, and the reflective reformulation of the subject-matter" (p. 543).

While Hlebowitsh (1992) acknowledged that more guidance on the philosophical considerations might have been helpful, he stressed that to interpret Tyler's Rationale as a way "to control educational ends" by eliminating "the variance of lived experiences" (p. 543) was wrong. These philosophical arguments surrounding the Rationale have created a paradox in that some critics accused Tyler of creating a "controlling mechanism that restrains experience unduly"; however, other critics criticized it for "not imposing enough boundaries or restraints" (p. 543). Hlebowitsh noted:

The Rationale encourages the main determiners of the curriculum to take charge of the curriculum; it supplies guiding questions and sources not for the purpose of suffocating artful initiative, but to lend a fundamental vision of growth and movement toward an idea. (p. 543)

Just as Tyler stated and Hlebowitsh reemphasized, this idea of curriculum planning is only one model for curriculum development. Hlebowitsh (1992) wrote, "It is not and should not be the only model for curriculum development" (p. 543). However, Hlebowitsh stressed, "The Rationale, is not a mechanism of social efficiency not *[sic]* is it an administrative procedure anchored in technocratic rationality" (p. 543). On the contrary, it represents a problem-solving approach to curriculum development that is historically representative of the curriculum field (Tanner, 1982 as cited in Hlebowitsh, 1992).

Kliebard's "The Tyler Rationale Revisited"

Kliebard began this article by stating the reasons why he addressed the Tyler Rationale in 1970. "When I undertook to write 'The Tyler Rationale' in 1970, I thought I was undertaking to challenge what had become the reigning model for curriculum planning" (Kliebard, 1995, p. 81). Since there had been little debate over the "supremacy" of the model in professional publications, Kliebard expected a "spirited counterattack" (p. 81) to emerge. On the contrary, Kliebard noted that what seemed

to transpire after his 1970 publication was "criticism rather than defence of the Tyler position" (p. 81).

Twenty-two years or so after the publication of Kliebard's article challenging the Tyler Rationale, Kliebard (1995) noted "a serious and carefully reasoned attempt to exonerate Tyler from at least some of the changes [sic] that I made so many years ago" (p. 81). Also, Kliebard acknowledged his gratitude toward Hlebowitsh as well as the *Journal of Curriculum Studies* for the "belated opportunity to get back into that fray" (p. 81). In Kliebard's (1995) article, "The Tyler Rationale revisited," he organized his response by first addressing the three criticisms offered by Hlebowitsh concerning his appraisal of the rationale, and then he turned his attention to consider the question raised by Hlebowitsh concerning curriculum theory and practice.

The first criticism Kliebard examined involved the conflicting views surrounding the idea of structure and boundaries established by the rationale. Kliebard included quotes from Hlebowitsh's (1992) article, which stated:

Kliebard (1975: 78), for instance flatly asserted that the Rationale failed to structure enough boundaries to be used in deciding what should be included (and by implication excluded) in the curriculum: ... Such a view is difficult to reconcile with the claims of other critics that the

Rationale uses a controlling, prescriptive language (Pinar 1975, Huebner 1975) or that the Rationale represents a repressive 'recipe' for curriculum planning (McNeil 1986). (as cited in Kliebard, 1995, p. 82)

Kliebard countered by stating that he does not intend to defend the ideas and criticisms of other critics concerning the Tyler Rationale. Next, Kliebard (1995) elaborated on his earlier statement, "The Rationale failed to structure enough boundaries" by explaining that this statement did not "capture the argument" (p. 82) as he intended. He restated his position by saying, "The sine qua non of the Rationale is the clear specification of objectives, but that poses a dilemma" (p. 82). By using the three sources identified by Tyler, there exists the possibility of numerous objectives being identified. Then, using one of the Rationale's screens, one must decide which objectives are worthy of being part of the curriculum planning. Kliebard further clarified:

Since the philosophical screen (and the psychological screen for that matter) are essentially arbitrary statements of beliefs, they can just as easily screen out what is worthy and commendable as what is trivial and senseless. Because we have no guidance as to what a good 'philosophy' is as opposed to a bad one, we also have no guidance as to what objectives to choose.

Needless to say, if there were no necessity to choose objectives in the first place, there would be no need of a mechanism for sorting them out. (p. 82)

Next, Kliebard discussed his interpretation of the repressive claims against the Rationale. According to Kliebard, these claims stemmed from the rigid, linear sequence of the Rationale as well as the use of predetermined objectives. Because it has been customary for objectives to be the starting place for learning experiences, Kliebard claimed that few could comprehend of another starting place. Kliebard referenced his 1970's article concerning Dewey's idea for the formation of objectives being derived from the educational activities themselves rather than the objectives being predetermined the learning begins. Moreover Kliebard (1995) stated, "It may even be possible to engage in an educational activity for good reasons that have nothing to do with objectives in the Rationale's sense of the term, and, I dare say, many excellent teachers have done so for centuries" (p. 82).

Linearity of the Rationale was another area of debate. Kliebard noted that Hlebowitsh's reference to the very last paragraph of Tyler's Rationale in order to refute the claims of linearity in the Rationale.

Another question arising in the attempt at curriculum revision by a school or part of a school is whether the

sequence of steps to be followed should be the same as the order of presentation in this syllabus. The answer is clearly no. (Tyler, as cited in Kliebard, 1995, p. 83)

Kliebard's interpretation concerning linearity was that Tyler meant one could begin with any one of the sources or the screens in order to determine the objectives; however, it is not possible to begin with the other three questions posed by Tyler in the Rationale.

In the end, though, the key point is that the logic of the four questions on which the Rationale is based absolutely requires the determination of objectives at the outset and proceeding stepwise from there. It is simply not possible, for example, to provide educational experiences that attain the purposes (Tyler's Question 2) without having determined what the purposes (objectives) are in the first place (Question 1). Likewise, there is no earthly way one can determine whether these purposes are being attained (Tyler's Question 4) without a prior determination of those purposes. That, I believe, is the source of the charge of excessive rigidity; a charge I believe has considerable merit. (Kliebard, 1995, p. 83)

Another area of criticism Kliebard explored was whether or not Tyler's Rationale made any improvements over the work of Bobbitt. Kliebard pointed out that when looking at the

essentials of Tyler's Rationale in light of Bobbitt's work, they both share a strong resemblance. He emphasized the main differences between the two was Tyler's use of the three sources and two screens in the determination of the learning objectives, while Bobbitt would have drawn his objectives mostly from contemporary life.

Kliebard agreed with Hlebowitsh by admitting that there are differences between Tyler and Bobbitt and complimented Hlebowitsh for doing a good job delineating the differences. For Kliebard, the question was at what level the two, Tyler and Bobbitt, should be compared? Also, he questioned whether Tyler's addition of the two screens used to filter the learning objectives established a considerable difference between the two. In addition, Kliebard (1995) noted that the major difference between them "is that Bobbitt was ... a zealot, and Tyler, above all, is the epitome of moderation" (p. 84). Kliebard further explained that Tyler's moderation was expressed in his "willingness to fish in the waters of child-study and even in those of traditional subject-matter specialists in order to land those elusive objectives, whereas for Bobbitt, these waters are in effect off limits" (p. 84).

The third principle of criticism that Kliebard addressed was the neutral quality of the Rationale's use of philosophy. Kliebard (1995) expressed that his criticism of the use of

philosophy was not to expose the neutrality of its use, but to point out that the use of philosophy in order to make choices or screen the learning objectives is "just as arbitrary" (p. 85) as the choosing of the objectives from the three sources. Kliebard admitted that his example of a repressive school's mission of "programming the youth of the nation to react in a fixed manner when appropriate stimuli are presented" was an attempt at "reductio ad absurdum" (pp. 84-85). However, he wanted to point out that "too great a burden was being placed on philosophy and that the notion that the philosophical screen will somehow resolve the inherent problems in the Rationale was an illusion" (Kliebard, p. 85). Further, he emphasized that Tyler's use of the term philosophy was "very rough and commonsensical" (Kliebard, p. 85). He continued by illustrating that although each school has a statement of philosophy and beliefs, these statements are typically very vague, and do not serve as a guide in excluding different learning objectives; therefore, they have limited influence on the curriculum.

After addressing the three main principles of criticism, Kliebard turned his focus to examine the conclusion of Hlebowitsh's reappraisal. Kliebard (1995) began by discussing Hlebowitsh's referral to the Tyler Rationale as a 'practical theory' (p. 85). Hlebowitsh (1992) wrote, "Unfortunately, many of these curricularists have not made the case, as Tyler did,

for a practical theory that can inform and guide argumentation for, and the conduct of, schooling" (as cited in Kliebard, 1995, p. 85). Kliebard criticized this idea of 'practical theory' by stating he has "never come across a scintilla of credible evidence that the Rationale is a practical theory in the sense that, when followed, it actually eventuates in a better curriculum than one in which it is ignored" (p. 85).

Next, Kliebard noted that he has purposely avoided creating a practical theory because in doing so, he would be suggesting that there is a best way to design curriculum. He reiterated his purpose for writing the appraisal of the Rationale in 1970, which was to liberate "the process of curriculum planning from the kind of technological rationality in which it had become enmeshed" (Kliebard, 1995, p. 86). To Kliebard, the process of curriculum planning was not about the "sequence of steps", but about making "wise and informed decisions" (p. 86).

Kliebard (1995) envisioned curriculum planning, which consisted of "wise and informed curriculum decisions," as being related to Dewey's idea of "'intellectual instrumentalities'" (p. 86). Kliebard explained that these "'intellectual instrumentalities'" were "fundamental concepts or ideas that help us think through difficult problems" (p. 86) by serving as a guide of inquiry. Kliebard illustrated this idea through his discussion of a curriculum committee discussing the issue of

differentiating the curriculum for different ability groups. He noted that if the committee were to use Tyler's Rationale and filter their decision through the different philosophical and psychological screens it would "consists merely of passing the decision on to a higher authority" and of ensuring that the decision would be "consistent with those screens - not that relevant issues will be considered" (Kliebard, p. 86).

However, if the committee were to examine the same decision using Dewey's idea of intellectually instrumentalities, the committee would examine the different possible effects of curriculum differentiation. Therefore, the starting place for the study would have no particular starting point or predetermined objectives to guide the process. It would begin with the identification of real life problems and through careful examination, solutions would emerge.

Kliebard (1995) concluded his revisit of the Tyler Rationale by challenging what he called the "longstanding injunction that a statement of objectives is an indispensable prerequisite to the process of curriculum planning" (p. 87). Kliebard cited Dewey's (1922) observation:

... men have constructed a strange dream-world when they have supposed that without a fixed ideal of a remote good to inspire them, they have no inducement to get relief from present troubles, no desire for liberation from what

oppresses and for cleaning up what confuses present action.

(as cited in Kliebard, 1995, p. 87)

Although Kliebard noted Dewey's quote was not referring to education or even the curriculum development process, but referenced human tendency desires an idealized state before taking action, Kliebard connected this notion of the idealized state to the significance placed on objectives. Kliebard stated, "That misguided human tendency is nowhere more evident than in the almost universal belief that objectives are an indispensable ingredient in the curriculum planning process" (p. 87). In his opinion, the Tyler Rationale, concurred with this process of curriculum planning.

Hlebowitsh's "Interpretations of the Tyler Rationale:

a reply to Kliebard"

Hlebowitsh began his response by noting the reasons why he engaged in the re-evaluation of the Tyler Rationale. First, he noted that while examining the criticisms of the rationale, he discovered that many of the criticisms were "simply unfounded" (Hlebowitsh, 1995, p. 89). Hlebowitsh wrote to Tyler questioning why he had "remained quiet" while others criticized his rationale and labeled it as "overtly behaviouristic and as essentially wedded to the old world curriculum schemes of John Franklin Bobbitt" (p. 89). In addition, critics posed the rationale as a "little more than a malevolent construct of

social control, an instrument of oppression and of education for the status quo, a managerial mechanism used to smite teacher creativity and to keep the school experience locked into procedural compulsions" (Hlebowitsh, p. 89). The Rationale has been accused of being the "embodiment of everything that is wrong with curriculum studies, as the major stumbling block for the advancement of thinking in our community" (Hlebowitsh, p. 89). Tyler replied to Hlebowitsh by explaining that he would not respond to the critics of the Rationale, because they had failed to provide "an alternative" (Hlebowitsh, p. 89) for curriculum development.

Hlebowitsh (1995) undertook his "own re-examination of the Rationale" and built a defense for this problem-solving process. He emphasized that the Rationale was more than "one man's idea on curriculum development" and that it followed a "historical stream of thought that recognized the value of proposing a problem-solving framework for the school, one that was attuned to the nature of the learner, the values of the society and the wider world of knowledge" (Hlebowitsh, p. 90). Although the Rationale was not the only model for curriculum development, historically speaking, it had won the endorsement of progressive-experimentalists. Hlebowitsh focused his discussion around three areas of disagreement between himself and Kliebard

concerning the rationale: role of philosophy, predetermined objectives, and the idea of practical theory.

The role philosophy played and continues to play in the development of curriculum was one area of discord between Kliebard and Hlebowitsh. Hlebowitsh initiated his argument for the use of philosophy by noting Kliebard's position that the role of philosophy as a screen for objectives was guilty of providing little guidance as well as for being managerial. Hlebowitsh (1995) summarized his interpretation of Kliebard's view by stating, "The Rationale is a closed method of curriculum development that can operationalize virtually any philosophical end" (p. 90). On the contrary, Hlebowitsh saw within the Rationale framework certain elements, which would guide the philosophical choices.

According to Hlebowitsh, the use of philosophical screens in determining the learning objectives do not work in isolation but are coupled with the other factors, such as the learner, the society, and subject matter in order to arrive at the learning objectives. Thus, it was the utilization of all these factors that guide the developers. The background knowledge of the learners and society provided the necessary backdrop and framework for the creation of the democratic schools that Tyler envisioned. This multi-factor framework provided teachers and other school administrators with the "solid philosophical

boundary" (Hlebowitsh, 1995, p. 91) for curriculum development without imposing a prescriptive curriculum. One should remember that the development of the Rationale occurred during the Eight-Year Study when schools were looking for ways to personalize the curriculum to the needs of the students and society in which they lived.

The labeling of Tyler as a social efficiency advocate was another area of dissention between the two scholars. Hlebowitsh (1995) argued against this label by explaining Tyler's idea of behavioral objectives as being "broadly framed and highly generalizable ones" (p. 91). Also, Hlebowitsh noted, "Tyler accounted for more than knowledge, skills, and habits in the formulation of objectives; he also was concerned about general models of conduct - thinking, feeling, and acting" (p. 91). According to Hlebowitsh, the notion of stating, "objectives at levels of high generalizability" (p. 91) is an aspect Kliebard did not want to address. Hlebowitsh explained what separated Tyler from the other social efficiency advocates was Tyler's commitment "to see learning experience in the context of generalized modes of attack upon problems and as generalized modes of reaction to generalized types of situations" (p. 91), as well as the considerations of the three sources, learner, society, and subject-matter, in the development of the school curriculum.

In addition, Hlebowitsh found Kliebard's discussion of Dewey's role, especially as it related to objectives, intriguing. According to Kliebard, Tyler saw "objectives as preliminary to experience" (Hlebowitsh, 1995, p. 91). Although Hlebowitsh agreed there was some merit to this statement, due to the fact that Tyler proposed the idea of experiences and behaviors being aligned to the objectives, one must keep in mind that this "idea of alignment does not preclude the possibility of a back-and-forth reflection between the components of the Rationale" (p. 91).

Hlebowitsh (1995) reminded the reader that Tyler developed the Rationale as "a working document to be used for the development of the school curriculum, which meant that the Rationale always inherited a present condition of issues, needs and problems" (p. 92). Therefore, Kliebard's argument concerning Tyler's failure to note that experiences can serve as a catalyst to the formation of objectives was not substituted according to Hlebowitsh. Hlebowitsh stated, "... the very function of the Rationale is to deal with an educational or school situation" (p. 92). Hlebowitsh continued by saying, "This is the very issue that Tyler probably had in mind when he cautioned, in the last paragraph of his Rationale, against the use of the Rationale in a step-wise fashion" (p. 92).

For Tyler, curriculum development could begin at a number of different places, including but not limited to the examination of data, concerns of the staff and/or the learner. Hlebowitsh (1995) added, "In the context of the school, however, the Rationale can start with existing actualities that may or may not be imbued with purpose" (p. 92). Further, he cautioned Kliebard to remember the Deweyan principle "that experience can inform objectives" (p. 92). Hlebowitsh argued, "There is nothing in the Rationale that does not allow us to see the construction of objectives as operating on a reflective avenue between purpose and activity" (p. 92). Hlebowitsh concluded his discussion concerning objectives by elaborating on Kliebard's usage of Dewey's quote concerning an idealized state. Hlebowitsh emphasized, "No-one, however, could sensibly say that Tyler is in a dream world; his feet are solidly planted in the school experience as it relates to the life of the learners and their communities" (p. 92).

Next, Hlebowitsh (1995) addressed what he called "perhaps [the] most provocative ... contention" by Kliebard which was his claim that "the Tyler Rationale has no real credibility even as a practical theory of curriculum development" (p. 92). Kliebard (1992) stated: "I have to admit that I never come across a scintilla of credible evidence that the Rationale is a practical theory and that, when followed, it actually eventuates in a

better curriculum than one in which it is ignored" (as cited in Hlebowitsh, p. 92). However, Hlebowitsh emphasized the Rationale "has been in print now for over 40 years" (p. 92), translated into many languages, and still influencing school curriculum development. Furthermore, Hlebowitsh explained that Tyler "did not pull the idea for the Rationale out of a hat" (p. 93). He reminded the reader that the Rationale was fashioned during Tyler's work on the Eight-Year Study where 30 different schools were experimenting with different curriculum initiatives. Of course, the data from this study proved to be favorable for the experimental schools and the evaluation methods which Tyler developed as part of the study are still recognized in educational evaluation (Hlebowitsh).

Hlebowitsh acknowledged Kliebard's possible rejection of the evidence because of his beliefs concerning the data gathered during the study. Therefore, Hlebowitsh questioned, if Kliebard will not accept this data, what evidence does he have in support of his views of the Rationale? What evidence will the other critics of the Rationale present? Hlebowitsh (1995) stated, "The Rationale follows a long line of historical argumentation that other progressive-experimentalist interested in curriculum development has embraced during the century" (p. 93). To him, "The Tyler Rationale is really a framework that re-orchestrates

key sources, determinants and questions that other progressive-experimentalists championed" (p. 93).

In conclusion, Hlebowitsh called upon the community of curriculum scholars to re-examine the position that many have taken against the Rationale. Hlebowitsh (1995) stated, "The curriculum field has long been saddled with a view of the Rationale that is less than fair to the work of Ralph Tyler" (p. 93). Although Hlebowitsh acknowledged the "behaviouristic overtones to Tyler that invite the kind of interpretation that Kliebard privileges," he stressed that there was "a broad and cautious quality to the Rationale that reminds us that the school can benefit from a problem-focused framework that provides a solid ground for the exercise of classroom intelligence and artistry" (p. 93). Despite the fact that Hlebowitsh noted that during the current times, curriculum design had been forsaken as an "oppressive and imperialistic construct" (p. 93) by many in the curriculum field, he continued to believe that the Rationale provided schools with a framework. According to Hlebowitsh, the Rationale "gives overall shape and direction to the schools, not only in adjudicating what knowledge, experiences and values are most worthwhile for the schools of democracy, but also, in making decisions over a schedule of time and place" (p. 93).

Hlebowitsh concluded his reply to Kliebard's interpretations by pointing out that some scholars consider theory to consist of a body of criticism. In addition, this theory of criticism is theorized apart for the active participation within the school. Hlebowitsh (1995) elaborated, "We have a new sense of diversity, which naturally should be celebrated and debated, but our theory has become like a free-floating cloud, covering a vast territory, always airy and never touching ground" (p. 94). On the contrary, Hlebowitsh explained the "Rationale represents the progressive-experimentalist's commitment to testing ideas in practice, to founding judgments in key psycho-philosophical sources, and to formulating curriculum problems and solutions based on a reflective method" (p. 94).

Other Interpretations of the Tyler Rationale

Kliebard and Hlebowitsh are perhaps two of the most well-known curriculum scholars who have debated the interpretations of the Tyler Rationale. However, other curriculum scholars have analyzed the rationale and offered their perspective of its use.

Marsh and Willis (2007) described the Tyler Rationale as a "rational-linear approach" (p. 72) to curriculum development and classified the model under the procedural approach along with the works of Taba and Schwab. After identifying the four questions Tyler outlined in the Rationale, Marsh & Willis

defended their position by stating, "These questions can be answered systematically but, Tyler believes, only if they are posed in this order, for answers to all latter questions logically presuppose answers to all prior questions" (p. 72). Also, they addressed the Rationale as a "goal-directed, ends-mean approach" and emphasized the efficiency verbiage such as "'coherent program, efficiency of instruction, and effective organization'" (Marsh & Willis, p. 76). With regard to the area of objectives, they noted one can view this area as a strength or weakness due to the fact that "specificity and openness makes many demands on us in attempting to follow Tyler's ideas" (Marsh & Willis, p. 75). Although Marsh and Willis questioned and at times criticized the Tyler's Rationale in several areas throughout their book, they stated that the "Tyler rationale encompasses most of our basic concerns about curriculum" (p. 77). In addition they wrote, "For the purposes of communication and consensus building, it has had immense practical utility" (Marsh & Willis, p. 77). However, just as Tyler recommended to readers in 1949, Marsh and Willis suggested the examination of other curriculum development models.

Tanner and Tanner (1995) in *Curriculum Development Theory into Practice*, emphasized the Tyler Rationale was not "inherently a mechanical production model, but a problem-solving model based upon the method of intelligence" (p. 241). Although

they emphasized Tyler's treatment of three sources of objectives as separate areas that resulted in criticism of a mechanical and technological nature, they clarified the importance of treating these sources as interactive in order to maintain a balanced and coherent curriculum. In addition, Tanner and Tanner discussed the criticisms which projected the Tyler Rationale as an oversimplified process. They acknowledged that while curriculum development is "a highly complex process," the purpose of a model or rationale is to divide that "highly complex process" into "comprehensible and manageable" pieces" which allows the theory to be tested in practice (Tanner & Tanner, p. 245).

The criticism of oversimplification is seen in the writing of Elliot Eisner as well. Eisner (1994) stated, "What Tyler (1950) has given the field of curriculum through his monograph is a powerful, although in my view oversimplified, conception of what curriculum planning entails" (p. 17). To Eisner, the tone of Tyler's Rationale "is a no-nonsense, straightforward, systematic conception of what is practice is a complex, fluid and often halting and adventitious task" (p. 17). Described as a systematic approach, Eisner noted, "... the technical procedures it prescribes are bound to have consequences for what individuals trained to use this rationale will come to consider professionally adequate decision making in curriculum" (p. 17). He illustrated, "Ends ... are always to precede means, objectives

come before activities" (p. 17). However, Eisner did state, "One cannot give an account of where the curriculum field has been without attention to the work of Ralph Tyler" (p. 16). Also, he noted, "One would be hard pressed to identify a more influential piece of writing in the field" (Eisner, p. 16).

Kridel and Bullough (2007) examined the Rationale's simplicity and clarify and noted that it was often misinterpreted as a "direct, value-free curriculum development process" (p. 94). However, they maintained that Tyler "never sought to develop a curriculum theory or 'theoretical formulation of what a curriculum should be' but merely wished to pose an outline of kinds of questions that should be asked" (p. 94). In fact, Kridel and Bullough countered the criticisms concerning Tyler's use of behavioral objectives by noting, "'Human capabilities' became Tyler's phrase of choice when discussing behavior, and he disagreed with the unfortunate outcomes of behavioral objectives when education was reduced to mere training" (p. 95).

The criticism, whether in favor of or against the Tyler rationale, is critical to the historical development of the curriculum field as well as its current unity. Hlebowitsh (1999) noted, "The process of proclaiming a reconceptualization in the curriculum field has drawn a line between those who walk with Tyler and those who have walked away from Tyler" (p. 350).

Pinar, Reynolds, Slattery, and Taubman (1995) considered "the paradigm instability within the field itself (i.e., dissatisfaction over the Tyler rationale)" (as cited in Wraga, 1998, p.7) as being one of the catalysts that lead to the crisis in the curriculum field and to the so-called reconceptualization of the field. Those who called for this reconceptualization of the curriculum field were focused initially on developing "a comprehensive critique of the field as it is, a field immersed in pseudo-practical, technical modes of understanding and action" (Pinar et al., as cited in Wraga, 1998, p. 7). This critique, according to Wraga (1998), "centered around a narrow, misleading interpretation of Tyler's rationale that depicted it as a top-down, technical-bureaucratic form of social engineering that silenced and oppressed the genuine voices of teachers and students" (p. 8). The critique was based mostly on the interpretations of Kliebard, which were discussed previously in this chapter, and his writings have been "cited in key arguments favoring the reconceptualization and reprinted in influential anthologies" (Wraga, 1998, p. 10). Kliebard (1970) interpreted the Tyler rationale as a "production model of curriculum" (p. 270) and as being representative of the social efficiency model for curriculum development. Pinar et al. (1995) noted "the functionality of social efficiency asserted itself simply and forcefully in the Tyler Rationale" (p. 151). Also, they stated,

"The Tyler procedure is not a teacher's statement of curriculum development, it is a bureaucrat's" (Pinar et al., 1995, p. 149). However, Wraga recalled that the rationale originated during Tyler's work with the Eight-Year Study. Wraga (1998) wrote, "The Tyler rationale emerged from the most democratic and effective approach to curriculum improvement known to the field" (p. 12).

Other criticisms cited by postmodernists are the Rationale's failure to address political aspects in addition to the conduction of curriculum research (Glanz & Behar-Horenstein, 2000). Glanz and Behar-Horenstein (2000) stated, "The contention that Tyler (1949) advanced highly specific behavioral objectives is erroneous" (p. 19) and noted that Tyler called for generalized objectives. Also, they cited Tyler's belief that "it was imperative to provide 'educational opportunities and to assure effective learning for youth from varied backgrounds of training, experience, and outlook'" (Glanz & Behar-Horenstein, 2000, pp. 19-20). They argued against the Rationale being categorized as a managerial framework by noting "the Rationale was conceived as a document to be used for the development of the school curriculum, which means that it needs to be used in relation to some existing school condition" (Glanz & Behar-Horenstein, 2000, p. 63). In addition, Glanz and Behar-Horenstein (2000) pointed out Tyler's emphasis on "instructional

variance" and stated this emphasis was "diametrically opposed to the assertion of procedural compulsion and hypermanaged instructional scripting that one could find in the criticism lodged against the rationale" (p. 63).

Slattery (1995), in *Curriculum Development in the Postmodern Era*, attempted to explain the postmodern and reconceptualized viewpoints of curriculum development while at the same time sought to "bridge many gaps that currently divide various stakeholders in the curricular debates" (p. 9).

Slattery highlighted the significance of the Tyler Rationale by stating; "The influence of Ralph Tyler on the history of curriculum development in American education cannot be underemphasized" (p. 52). According to Slattery, since its publication, the Rationale "has almost taken on the stature of an icon in the field of curriculum studies" with several generations of educational scholars "indoctrinated to believe that this is the only viable conception of curriculum development available for schooling and teachers" (p. 8). However, one has to look no further than page one of the Rationale to see where Tyler himself encouraged the readers to examine other models for curriculum development.

Transformative Curriculum Leadership, by Henderson (1995), identified Tyler's Rationale as a "technical rationality - a linear, cause and effect, measurable, and rationally controlled

way of thinking and making judgments about who ought to learn what, how, when, where for how long, and why" (p. 9). Henderson compared the rationale to other efficient systems and noted that the manageability was one of the positive points. Conversely, Henderson drew the distinction between the development of curriculum and curriculum practices and other production practices by stating curriculum "is about fostering the capacity of human beings to understand themselves and their worlds, to grow emotionally, socially, physically, and cognitively; to continuously become more human" (p. 9). In addition, Henderson described several areas of criticism that have been addressed toward the Rationale. First, he noted the "value-neutral stance" as well as it being viewed by some as "having either heart or soul" (p. 9). In addition, the use of behavioral objectives have led some to believe that Tyler condoned "breaking content into atomistic elements ... disconnected from the real world, insulting to the minds and spirits of children" (p.9). Although Henderson pointed out it was not necessarily Tyler's intent, the Tyler Rationale has been interrupted and used by some under the system of "Standardized Curriculum Management" (p. 10).

Summary

This chapter examined some of the major interpretations and controversies concerning the Tyler Rationale. The impact of *Basic Principles for Curriculum and Instruction* is considered noteworthy and far-reaching. It has been called "the most influential curriculum book of the twentieth century" (Marshall, Sears, & Shubert, 2000, p. 3). Goodlad (1966) stated, "Tyler put the capstone on one epoch of curriculum inquiry" (p. 5). Even Kliebard (1970), one of the most vocal critics of the Rationale, admitted, "For his moderation and his wisdom as well as his impact, Ralph Tyler deserves to be enshrined in whatever hall of fame the field of curriculum may wish to establish" (p. 270).

The significance of the Rationale can be further supported by the amount of controversy that surrounds it. Perhaps the most well known debates surrounding the Rationale consisted of a series of written exchanges between Kliebard and Hlebowitsh. This controversy began in 1970 with Kliebard's analysis of the Rationale in "Reappraisal: the Tyler Rationale." In his reappraisal, Kliebard claimed that the philosophical screen was actually the source for the selection of objectives. Kliebard's (1970) short analysis of Tyler's selection and organization of learning experiences implied a Pavlovian conditioning and his interpretation of Tyler's idea of evaluation was described as a "product control" (p. 269).

Hlebowitsh (1992) countered Kliebard's appraisal in "Amid behavioral and behaviouristic objectives: reappraising appraisals of the Tyler Rationale," because of the "unjustified treatment of Tyler" and the "historical interpretation of curriculum studies" (p. 534). Hlebowitsh noted that Tyler called for a "small number of objectives" which would be structured at "high levels of generalizability" (p. 535). Hlebowitsh argued the "psycho-philosophic context" of the Rationale as opposed to the "neutral methodological device" Kliebard maintained (p. 539). Hlebowitsh emphasized the use of Tyler's four fundamental questions served as "a frame of reference, not the imposition of universally precise rules" (p. 539).

Kliebard responded in his 1995 article, "The Tyler Rationale revisited." In this revision, he examined the conflicting views of structure and boundaries established by the Rationale and discussed the linearity of the Rationale. In addition, Kliebard (1995) criticized Hlebowitsh's reference to the Rationale as a "'practical theory'" (p. 85). Hlebowitsh (1995) countered in "Interpretations of the Tyler Rationale: a reply to Kliebard," focusing on three main areas of disagreements between himself and Kliebard concerning the Rationale: role of philosophy, predetermined objectives, and the idea of practical theory.

The amount of criticism concerning Tyler's *Basic Principles of Curriculum and Instruction*, whether positive or negative, has continued to indicate the importance of the Rationale in the field. Others such as Pinar, Slattery, Marsh and Willis, Wraga, Tanner and Tanner, Eisner, Schubert, and Henderson represent some of the curriculum theorists who have continued to debate the different interpretations and significance of the Rationale.

Chapter 4

EXAMINATION OF PRIMARY SOURCES AND SUMMARY OF TYLER'S 1970s
REVISION TO THE RATIONALE

This chapter examines the preface and the six chapters Tyler drafted as revisions and additions to *Basic Principles of Curriculum and Instruction*, under the auspices of the Ralph Tyler Project. In February 1974, the Ford Foundation officially initiated the Ralph W. Tyler Project as a means "to collect and update the educational writings of Ralph W. Tyler" (Kolodziey, 1986, p. 2). The Ford Foundation continued to provide supplementary grants through July 1978 and the Charles F. Kettering Foundation supported the project with a small grant in 1975.

The Project was under the direction of the late Dorothy Neubauer from its inception until her death by heart attack in August of 1978. The project consisted of many major activities, which involved:

... to identify and collect the largely unindexed and widely scattered Tyler writings; the compilation of a bibliography of published works; explorations of possibilities for publications of a volume or volumes of selected writings; and Dorothy Neubauer's editorial assistance in revising the Tyler monograph, "Basic Principles of Curriculum and Instruction". (Kolodziey, 1986, p. 2)

During Neubauer's direction, over 400 published writings and some unidentified documents were gathered. A chronological bibliography was compiled, and *Perspectives on American*

Education: Reflections on the Past ... Challenges for the Future (1976), a volume of selected Tyler's presentations, was published. Included in this volume were over 400 citations of Tyler's published writings from 1929 to 1974.

After the death of Dorothy Neubauer, Helen Kolodziey became director of the project for the continuation of the project with Tyler contributing the funding. During this final phase of the Tyler Project, activities included:

... a continuing systematic effort to identify and collect all known Tyler writings; compilation of a revised and expanded bibliography of published works; and processing, cataloging, and organizing the total collection of published writings as well as substantial segments of other documents assembled during the course of the Project for transfer to a permanent repository. Editorial assistance on revision of the monograph was terminated with Dorothy Neubauer's death and is no longer a Project activity. (Kolodziey, 1986, pp. 2-3)

The Ralph Tyler Project can be accessed at Joseph Regenstein Library, the University of Chicago, within the Special Collections Archives. In order to reflect Tyler's intentions, the chapter titles and subheadings have remained the same as in his drafted unpublished 1970s revisions.

Preface

Tyler (1977) began the preface by commenting that this book "grew out" (Preface, p. 1) of his many different educational experiences. Whether working with schools, colleges, formal or informal educational institutions with trained personnel or volunteers, as well as differing philosophies, the task of developing their plans and programs all focused on answering four basic questions:

1. What things shall be taught?
2. What shall the students do to learn these things?
3. How should these learning experiences be organized?
4. How shall the effectiveness of the curriculum be appraised? (Tyler, Preface, pp. 1-2)

Of course, the answers generated by the various institutions would differ greatly; the information collected while answering these questions would provide a foundation for the development of the program. It was during his work with the Eight Year Study that Tyler (1977, Preface) began to realize this. As discussed earlier, during the study, 30 secondary schools from all over the United States were free to develop an appropriate curriculum based on the needs of their students. Tyler (1977) noted,

But as they got into their work, each school discovered the need to answer the four basic questions and the need to

obtain relevant information to work out the answers. This led me to develop the outline for this book. (Preface, p. 2)

Tyler explained that he prepared *Basic Principles of Curriculum and Instruction* first as a syllabus for a curriculum development course at the University of Chicago. Although the students in this course brought with them different educational experiences, almost all of them had the job of developing curricula for their different institutions. Tyler explained, "They wanted help in conceptualizing the task and organizing their work. The syllabus was prepared to serve this purpose; it was a kind of handbook to guide one's thinking when engaged in curriculum development" (Preface, p. 2).

Next, Tyler indicated some foundational guidelines about both the original book and the revision.

This present book, like the earlier syllabus, does not present a theory of the school nor a catalogue of contemporary theories. It does not describe various curriculum forms and content. It is designed to help those engaged in curriculum development by furnishing a rationale for their efforts. (Tyler, 1977, Preface, p. 3)

In this Preface, Tyler (1977) maintained, "There is no particular sequence in which the four guiding questions should be examined," but stated, "Although most persons start with the question of objectives, one can begin with any of the four

questions and work through the others" (Preface, p. 3). In other words, Tyler explained, "In developing answers to each question, information may be analyzed and implications recognized that lead one back to modify the answers to questions considered earlier" (Preface, p. 3). Therefore, continual review of the curriculum in light of the four basic questions was essential. Here Tyler described a recursive process of curriculum development.

Tyler concluded the preface by noting the usefulness of his earlier book. He explained that some of the examples from the earlier edition had been substituted with more recent ones gained from his experiences overseas as well as the suggestions from others who have used the Rationale. It was his hope that "the revised edition will be equally useful for contemporary and future curriculum developers," as well as being "relevant to a wider audience" (Tyler, 1977, Preface, p. 3-4).

Within the Preface, there are two important changes to note, which will be discussed in more detail in chapter five. The first change was in the wording of the four fundamental questions that serves as a framework for curriculum development. Second, Tyler emphasized on page three of the Preface that the starting point for answering the fundamental questions does not have to occur in a linear manner. In the 1949 Rationale, Tyler did not comment of the starting point until the last page of the

monograph, which has caused some theorists to classify the Rationale as a rigid and linear model.

Chapter One - "Educational Objectives"

In the first chapter, entitled "Educational Objectives," Tyler (1977) focused on the importance of educational objectives and on answering the question: "Why should an educational institution have clearly defined objectives?" (chap. 1, p. 1). Tyler divided chapter one into three main sections: 1) "The importance of objectives," 2) "The sources from which educational objectives are derived," and 3) "The author's position" (p. 1).

"Importance of objectives"

Tyler (1977) began his discussion of the importance of educational objectives by noting that the "major responsibility of school, college, or other educational institution is to provide an educational program for its clientele - the students" (chap. 1, p. 1). Tyler explained that in a democratic society the responsibility of an educational program is to help the student "become increasingly able to meet his needs, to achieve his purposes, to participate constructively in the society, and to realize his own potential" (chap. 1, pp. 1-2). In order to achieve these goals, the educational program needed to facilitate the student's learning of "new ways of thinking, feeling, and acting" (chap. 1, p. 2). Tyler noted that these

new ways of learning are commonly called "patterns of behavior;" however, he pointed out that he was referring to behaviors "to include thinking and feeling as well as acting" (chap. 1, p. 2), which he also had explained in the 1949 Rationale. Since the educational objectives are representative of the patterns of behavior that educational institutions want students to achieve, it was these educational objectives that serve as "the criteria by which materials are selected, learning experiences are identified and organized, instructional sequences are determined, instructional procedures are developed, and evaluation techniques are selected or designed" (chap. 1, p. 2).

According to Tyler, many educational programs lacked clarity and meaningfulness in their objectives; this was evident through conversations with students as well as teachers. Student responses about what they were expected to be learning were often "I'm supposed to learn enough to pass the tests" or "I have to take it if I'm going to go to college" (Tyler, 1977, chap. 1, p. 3). For Tyler, these responses reflected a breakdown of communication between the teacher and the learner concerning the educational objectives or even a lack of clarity about the learning objectives by the teachers themselves. Although Tyler acknowledged that different students vary in their abilities to communicate the learning objectives, he noted that "...their understanding of what they are trying to achieve ...

and why ... should be consistent with the objectives of the program" (chap. 1, p. 3).

Tyler (1977) maintained that, not only should students have an understanding of the learning objectives, but also, that the teacher needed to be able to answer some basic questions about the learning: "What are you trying to achieve through your teaching of this particular content? What are your aims? What behavioral changes are you trying to bring about?" (chap. 1, p. 3). In order to assist teachers in new teaching experiences, such as working with students whose background experiences are different from the ones of students with whom the teacher had previous experience, the clarity and meaningfulness of objectives were important. Although Tyler noted that there are a few, intuitive teachers who were effective with students even though they are unable to articulate their learning objectives, these teachers would still benefit from clearly stated objectives in the selection of and use of newly developed instructional resources.

The need for teachers to have a way to communicate the common learning outcomes of the educational program was for Tyler another indication of the importance of clearly defined learning objectives. The defined educational objectives enabled the institution to have a common language in order to achieve its educational purposes.

Finally, Tyler concluded this discussion of the importance of educational objectives by noting the school's role in public accountability. It was the clarity of the learning objectives that explained to the students as well as the public in general what the school or educational institution was trying to accomplish and the means by which they would be measured. The educational objectives "are important in planning an educational program, conducting it, appraising it, improving it, and explaining it to the appropriate public" (Tyler, 1977, chap. 1, p. 6).

"The sources from which educational objectives are derived"

Next, Tyler turned his attention to the sources from which educational objectives are derived. He began his discussion by asking two fundamental questions: "Since objectives are consciously willed goals, is it possible to take a really systematic approach to the task of selecting these guiding purposes? Can objectives be anything more than the expression of personal preferences of individual or groups?" (Tyler, 1977, chap. 1, p. 6). Although Tyler acknowledged that objectives "are matters of choice;" he noted that objectives "... should be the considered value judgments of those responsible for our educational program" (p. 7). Therefore, there existed a need for a philosophy of education as well as other types of information about the learner, society, and/or the subject matter in order

to guide the curriculum developers in making judgments concerning the objectives.

According to Tyler (1977), prior to the twentieth century, the need for clarity and meaningfulness in the selection of educational objectives was not understood by teachers or others who bore the responsibility of creating curricula. The curriculum developers relied on the "theory of faculty psychology" as well as the "doctrine of formal discipline" (chap. 1, p. 8) as guides to curriculum development. Those who accepted the theory of faculty psychology believed that by training different faculties in the mind, learning occurred. Tyler offered the example of the teaching of mathematics as a way to train the reasoning faculty of the mind as well as the study of poetry as a way to train the faculty of imagination. Those who aspired to the doctrine of formal discipline believed that the study of certain subject matters resulted in the disciplining and learning of the mind.

Tyler (1977) explained, through the experiments conducted by E. L. Thorndike and others around the turn of the century, these two previously held beliefs about teaching and learning were refuted. These investigations proved to curriculum makers that the transfer of knowledge from previous learning to new learning was not a result of the theory of faculty psychology or the doctrine of formal discipline, but the results of establishment

of relevance and connections to background knowledge. Tyler claimed these discoveries had a significant impact on curriculum development. These investigations led curriculum developers to begin identifying the different patterns of behaviors by giving "serious consideration to selecting objectives that were appropriate to the students, applicable to the situation the students were likely to encounter, and drew upon subject-matter that the students could internalize and make part of their patterns of behavior" (Tyler, chap. 1, p. 10).

Even though the work of Thorndike and others emphasized the need for more focused and clearly defined educational objectives, Tyler (1977) noted that three different educational philosophies continued to disagree over which sources should be used in determining the learning goals. The progressives called for the examination of the student's interests, needs, and purposes as the main basis for defining the educational objectives. The essentialists believed that the subject-matter along with other basic skills, values, and traditions should serve as the foundation for the learning goals. Finally, "the social functionists," (chap. 1, p. 10) or sociologists, which was the term Tyler used in the 1949 Rationale, were concerned about the changes and operations of the society, considered the needs of society as the starting point for objectives. In addition, Tyler pointed out the importance of examining

educational philosophy and psychology of learning when determining objectives. His discussion on the educational philosophy and psychology of learning was brief in chapter one; however, he devoted a separate chapter to each topic in chapter five and chapter six later in the revision.

"The author's position"

Tyler concluded chapter one with "The author's position." He stated, "The position I take is that no single source of information is adequate to provide a basis for wise and comprehensive decisions about objectives and that no one of the sources can be disregarded" (Tyler, 1977, chap. 1, p. 13). Tyler emphasized that attention must be given to the needs and interest of the learner, the needs of society, and the knowledge of the subject matter. Since educators will identify far too many objectives to be learned during a program of study, Tyler believed that "... philosophy and psychology make important contributions by serving as screens for establishing priorities—that is for selecting the most important, feasible objectives to guide the program" (p. 14). Therefore, in the remaining chapters, Tyler examined, in more detail, the different sources and screens to be considered when deriving educational objectives.

Chapter Two - "The Learner as a Source of Educational Objectives"

Tyler focused chapter two of the 1970's revision on the learner as a source for the development of educational objectives. Tyler (1977) divided the chapter into five parts: 1) "Needs of learners," 2) "Student's interests as a basis for objectives," 3) "Student aspiration and expectations," 4) "Methods of studying learners," and 5) "Deriving objectives from studies of learners" (chap. 2, p. 1). It should be noted that in the original 1949 Rationale, Tyler's discussion of the learner as a source for objectives consisted of approximately 10 pages compared to the 1970's revision discussion of 38 pages. In addition, Tyler (1976) had stated in his article, "Two New Emphases in Curriculum Development," that he "would now give much greater emphasis to the active role of the student in the learning process" (p. 62). Chapter five of this dissertation will focus in greater detail on the addition and/or changes Tyler made concerning the learner as a source for educational objectives.

"Needs of learners"

Tyler began this chapter by examining two different definitions of a need. He explained how each definition would be used to identify the appropriate educational objectives for a student.

The first definition Tyler (1977) discussed was the "... gap between what is conceived to be a desirable norm and the situation as it actually exists" (chap. 2, p. 2). He illustrated several different examples for this type of need by pointing out that by studying the learner, one can identify the present condition, or what is. The norms established by the society would provide what should be. Tyler gave the example of elementary students and nutrition. After investigating the students, it was noted that for a majority of students, bread, potatoes, and salt pork made up their daily diets. A need for change in their diets would exist only if the acceptable norms for what constituted an adequate diet differed from the bread, potatoes, and salt pork. Therefore, if there were no accepted norm for a particular behavior, one would be unable to identify a need using the first definition.

Next, Tyler (1977) examined the second definition of need which different psychologists, including "Murray, Prescott, Maslow," (chap. 2, p. 2) and others identified. Here, Tyler explained the term need, as meaning "... to bring tensions in the organism into equilibrium so that a normal, healthy condition of the organism can be maintained" (chap. 2, p. 2). Tyler further noted that some psychologists viewed "... a human being as a dynamic organism, an energy system normally in equilibrium between two things: 1) internal forces produced by the energy

from the oxidization of food, and 2) external conditions" (chap. 2, p. 2). Different tensions, whether these forces are physical, social, or integrative needs, are consistently creating disequilibrium. Therefore, every organism must work continually to reestablish a sense of equilibrium. In order to identify the educational objectives consistent with this definition of need, the identification of students' unsatisfied needs as well as the way the school could help facilitate the fulfillment of these needs would provide a basis for deriving educational objectives.

The relationship of needs to objectives was Tyler's next focus. Tyler (1977) stated, "The day-by-day environment, in the home and in the community generally, provides a considerable part of the educational development of the student" (chap. 2, p. 7). The focus of the school should not be on establishing educational experiences, which the students are benefiting from outside the school; instead, the focus should be on the gaps that exist in the students' development. It was important to identify and study where these gaps exist. Tyler cautioned the reader, "... lists of students needs do not, per se, yield lists of objectives directly correlated with these needs" (chap. 2, p. 8). Furthermore, he added, "... meeting students' needs are not, primarily, the function of an educational institution" (chap. 2, p. 8). Instead, Tyler clarified that the "... function of the

school is to educate students in such a way that they themselves are better able to meet their own needs" (chap. 2, p. 8). In other words, the school's responsibility was "to help students acquire those patterns of behavior which assist them in meeting all of their basic needs" (Tyler, p. 8). For Tyler, it was not the school's responsibility to provide food, friendship, love, and other basic needs, but "to help learners change their behavior patterns -acquire understanding, skills, habits, attitudes, interests, and ways of thinking which are important constructive resources" (chap. 2, p. 9) for meeting these basic needs.

In order for the school to assist students in acquiring the necessary behavior changes to allow students to meet these basic needs, the information concerning the students' needs must be translated into teaching goals or objectives. Tyler (1977) identified three generalizations for aiding the classroom teacher in translating these needs into educational objectives:

1. Student needs imply educational goals when the student is not able to meet the needs satisfactorily without developing new patterns of behavior, that is, without learning something. If he is able to meet his needs without further learning, then such needs do not suggest significant teaching goals.

2. Teaching goals can be derived from the needs of students by identifying the patterns of behavior which will help students meet these needs.

3. The patterns of behavior thus identified are appropriate teaching goals, if they are consistent with the educational philosophy of the school and are capable of being learned in the school. (chap. 2, pp. 10-11)

In conjunction with the preceding generalizations, Tyler outlined three procedures to guide teachers in translating the needs of students into learning goals. The first procedure called for the assimilation of students' needs within teacher's class. This information could be assembled on multiple levels, including studies which characterized the needs of large groups of students in the society, studies of students within the teacher's school, as well as studies to identify the needs of individual students within the teacher's own classroom.

Next, Tyler recommended the teacher examine different studies of the society as well as the needs and/or expectations that society places on the students. Tyler noted that these studies would generate more general objectives than the first step. Also, he pointed out that the objectives derived from a study of society would differ based on the different locations. However, Tyler (1977) stated, "... these differences are worthy of consideration" (chap. 2, p. 12).

Once the above information has been collected, it was time for the teacher to review all the information and make curricular decisions. First, it was important for the teacher to distinguish which of the identified needs the students were prepared to meet without any further assistance from the teacher. Since the home and community provided a foundation for educational development, Tyler (1977) stated, "... an educational institution should not duplicate educational experiences already adequately provided by other agencies" (chap. 2, p. 13). With the remaining needs, the teacher must decide what patterns of behaviors the students would need to acquire to meet the identified needs. These patterns of behavior would need to be in compliance with the school's philosophy of learning as well as relevant to the teacher's field of study.

Tyler (1977) cautioned not all needs "... automatically give rise to suggested teaching goals" (chap. 2, p. 18). He stated, They require careful consideration by the teacher who must infer, from his understanding of the needs and his understanding of the learning possibilities of his own field, the types of teaching goals that can appropriately be pursued in his classroom to help students meet the needs that have been identified. (chap. 2, p. 18)

Tyler concluded his discussion on the needs of learners by warning the reader of certain difficulties they are likely to

encounter when investigating the students' needs. One difficulty Tyler (1977) addressed was that the "... needs of students may fall in any aspect of life, and it is difficult to study all aspects of life simultaneously or in a single investigation" (chap. 2, p. 18). Therefore, he recommended analyzing "... life into some of its major aspects" and investigating "... each of these aspects in turn" (chap. 2, p. 19). Also, the studies of the "... student's practices, knowledge, ideas, attitudes, interests, and the like" (chap. 2, p. 19) gave more information concerning the needs of the students. This collection of information coupled with previous data about the students' needs would need to be compared to the desirable norms in order to see if there exists a serious gap between the two. If a gap existed, then an educational objective could be identified.

Because the needs of students can vary based on the students' location, Tyler noted, "It will always be necessary to recognize the varied composition in any student body" (Tyler, 1977, chap. 2, p. 21). Tyler outlined three possibilities for identification of needs approved for the school:

1. Some needs are common to most persons of a given culture;
2. Other needs that are common to almost all of the students in a given institution; and

3. Still other needs that are common to certain groups within the institution but not common to a majority of the students in the school. (chap. 2, pp. 21-22)

Tyler recommended a four-step approach to clarify the needs and findings once the educational institution has been determined.

1. List some studies of the learners that could be carried on in that institution to determine needs.
2. Outline some of the techniques that might be used in making the studies.
3. Project, in your own thinking, some possible results of the studies.
4. List some of the objectives that might be inferred from your "assumed" findings. (p. 22)

"Student interests as a basis for objectives"

Not only do the needs of the learner serve as a starting point for the identification of learning objectives, but the interest of the students also can guide educators in determining the educational goals. Tyler gave the following argument for using student interest as a basis for selecting educational objectives.

Education is an active process that requires the active efforts of the learner himself. In general, the learner truly learns only those things in which he actively participates. He participates most readily and most

effectively in things which are of interest to him, and, if the educational program is focused on such things, the student will be an active participant and will learn to deal effectively with the situations to which the school exposes him. It is essential, therefore, according to this argument that educational institutions provide opportunities for the student to enter actively into and deal wholeheartedly with things that interest him and in which he feels deeply involved. (Tyler, 1977, chap. 2, p. 23)

Tyler noted that there were educators who believed that the use of student interests as a basis for objectives was not sufficient. They claimed that the use of student interests ignored some of the educational agencies main responsibilities:

... to broaden and deepen a student's interests; to open doors; to develop attitudes of curiosity, openness, and receptivity; and to develop skills that make it possible for an individual to continue his education long after his formal schooling comes to an end. (Tyler, pp. 23-24)

It is important to note, that the same educators who cautioned against using student's interest as a basis for educational objectives, also valued the use of these interests as a building block for connecting background knowledge as points of departure.

"Student aspirations and expectations"

This section was brief consisting of only one paragraph. The aspirations and expectations of students represented their "hopes, desires, and future goals" (Tyler, 1977, chap. 2, p. 28). Tyler pointed out that the identification of either of these could suggest positive and/or negative learning objectives. If the student's goals are in alignment with the acceptable norms and the philosophy of the schools, they can serve as a motivation factor for the student. Needs can be identified when the student's expectations are lower than the norms. Tyler saw student's aspirations and expectations as similar to student's interests serving as a motivator for learning.

"Methods of studying learners"

According to Tyler, an important note to consider when studying the interests of students as the basis for educational objective was the same as the studying of the learners needs. Since each created such varied possibilities, it was important to plan several focused investigations instead of trying to cover the many different areas of interests in a single study. Tyler recommended several different methods for studying the learners. These included observations, student interviews, interviews with parents, questionnaires, essays, tests, as well as school and community records (Tyler, 1977).

"Deriving objectives from studies of learners"

Tyler (1977) concluded chapter two by examining how to derive "objectives from the studies of learners" (chap. 2, p. 34). Tyler noted, "There is no single formula for inferring educational objectives from data about students" (chap. 2, p. 34). The procedures for identifying the educational goals involved "... studying the data to see implications, comparing the data with norms or standards in the field, and from that, obtaining suggestions about possible needs that a school program could meet" (chap. 2, p. 34). Tyler cautioned that different teachers could interpret the data differently. Since teachers have different philosophies of life and of education, these philosophies guide the teachers in their interpretation of the data. Therefore, the objectives are not clearly identified just by the collections of student data. Also, Tyler reminded the educator that when deriving the learning objectives, it was important "... to distinguish between needs that are appropriately met by education and needs that are properly met through other social agencies" (chap. 2, p. 36). According to Tyler, the teacher "should seek to identify desirable changes in the behavior patterns of students - changes which will help to meet the needs indicated by the data, changes which the school can help to bring about" (chap. 2, p. 37). Tyler outlined five

possible steps to guide the interpretation of student needs and interest from data in order to derive educational objectives:

1. Jot down information about groups of students with who you are familiar.
2. Formulate as comprehensive a set of data about their needs and interests as you can.
3. Write down the educational objectives which these data seem to imply.
4. Set down every educational objective that comes to your mind.
5. Consider carefully how you arrived at each objective:
What factors did you take into account: How you were able to infer this particular educational objective from the data you have? (chap. 2, p. 37)

Chapter 3 - "Studies of Contemporary Life as a Source of Objectives"

While chapter 2 of the 1970's revision focused on the needs of the learner as a basis for the formulation of educational objectives, in chapter 3, Tyler examined different aspects of contemporary life as a source for deriving objectives. When referring to contemporary life, Tyler (1978) was including "the environment in which the learner now lives or can be expected to live in the future" (chap.3, p. 1). In his introduction for chapter 3, Tyler illustrated different aspects of the

environment that would need to be taken into consideration by those working to develop the curriculum: demands of the environment on the learner, employment opportunities, civic responsibilities, and the development of new media for communication.

"Why use studies of contemporary Life as a Source of objectives"

Tyler offered two main arguments in favor of this source. The first argument related to the school's responsibility of "socialization" (Tyler, 1978, chap. 3, p. 2). He stated, "Educators have long accepted a large share of the responsibility for helping young people learn to live in their society" (chap. 3, p. 2). Tyler argued that since society is complex and constantly in a state of change because of the increasing amount of knowledge and technology in almost every field, it was impossible for educational agencies to be responsible for educating the youth in all of these areas. It was important for makers of the curriculum to focus educational objectives on those aspects of society that are most significant for today's society. Tyler noted, "If we fail to do this, we are likely to waste the time of students by urging them to learn things that were important fifty years ago but no longer have significance" (chap. 3, p. 3).

Tyler's second argument supporting the use of contemporary life for deriving educational objectives related to how learning

occurs. The foundation for this argument was rooted in a need for transfer of training. Tyler (1978) emphasized that the student was "much more likely to apply his learning when he recognized the similarity between the situations he encountered in life and the school situation in which his learning took place" (chap. 3, p. 3). Tyler noted both arguments supported the use of contemporary life as a source for learning objectives in curriculum development for general educational purposes and/or for a single part of a student's educational development. *"Criticism of this source of objectives"*

Just as there are arguments for the use of contemporary life as a basis for deriving objectives, Tyler noted three arguments, which critics have offered opposing the use of this source. It is important to note that the arguments against centered on these studies as the sole basis for educational objectives.

The first criticism for the use of contemporary studies for the formulation of objectives was that, although certain activities may be prevalent in society, those activities may not be desirable for young children to learn and could even be harmful. Tyler argued that if the objectives generated for the studies of contemporary life are checked against the educational philosophy of the school as well as other sources, this criticism could be removed.

Essentialists offered the second criticism by referring to these studies of contemporary life as "the cult of presentism" (Tyler, 1978, chap. 3, p. 5). They argued that since society is constantly changing, the problems that students face in society will constantly be changing; therefore, preparing them to solve present day problems would not prepare them to solve future problems because the problems would be different. Tyler countered this notion of "presentism" (chap. 3, p. 5) by explaining that studies of contemporary society would identify certain areas that would have continuing importance as well as suggest areas that would provide students the opportunities to practice what they had learned in school.

Progressives, who pointed out the starting place for objectives should be the students' interests and needs, promoted the third criticism of society as a source for educational objectives. They noted that the critical problem areas or common activities of society were not necessarily reflective of or related to the students' interests or needs. Some of the progressives argued "to assume that these activities should suggest educational objectives for children of a given age neglects the importance of considering children's interests and children's needs as a basis for deriving objectives" (Tyler, 1978, chap. 3, p. 5). In response, Tyler argued:

If studies of contemporary life are used to indicate directions in which educational objectives may aim, while the choice of particular objectives for given children takes into account student interests and needs, then studies of contemporary life can be useful without violating relevant criteria of appropriateness for students of particular age levels. (chap. 3, p. 6)

"Conducting studies of contemporary life"

Tyler maintained that in order to conduct studies of contemporary life, different functionalities of life needed to be broken down into manageable parts. Tyler (1978) offered the following as an example of dividing the different parts of life into reasonable categories:

1. Home and family life
2. Occupation
3. Social-Civic life
4. Personal-social life
5. Health and safety
6. Recreation (chap. 3, p. 9)

The examples of categories given in the 1949 Rationale differ somewhat to the examples Tyler outlined in the revision.

Table 1.

Comparison of life categories.

1949 - Rationale	1970s - Revision
1. Health	1. Home and family life
2. Family	2. Occupation
3. Recreation	3. Social-Civic life
4. Vocation	4. Personal-social life
5. Religion	5. Health and safety
6. Consumption	6. Recreation
7. Civic	

Note. From *Basic Principles of Curriculum and Instruction*, by R. Tyler, 1949, p. 20. From *Studies of Contemporary Life as a Source of Objectives*, by R. Tyler, 1978, Chapter 3, p. 9. Tyler, Ralph W., Papers, [Box 4, Folder 1], Special Collections Research Center, University of Chicago Library

Once the different categories of life to be studied are defined, decisions regarding the function of these areas can be discussed.

"Methods used in studying contemporary life"

The methods previously noted in the study of the students' needs can all be used in the study of contemporary life.

Observations, interviews, questionnaires, and public records can all shed light on the educational objectives identified through

analyzing contemporary life. In addition, investigations which examine different social groups, communities, population changes, migration, and natural resources are a few of the other studies that identify important educational objective which should be considered in the development of the curriculum (Tyler, 1978).

"Deriving objectives from studies of contemporary life"

Tyler concluded chapter three by suggesting ways to derive objectives from the studies of contemporary life.

Tyler (1978) explained that these studies do not directly identify a list of objectives, but provide the teacher or curriculum developer with the necessary data to answer the question: "What do these data suggest regarding what these students should learn in order to meet the demands and opportunities of contemporary life?" (chap. 3, p. 12).

The above question was not always answered directly by the data. Oftentimes, it was the responsibility of the teacher or school to teach students problem solving strategies so that when the student encountered problems in society, the student could devise a plan of action to solve the particular problem. As Tyler (1978) put it, "A professional is taught to bring general principles to bear in understanding the situation with which he deals and then devise courses of action appropriate for dealing with the situation as he understands it" (chap.3, pp. 12-13).

Although the study of contemporary life may identify different activities or problems in which the student may be involved, for the purpose of deriving the objectives, the makers of the curriculum must answer this questions: "What should the student learn that will enable him to carry on these activities or deal with these problems in an intelligent way, not blindly following rules?" (chap. 3, p. 13).

Chapter Four - "Subject Matter as a Source of Objectives"

Chapter four of the 1970s draft focused on the third main source from which educational objectives can be derived - subject matter. Tyler began this chapter by examining the different purposes as well as providing a short history of the use of subject matter specialists. He used the term, *subject matter*, to describe the "resources available from the cultural heritage" (Tyler, 1977, chap. 4, p. 1).

When examining the history of subject matter curriculum, Tyler (1977) noted the contributions from the subject matter specialists were used for different educational purposes. He explained that one finds a time when only a select few, mainly "priests, medicine men, and philosophers" were among the educated since the purpose of schooling "was to prepare the few who would know the "'mysteries' of esoteric knowledge'" (chap. 4, p. 2). Subject matter specialists were the ones who passed on the curriculum to fulfill that purpose. However, as colleges

and universities began being established in order to provide "apprentice training for scholars," Tyler clarified there was a shift from the subject matter specialists to the teachers serving as the scholar since "the teachers were themselves the scholars of that day and were expected to initiate their students into the lore of the academy" (chap. 4, p. 2). Also during this time, it was recognized that "reading, writing, and ciphering" were important and practical skills for everyday living (chap. 4, p. 2). Objectives needed to be formulated that supported this purpose. A distinction needed to be established between "objectives that are appropriate for curricula geared to specialization and objectives that are appropriate for curricula intended for general education" (chap. 4, p. 3). In addition, Tyler offered a third purpose- occupational training. Tyler recommended the following reasons for subject matter specialists to serve in the creation of educational objectives:

1. to prepare students to be specialists in a subject field;
2. to provide general education for many people, most of whom will not become specialist in any field;
3. to prepare persons for an occupation which requires the use of some of the contents from one or more subject fields. (chap. 4, p. 4)

For Tyler, the purposes for which the curriculum was being developed must serve as a guide to curriculum makers as well as subject matter specialists. He referenced the reports from the Committee of Ten in 1893 as an illustration of "failure to clarify the purpose and respond to the relevant question" (Tyler, 1977, chap. 4, p. 5).

The Committee of Ten, established by the National Education Association, was composed of subject-matter specialists whose job was to recommend to secondary schools a model curriculum for the "'modern' era" (Tyler, 1977, chap. 4, p. 5). Tyler noted that the committee wrote a series of reports based on the assumption that "the major purpose of the secondary school was to provide introductory training for people who would later become specialists in a field" (chap. 4, p. 6). With that assumption in mind, according to Tyler, the committee sought to answer the question: "What should be the early instructional program ... for students who will later carry on advanced work leading to specialization?" (chap. 4, p. 6). Consequently, many secondary schools accepted the different subject matter specialists' content recommendations as their educational goals.

Tyler (1977) questioned how the committee would have responded if the major responsibility of the school had been clarified to be, "... to provide a program of general education for all students, with modifications, as needed, for those whose

continuing education may lead to specialization and those who may soon move into an occupation" (chap. 4, p. 7). For Tyler, the questions being asked by the subject matter specialists would have been different. Instead, the questions would have been: "What can your subject contribute to the general education of all layman? What knowledge, what skills—related to your field—will be of most value to a typical member of our society?" (chap. 4, p. 7).

Tyler (1977) emphasized the importance of asking the "'right'" questions (chap. 4, p. 8). He noted that if the right questions are not considered, subject matter specialists assumed that the purpose of the learning was for specialization in the field. However, according to Tyler (chap. 4, p. 9), it was the general assumption from educators in this country that the high school curriculum "should be developed to contribute to the general education of students as well as to their preparation for occupations and other specialized activities" (chap. 4, p. 9). The subject areas of "language and literature, science, social studies, mathematics, music, and art" (chap. 4, p. 9) together contributed to the personal development of high school students. In addition, these subject areas enabled students to "expand their horizons, to extend their vision ... and to discover the values to be gained from the study of these subjects" (chap. 4, p. 9).

Tyler proposed that when the specialists in the field ask the right questions, the recommendations provided by subject matter specialists could guide educators to understand the importance of the subject matter to the general population of students who are not specializing in that subject area. Tyler (1977) offered "'Science in General Education' and 'Mathematics' in General Education" (chap. 4, p. 11) published by the Commission on the Secondary School Curriculum of the Progressive Education Association, as examples of reports that focused on the contribution the subject area could have on the general education of students. Tyler noted that other groups, such as the National Council of Mathematics Teachers, National Council of English Teachers, as well as the National Council of Social Studies Teachers have produced similar reports.

For Tyler, these reports, unlike the reports created by the Committee of Ten, are helpful in the development of educational objectives. Tyler suggested although some reports written by subject matter specialists do not outline specific objectives, the curriculum developers could infer, from the statements provided, the type of objectives that would serve the general function of that subject area. Tyler illustrated this concept by noting different functions for each subject area and provided examples of the objectives that could be inferred. For example, Tyler (1977) explained one function of the study of English was

to "develop effective communication, including both the communication of meaning and the communication of form" (chap. 4, p. 12). Next, Tyler noted two more functions for English and two in the area of literature. These major functions, outlined by the different subject matter groups, served as "large headings under which to consider possible objectives" (chap. 4, p. 15).

Tyler asked, when it comes to the purpose of occupational training, what distinctions do subject matter specialists make in designing the curriculum? Tyler provided an example of the education a physician would need as compared to that of a biochemist, anatomist, and physiologist. Although he pointed out that the training for a physician would include biochemistry, anatomy, as well as physiology, the "purpose and ... related attitudes" of the physician would differ from those of a "'pure' scientists" (Tyler, 1977, chap.4, p. 21). While the physician's purpose of the subject matter was to "understand the functioning of patients in order to help them overcome pathological conditions," the scientist's purpose was to "gain increasing understanding of the phenomena with which his subject deals" (chap. 4, p. 21). For the physician, his attitudes focused on the welfare of his patients, while the scientist was concerned mostly with the obtainment of accurate knowledge.

Tyler maintained that the use of subject matter was important in developing the curriculum for educational agencies, and that the expertise of subject matter specialists was needed. Since subject matter specialists have difficulty identifying those areas of their fields that would be useful for education, Tyler recommended that those writing the curriculum work together with subject matter specialists to derive appropriate educational objectives from subject content.

"Deriving objectives"

Tyler (1977) suggested three steps for deriving educational objectives from subject matter for the purpose of general education:

1. Read at least one subject report at the level in which you are interested
2. Jot down your interpretation of the major function the authors believe this subject can serve and the more specific contributions it can make to other educational functions
3. Formulate a list of the educational objectives you infer from these statements. (chap. 4, pp. 25-26)

When deriving educational objectives for the purpose of occupational training, Tyler outlined the following steps:

1. Select a subject that appears to be a useful resource for such an educational program

2. Through reading textbooks in the subject or by interviewing a subject specialist, identify parts of the subject (concepts, principles, facts, skills, modes of inquiry ways of appreciating) that are relevant to the occupation
3. Formulate several educational objectives that you infer from these materials. (chap. 4, p. 26)

Tyler concluded chapter four by reiterating the importance of subject matter in the educational development of students and restated that subject matter can be used as a source for deriving educational objectives. While subject matter specialists can provide valuable information that their field of study can bring to the curriculum, Tyler (1977) reminded the reader to "... make sure that the questions you ask them are the right questions for getting responses relevant to the purpose" (chap. 4, p. 27). Finally, he urged the curriculum developers to keep in mind the purpose for which the subject matter would be utilized and to use this purpose as a guide for deriving educational objectives.

Chapter 5 - "The Use of Philosophy in Selecting Objectives"

Tyler maintained that deriving educational objectives from the three sources would produce a long list of objectives. He suggested, therefore, that it was important to consider the different objectives, looking closely at eliminating the

unrelated ones. In order for the educational agency to be effective, Tyler recommended, "there should be a relatively small number of highly important objectives that are consistent" (n.d., chap. 5, p. 1). He added, "There should be a small number because attaining educational objectives means acquiring new patterns of behavior, and that takes time" (n.d., chap. 5, p. 1). Tyler stressed the importance of consistency among the objectives, which would reduce confusion and conflicting learning.

In order to attain these few consistent and highly important objectives, Tyler recommended screening the objectives in order to help identify objectives that were unimportant to the purpose of education or ones that contradicted the philosophy of the school. The first screen Tyler recommended was "... the educational and social philosophy to which the school is committed" (n.d., chap. 5, p. 1). The list of objectives generated from the three sources can be assessed by how they align with the philosophy of the school.

Tyler noted that not all schools have educational philosophies. In such cases, the staff does not fully understand the connection between the educational philosophy and the development of the curriculum. Therefore, for an explanation concerning educational philosophy, Tyler quoted Charles Frankel:

Philosophy of education...is simply one example of the kind of philosophy whose aim is to clarify human choices by indicating their relationship to some ordered and examined scheme of purposes. It is an application of the Socratic maxim, 'Know thyself,' and of the Socratic principle that the unexamined life is not worth living. Like the philosophy of science or the logical analysis of ordinary usage, it heightens men's self-awareness by putting the principles that govern their thought clearly before their minds, forcing them to wrestle with the puzzles and dilemmas implicit in these principles. But like Socrates' own philosophic activities, it is primarily moral and social in its intent. It is an attempt to clarify the principles we should employ when we set about answering the question, 'What ought we to do?' and specifically, 'In what ways and for what purposes shall we educate our children?' (n.d., chap. 5, p. 2)

In addition to Frankel's definition, Tyler added, "... the statement of philosophy attempts to define the nature of a good life and a good society" (n.d., chap. 5, p. 3). According to Tyler, usually the statement would address three different values: democratic, material, and success. The acceptance of these values indicated that the aims of the educational program were aligned with the identified values. Tyler further

explained that the identified values "... suggest educational objectives in the sense that they suggest the kinds of behavior patterns - that is, the types of values and ideals, the habits and practices - which will be aimed at in the school program" (n.d., chap. 5, p. 3). Therefore, the use of the school philosophy can serve as a screen for the selection or elimination of educational objectives.

Tyler proposed that the educational philosophy of the school needed to address some fundamental questions:

1. Should the educated man adjust to society, should he accept the social order as it is, or should he attempt to improve the society in which he lives?
2. Should the school seek to develop young people who will fit into the present society as it is, or does the school have a revolutionary mission to develop young people who will seek to improve the society?
3. Should there be a different education for different classes of society?
4. Should public school education be aimed primarily at the general education of the citizen, or should it be aimed at specific vocational preparation? (Tyler, n.d., chap.5, pp. 4-6)

Tyler maintained the answers to the above questions would provide a clear indication of the purpose of the education

within that educational agency, as well as provided the curriculum developers with a framework from which to select the educational objectives.

The school's philosophy concerning affective behaviors was another area that Tyler examined as a way of selecting objectives. The area of affective behaviors was an addition to the discussion of philosophy, which was not included in the 1949 Rationale. He noted that human behaviors tended to fall into one of three domains: cognitive/thinking, affective/feeling, or psychomotor/acting. Tyler pointed out few behaviors involve just one domain; in fact, he noted, "... most behavioral events accessible to consciousness involve all these aspects" (n.d., chap. 5, p. 6). In order to label the event, as cognitive, affective, or psychomotor, one has to consider which of these aspects dominated. When one labeled a behavior in the affective domain, there needed to exist a "...significant emotional or feeling component" (n.d., chap. 5, p. 7).

Tyler identified "... interests, attitudes, values, and/or appreciations" (n.d., chap. 5, p. 7) as common ways for affective objectives to be written. He noted that these same objectives might be viewed within the cognitive domain depending upon the school's philosophy and the purpose behind the objective. Tyler illustrated that an objective calling for appreciation could mean, "...knowing or recognizing the worth of

certain works of art, music or literature'" (n.d., chap. 5, p. 8). This definition for appreciation would seem to fall under the cognitive domain. On the other hand, if the school recognized appreciation as "'responding emotionally to aesthetic characteristics in certain works of art, music, or literature,'" (n.d., chap. 5, p. 8) one would tend to classify this objective within the affective domain. In either case, the philosophy of the school would serve as the guide for classification.

In the area of affective domains, Tyler offered two caveats for consideration. First was the "political principle" which stated "... that the function of the school in a democratic society is to help the student gain the means for increasing independence in judgment and action, and not to urge him to adopt particular doctrines or views" (Tyler, n.d., chap. 5, pp. 8-9). The second was the "ethical principle" which stated "...that each individual has a right to privacy not to be invaded by the school" (n.d., chap. 5, p. 9). Schools needed to ensure objectives falling within the affective domain do not infringe upon the rights of the individual nor required the individual to confirm to any preconceived values or behaviors.

In his conclusion for chapter five, Tyler reiterated the helpfulness of a school's philosophy as a screen for educational objectives. Tyler noted, "... a philosophy must be stated clearly and the implications for educational objectives may need to be

spelled out" (n.d., chap. 5, p. 10). Only those objectives in alignment with the philosophy should be considered.

Chapter 6 - "The Use of a Psychology of Learning in Selecting Objectives"

In this final completed chapter of the 1970s revision, Tyler examined the second screen, use of psychology, for the selection of learning objectives. Tyler stated, "Educational objectives are educational ends; they are results to be achieved from learning" (n.d., chap. 6, p. 1). He explained, "Unless these ends are in conformity with conditions intrinsic in learning they are worthless as educational goals" (n.d., chap. 6, p. 1).

The use of psychology can prove to be helpful in the selection of learning objectives for several reasons, similar to his discussion in the 1949 Rationale. At the most basic level, Tyler noted that psychology of learning can guide the curriculum developers to distinguish which changes in behavior can occur from learning from those which can not. He gave the example of teaching students healthy habits, which would lead them to a more healthy life. The learning of healthy habits would not enable a student to grow taller. On a different level, the use of psychology can aid in identifying feasible goals and the length of time needed for the mastery of those goals. These goals could be determined based on the psychological knowledge

of developmental appropriateness as well as the typical sequence of development for the learning of objectives.

Also, the use of psychology could shed light on the conditions for learning which are essential in the development of objectives. One area Tyler referred to was "... the forgetting of knowledge" (n.d., chap. 6, p. 3). He referenced the results of a series of studies which were conducted at the college level where students had forgotten 50% of the course material within one year and 80% within two years of course completion. He noted that daily application of the learned knowledge would increase permanency. Another condition of learning identified was the amount of instructional time needed to master particular objectives.

Two other psychological findings have been found to be important for the condition of learning. One identified that learning could produce multiple outcomes. Tyler wrote, "In practically every educational experience, two or more kinds of educational outcomes may be expected" (n.d., chap. 6, p. 5). This finding led into the second condition for learning which stressed the importance of consistency and integration of knowledge, in the place of knowledge compartmentalization.

Next, Tyler examined different theories of learning which aided in the selection of educational objectives. He noted that these theories range from the idea of "simple conditioning" to

more complex theories such as "self-directed complex learning" (Tyler, n.d., chap. 6, p. 7). In the 1949 Rationale, Tyler discussed how theories of learning influence the type of educational objectives generated. He contrasted the theories of learning of Thorndike with that of Judd and Freeman and demonstrated the differences in the types of objectives the two contrasting theories of learning formulated. Thorndike's theory of learning called for "specific ones, very numerous and of the nature of specific habits" (Tyler, 1949, p. 42). Judd and Freeman's theory of learning called for general objectives where students "apply important scientific principles in explaining concrete phenomena" (Tyler, 1949, pp. 42-43). In the 1970s revision, Tyler once again discussed these two theories of learning; in addition he expanded his discussion to include simple conditioning as well as a more complex theory of learning.

Tyler illustrated the idea of simple conditioning as a necessary and important type of learning. Although Tyler does not name the psychologist or learning theory specifically, what he described as "simple conditioning" was similar to Pavlov's theory of classical conditioning, which Tyler's critics have accused Tyler's Rationale as promoting. He defined this theory as "... the learning of a behavior which is initiated by a clear stimulus and consists of an automatic fixed response" (Tyler,

n.d., chap. 6, p.7). Different types of habits, such as eating, cleanliness, along with other automatic responses are among the examples Tyler noted. Tyler explained, "The demands for reactions in modern society are so great that a person would soon perish if each reaction had to be examined, analyzed and dealt with in a problem-solving way" (n.d., chap. 6, pp. 7-8). Indeed, this type of learning is important; however, an automatic response to stimulus is not always appropriate. Tyler maintained there are times when an automatic response could not only "lead to the destruction of the species" but also could deny "significant opportunities for man's fuller development" (n.d., chap. 6, p. 8).

Tyler emphasized the importance of being able to make a distinction between when simple conditioning was appropriate for learning and when it would be destructive. For Tyler, the distinction could "be made only as an approximate adaption to the present and foreseeable situation." (n.d., chap. 6, p. 8). Since the habits of eating, driving, exercise and the like require an automatic response; the theory of simple conditioning would be appropriate for learning. On the other hand, when considering problems in society along with the increase of knowledge and changes in environment, the learner has to be able to change his patterns of behavior to adjust to the ever-changing world around him. Tyler pointed out the theory of

condition or automatic response would not be sufficient in this case. Tyler stated:

The inadequacy of conditioned responses arise from the changing environment which requires new human behavior patterns for coping with changes from the increasing understanding of the world and of man which opens new possibilities for people to achieve their aspirations by effective utilization of the new knowledge, and from greater acceptance of the ideal of the brotherhood of man and a new world of greater equality of opportunity, the attainment of which requires new attitudes, skills, and deeper understanding. (n.d., chap. 6, p. 9)

There is a need for more complex theories of learning.

Since the world is constantly changing, Tyler maintained there existed a need for more complex theories of learning, which would allow students to think through different situations and problem-solve as part of the learning process. Again, Tyler does not specifically name a theory of learning or psychologist but described the characteristics of the theory. He noted, "The purpose of outlining this model in some detail is to show that there is an alternative to conditioning as a conception of learning that can be used in the planning and conduct of education designed to develop persons who are socially responsible, humane, and self-renewing" (Tyler, n.d., chap. 6,

p. 15). This theory of learning emphasized the importance of relevance and meaningfulness of the objectives to be learned, as well as stressed the role that personal satisfaction played in the acquisition of new knowledge. The modeling of the desired behavior was an essential feature which provided students with an idea of what behaviors to emulate.

Rewards played a part in both theories of learning. In the conditioning theory, rewards are extrinsic focused on the gratification of the human appetites. In the more complex theory of learning, rewards are more intrinsic, focused on the inner satisfaction one receives for the learning of the new knowledge.

Another area of contrast between the two models was in the role of the student. In the conditioning theory, the students take on a passive role while the teacher performs the new learning. In order for the subject-matter to be learned, the students must be actively involved in the learning process as well as given multiple opportunities to practice the new skills. When practicing these new skills, the sequences of the practice opportunities are important. This sequential practice establishes a spiral review of the learning so that the student will see and continue to see the new knowledge multiple times and within harder content. Finally, the timing and form of feedback provided to the student was essential. In order to increase the acquisition of the newly learned behavior, specific

feedback from the teacher served as a guide for correcting and modeling the desired behaviors.

As noted earlier in the chapter, since many critics of the conditioning theory had offered no alternative theory for learning, Tyler outlined a more complex theory of learning model "... as a conception of learning that can be used in the planning and conduct of education designed to develop person who are socially responsible, humane, and self-renewing" (n.d., chap. 6, p. 15). Tyler noted that some of the critics of conditioning "... expect that the spirit of the school or the undefined interpersonal relation ... will develop children into 'good specimens of humanity'" (n.d., chap. 6, p. 15). He added that some critics "... profess that the content inherent in certain school subjects liberate and develop the responsible man" (n.d., chap. 6, p. 15). Tyler noted these claims are not supported by evidence. Tyler outlined the previously discussed complex learning theory as a guide for curriculum developers. According to Tyler, this model "... is not a vague, global conception but delineates features that can be defined, principles that can be followed, criteria that can be used to test the effectiveness of the model in action" (n.d., chap. 6, p. 15). He believed that with the implementation of the common characteristics of the learning theory he outlined, the schools could produce responsible citizens.

Curriculum makers have used many other theories of learning. Each theory will affect the selection of educational objectives in different ways. Tyler described the theory of "'natural development'" (n.d., chap. 6, p. 16) by Jean Piaget as a theory, which called for grade placement of learning objectives. Jerome Bruner's theory of learning maintained, "... the acquisition of these basic concepts is a matter of learning that may vary in age with the experiences available to or provided for children" (n.d., chap. 6, p. 16).

In conclusion, Tyler outlined several steps for the use of psychology in the selection of objectives. He advised curriculum makers to "... write down the important elements of a defensible psychology of learning, and then to indicate in connection with each main point what possible implications it might have for educational objectives" (Tyler, n.d., chap.6, p. 18). These connections and implications for educational objectives would serve as the screen for the selection of the objectives. Some objectives may be selected because they are consistent with the school's psychology of learning. Other objectives may be rejected, because they are "... probably unattainable, inappropriate to the age level, too general or too specific, or otherwise in conflict with the psychology of learning" (n.d., chap. 6, p. 18). Therefore, by using

psychology of learning as an additional screening source, the number of possible educational objectives can be reduced.

Summary

During the 1970s as part of the Ralph Tyler Project, Tyler began drafting revisions for *Basic Principles of Curriculum and Instruction*, which are archived at the University of Chicago. At the time of termination, a preface and six drafted chapters had been completed. These chapters were expansions of chapter one of Tyler's 1949 Rationale. This chapter examined the preface and the six chapters Tyler drafted as revisions and additions to *Basic Principles of Curriculum and Instruction*.

In the preface, Tyler (1977) explained that the book "grew out" (Preface, p. 1) of his many different educational experiences, including his work with the Eight-Year Study. Although the wording of the four fundamental questions was different than in the 1949 Rationale, the four areas of focus remained the same: educational purposes or objectives, learning experiences, organization, and assessment. Tyler emphasized in the Preface that the four questions were not linear in nature. Although he stated this in the 1949 Rationale, the statement appeared on the last page of the monograph.

In chapter one entitled, "Educational Objectives," Tyler (1977) focused on the importance of educational objectives and answering the question: "Why should an educational institution

have clearly defined objectives?" (chap. 1, p. 1). He emphasized the role of education in a democratic society was to help students "become increasingly able to meet his needs, to achieve his purposes, to participate constructively in the society, and to realize his own potential" (pp. 1-2).

Chapter two of the 1970s revision focused on the first source for deriving educational objectives - the learner. Not only do the needs of the learner serve as a starting point for the identification of learning objectives, but also the interests, aspirations and expectations of the students guide educators in determining the educational goals.

In chapter three of the 1970s revision, Tyler examined the source of contemporary life as means for deriving objectives. He offered two main arguments in favor of this source: the school's responsibility for socialization and transfer of training.

Chapter four of the 1970s draft focused on the third main source - subject matter. Tyler recommended three purposes for the use of subject matter specialists in the creation of educational objectives: subject matter specialist, general education, and occupational training.

In chapter five of the 1970s revision, Tyler focused his discussion on the use of the school's philosophy of learning in order to help reduce the number of objectives that would be

generated from the three sources: the learner, society, and subject matter. Tyler described the purpose of an educational philosophy as being a statement that "... attempts to define the nature of a good life and a good society" (n.d., chap. 5, p. 3) and addresses three different values: democratic, material, and success.

Chapter six, which focused on the use of psychology for the selection of learning objectives, was the final completed chapter of the 1970s revision. The different theories of learning were discussed. The comparative discussion of simple condition with a more complex theory of learning was not included in his 1949 Rationale. Tyler maintained that schools could produce responsible citizens through the implementation of the learning theory he outlined. According to Tyler, by using the psychology of learning as an additional screening source, the number of possible educational objectives can further be reduced.

Chapter 5

ANALYSIS OF THE 1970S REVISION OF BASIC PRINCIPLES FOR CURRICULUM
AND INSTRUCTION

This chapter examines three major writings by Ralph Tyler published after *Basic Principles of Curriculum and Instruction* in 1949. These writings highlight some of Tyler's developments and changes in thought concerning the Rationale from the 1950s to the 1970s, when he began a revision of *Basic Principles of Curriculum and Instruction*, which was described in the previous chapter. The conclusion of this chapter examines key changes in Tyler's thinking that emerge from these published and unpublished works, and compares those areas to the original Rationale.

Tyler's Published Articles Reflecting Modifications
to the Rationale*"Tyler's (1958) 'New Criteria for Curriculum Content and Methods'"*

During the 1950s, "New Criteria for Curriculum Content and Methods," was one of Tyler's first significant statements concerning the Rationale since its publication in 1949. This statement was originally presented as a speech at the University of Chicago concerning the American High School. To begin with, Tyler (1958) applauded the American high school because it had "contributed tremendously to the 'American dream'" and had made

"tremendous advances" (p. 170). He gave credit to high school graduates by noting, "they have learned many significant things... The graduates are more effective in their occupations, they do more reading... have more information about public affairs, and they are more concerned about the education of their children" (p. 170). Tyler stated, "On the whole, the American high school has changed the cultural level of the adult population in this country" (p. 170).

Although the American high school had made many accomplishments, Tyler (1958) noted six deficiencies directly related to the curriculum, which he used in the broad sense of the term to include "the objectives sought in the educational program; the learning experiences provided; the way in which the learning experiences are organized into courses, sequences, and the like; and the means used for appraising the progress that students are making" (pp. 170-171). These identified deficiencies included:

1. Although almost all youth of high-school age are in school, they do not have equal educational opportunity. Success in most high-school courses requires a fairly high level of verbal facility and a background of middle-class experience with books and language.
2. The failure to enlarge and extend the intellectual and aesthetic interests of many students.

3. Development in the high school of an understanding and appreciation of intellectual and aesthetic values has not kept pace with the understanding and satisfactions which young people have in the extra curriculum activities of the school.
 4. The failure to extend the informal social contacts existing between students and teachers into cordial relations that will help vitalize classroom learning.
 5. The student personnel services are viewed as ends in themselves and not as aids to learning.
 6. Although many students learn a great deal from their high-school experience, there are still important educational areas which they touch only lightly and experience inadequately. Often a limited experience in an area closes, rather than opens, doors for the students.
- (pp. 171 - 173)

In spite of these weaknesses, Tyler (1958) stated, "The purpose of mentioning deficiencies here was not to find fault but to suggest opportunities for improvement in the years ahead" (p. 173). Tyler recommended five new criteria for curriculum content in order to help guide improvement.

The first new criterion Tyler (1958) identified was to "emphasize tasks appropriate for the school" (p. 173). This criterion focused on distinguishing between those educational

tasks that were appropriate for the school to teach from those that were appropriate for the home, church, clubs, radio, newspapers, televisions, and other social agencies to teach. In order to facilitate the process, Tyler outlined five kinds of learning tasks:

1. One of these is the learning of complex and difficult things that require organization of experience and distribution of practice over rather long periods of time.
2. It is appropriate for the school to provide learning opportunities in cases in which the essential factors are not obvious to one observing the phenomenon and the principles, concepts, and meanings must be specially brought to the attention of the learner.
3. It is appropriate for the school to provide learning experiences that cannot be provided directly in the ordinary activities of daily life [geography and history].
4. A kind of learning particularly appropriate for the school is that which requires more "purified" experience than is commonly available outside the school. The school can provide examples for study and enjoyment which represent the best available [art, music, literature, or human relations].

5. Another kind of learning particularly appropriate to the school is that in which re-examination and interpretation of experience are essential. (pp. 173-175)

The second criterion Tyler (1958) offered for curriculum improvement was to "utilize scholarly contributions as vital means of learning" (p. 176). Tyler stressed the importance of real life application for the fields of science, scholarship and the arts. He posed that the arguments concerning the high school curriculum should focus on the "either-or" - "textbook memorization or direct experience with the problems of life" (p. 176). Tyler stated, "Our effort should be not to make the classroom more like life outside the school but to make the life outside the school more in harmony with the values, purposes, and knowledge gained from the classroom" (p. 176).

The third criterion Tyler (1958) identified was to "seek equal educational opportunity for all" (p. 177). Tyler stated, "The improvement of the high-school curriculum requires that we seek more intelligently and energetically than we have in the past to achieve the ideal of equality of educational opportunity for all" (p. 177). In order to accomplish this goal, Tyler believed it "requires different means for students with varied backgrounds, but it does not mean the denial of opportunity to learn to think, feel, and act as adequately as possible on the

aspects of life that matter" (p. 177). Tyler acknowledged that reaching all children would be major task for the next twenty years.

The fourth criterion for curriculum content and method was to "apply our knowledge of laws of learning" (Tyler, 1958, p. 177). Through the years, educators, psychologists, and others, have identified nine essential conditions, which lead to effective learning and these were recommended procedures for selecting learning experiences:

1. Motivation
2. Stimulation to try new ways of reacting
3. Guidance of the new behavior
4. Materials appropriate to work on
5. Time to practice
6. Satisfaction from the desired behavior
7. Opportunity for sequential practice of desired behavior
8. High standards of performance are set
9. Continuance of learning when teacher is no longer around. (pp. 178-180)

The fifth and final criterion Tyler (1958) presented was to "provide administrative leadership" (p. 180). Tyler believed improving curriculum "requires active administrative leadership. Rarely is curriculum development effective when the school administration is not involved" (p. 181). He continued by

stating, "The extent to which teachers deeply involve themselves in the improvement of the curriculum is greatly influenced by the attitude shown by the administration and the intelligent steps taken to help and to reward the teachers' efforts" (p. 181). According to Tyler, leadership matters in curriculum improvement.

"Tyler's (1966) 'New Dimensions in Curriculum Development'"

During the 1960s, one article by Tyler stood out as having direct impact on the clarification and modification of the Tyler Rationale: "New Dimensions in Curriculum Development."

Tyler's (1966) "New Dimensions in Curriculum Development" was written as a result of being asked to comment on his "'rethought, changed, updated, clarified'" (p. 25) position in the Rationale. Tyler commented, "It is hard for one introspectively to chart the course of this thinking over 15 years in an area that has been as active as the field of curriculum development" (p. 25). He stated, "Hence, what I have to say is likely to be incomplete and, at points, in error" (p. 25). Tyler noted that the Rationale's original four areas, learning purposes, experiences, organizations, and evaluation along with the use of the two screens for the identification of the learning experiences were still appropriate. However, Tyler emphasized as he did in the original text "the sources can be used in any order" (p. 26). The philosophy and psychology

screens were used to identify objectives, which could be included in the program of study.

The area of greatest change, according to Tyler (1966), related to his thinking concerning the "conceptions of the learner and of knowledge and to the problem of the level of generality appropriate for an objective" (p. 26). He explained that through his practice of observations and discussions with educators, he found "the use of programmed materials" (p. 26) which brought contrasting theories of learning and formulations of objectives. One theory perceived the learner as passive, being "'conditioned' by the learning situation so as to respond in the way specified by the teacher or the designer of the program" (p. 26). On the other hand, the other theory perceived the learner as "an active agent exploring learning situations so as to learn to manipulate them for his purposes" (p. 26). Tyler noted Dewey's description of the "truly educative environment" as being "a balance between factors under the learner's control and those that he could not influence" (p. 26). He described a learning environment where the student has no control over the objectives or purposes he is taught results in rebellion, conformity, but not mastery. In contrast, an environment where the student controls all experiences and purposes results in "whimsical or undisciplined behavior" (p. 26). According to Tyler, "Desirable learning results from the learner recognizing

factors in the situation to which he must adapt and the others that he can manipulate in terms of his purposes" (p. 26). These are the types of learning experiences Tyler supported. He stated, "I now think it is important in curriculum development to examine the concept of the learner as an active, purposeful human being" (p. 26). Tyler maintained this "psycho-philosophic factor" (p. 26) needed to be considered early in the process of formulating objectives.

Tyler (1966) noted, "the structure of discipline" (p. 26) as another area of change. He stated some of the programmed materials, being used in the schools at that time, assumed that the learning was not an organized process, but happened randomly. Tyler argued,

Learners can understand the structure of the discipline, that is, the questions it deals with, the kinds of answers it seeks, the concepts it uses to analyze the field, the methods it uses to obtain data, and the way it organizes its inquires and findings. (p. 26)

Tyler maintained it was important to explore the nature and structure of the knowledge before "deriving and formulating objectives" (p. 26) in a given area.

The "level of generality appropriate for an objective" was the third area Tyler (1966) identified as being an "area of greatest change in my thinking relating to the formulation of

objectives" (p. 26). He noted the level of generality in objectives was "perhaps the most puzzling question about objectives" (p. 26) which the curriculum developers were facing during those times. Tyler referred to his brief contrast of "highly specific objectives" (p. 26) compared to generalized objectives in his 1949 Rationale. He described the studies conducted by Thorndike and others who measured the learner's ability to generalize knowledge without having received any specific instruction. These studies claimed a "low level of accurate generalization" (p. 26). Tyler acknowledged that many have interpreted these findings to mean that objectives should be written specifically since learners lack the ability to generalize behaviors.

Tyler (1966) contended that with "carefully controlled studies" (p. 26) where the level of generalization is defined, learners could be successful. Tyler (1966) suggested "aiming at as high a level of generalization as the experiments show to be successful" (p. 26). This would enable the student to "perceive and use a generalized mode of behavior, as shown by his ability to deal appropriately with the specifics subsumed under the generalization" (p. 26). Tyler recommended "the level of generality of the objective should then be stated in the curriculum plan, with specifics used as illustrations, rather than treating the specifics as ends in themselves" (p. 26).

In addition, Tyler (1966) noted because his work and studies especially considering the use of factor analyses in relation to the level of generality of objectives, his thoughts concerning the "planning of learning experiences have been elaborated considerably" (p. 27) since the 1949 Rationale. In the 1949 Rationale, Tyler identified five principles for planning learning experiences:

1. The student must have experiences that give him an opportunity to practice the kind of behavior implied by the objective.
2. The learning experience must be such that the student obtains satisfactions from carrying on the kind of behavior implied by the objective.
3. The reactions required by the learning experiences are within the range of possibility for the students involved.
4. There are many particular experiences that can be used to attain the same educational objectives.
5. The same learning experiences will usually bring about several outcomes. (as cited in Tyler, 1966, p. 27)

Tyler noted these five principles did not provide as much guidance as necessary in order to derive learning experiences. Therefore, Tyler modified the five and added five more for a total of 10 principles. In addition, Tyler changed the title from "general principles" to "conditions for effective learning"

(p. 27). The first two principles or conditions remained the same as stated in the 1949 Rationale. The new eight conditions are:

3. The motivation of the learner, that is, the impelling force for his own active involvement, is an important condition.
4. Another condition is that the learner finds his previous ways of reacting unsatisfactory, so that he is stimulated to try new ways.
5. The learner should have some guidance in trying to carry on the new behavior he is to learn.
6. The learner should have ample and appropriate materials on which to work.
7. The learner should have time to carry on the behavior, to practice it until it has become part of his repertoire.
8. The learner should have opportunity for a good deal of sequential practice. Mere repetition is inadequate and quickly becomes ineffective.
9. Another condition is for each learner to set standards for himself that require him to go beyond his performance, but standards that are attainable.
10. The tenth condition, related to the ninth, is that to continue beyond the time when a teacher is available the learner must have means of judging his performance to be

able to tell how well he is doing. Without these means, his standards are of no utility. (p. 27)

In addition to the three noted changes in his thinking since the 1949 Rationale, Tyler (1966) acknowledged that he had added to his "thinking about the total curriculum and the instructional program recognition of the influences upon learning of the school environment, the peer group values and practices, and the types of personality identification available in the school" (p. 27). Tyler emphasized that each area could be a power influence of the objectives of the schools as well as influence whether or not the objectives are met. Tyler recommended that each area should be considered carefully and ways to utilize the different resources should be examined when developing an instructional program.

Tyler concluded his article by noting that the areas of organization and evaluation had not been discussed. He stated, "Recently, I have been giving considerable attention to the problem of organization and to the elaboration of a more helpful rationale for this area" (Tyler, 1966, p. 28). During this time, Tyler was working on an evaluation project, "Assessing the Progress of Education" (p. 28), and he planned to share his new thoughts on organization and evaluation at a later time.

"Tyler's (1976) 'Two New Emphases in Curriculum Development'"

During the 1970s, *Basic Principles of Curriculum and Instruction* was in the process of being revised. Robert Leeper, editor of *Educational Leadership*, was aware of this revision and requested for Tyler to share the changes he was making from the original Rationale. In his article, "Two New Emphases in Curriculum Development," Tyler (1976) noted two areas that he would give greater emphasis: "the active role of the student in the learning process and to the implications student involvement has for curriculum development" and "the need for a comprehensive examination of the non-school areas" (p. 62). Tyler expressed these changes became evident through his active involvement with school and his experiences since the publication for the original Rationale. In addition, Tyler noted the need for reexamining the four fundamental questions as a result of the changes in society over the past 25 years as well as the information that had been gathered from the "large-scale curriculum development projects" (p. 62). He noted not all the anticipated changes to the 1949 Rationale would be addressed in this article, but rather it would focus on the two areas that he felt needed greater emphasis. Tyler stated the four fundamental questions outlined in 1949 Rationale would remain unchanged in the revision because their significance had been confirmed through experiences.

According to Tyler (1976), greater emphasis needed to be placed on the "active role of the learner" (p. 62). He referenced the 1960's curriculum projects, which placed emphasis on the "'educational delivery system,'" and "'teacher-proof materials'" at the expense of learners' needs and interests. Tyler stressed that "learning is a process in which the learner plays an active role" and that the "only behavior that is truly learned is the behavior that the learner carries on with consistency so that it becomes part of his or her repertoire of behavior" (p. 63). He maintained, "A human being cannot be forced to learn intellectual and emotional behavior patterns" (p. 63). Tyler explained that only with the use of coercion or rewards will the learner attempt a learning experience that he finds unsatisfying. In order for the learning to become part of the learner's repertoire, the learner must: "(a) see the way in which what is learned can be used, and (b) have the opportunity to continue employing the learned behavior in the various situations he or she encounters" (p. 63). Tyler acknowledged that these learning conditions have significance to selecting and designing learning experiences as well as to transferring the learning.

The active role of the learner, according to Tyler (1976), has significant implications for selecting educational objectives as well as for creating and organizing learning

experiences. Tyler suggested four guidelines to consider when selecting the objectives:

1. Stress those things that are important for students to learn in order to participate in contemporary society.
2. Be sound in terms of the subject matter involved.
3. Be in accord with the educational philosophy of the institution.
4. Be of interest or be meaningful to the prospective learners, or they should be capable of being made so in the process of instruction. (p. 63)

In regards to learning experiences, Tyler stressed the importance of clearly defining the behavior so that students can identify the behavior they are learning. In addition, the learning experience must be within their present level of achievement. In other words, students need to understand what it is that they need to know and be able to do, and this knowing and doing needs to be within their ability range in order for the students to feel confident enough to attempt the learning task. As the learning tasks are being designed, Tyler recommended attention be given to the sequencing of the tasks. He stated, "Sequences that are designed solely in terms of the logic of the discipline are not likely to be effective in meeting essential conditions for learning" (p. 64).

Tyler proposed sequencing the learning tasks so that the tasks became increasingly more difficult or the levels for mastery increased.

In addition to the selection of objectives and designing of learning experiences, Tyler maintained the active role of the student enabled him/her to transfer the learning within the school to situations outside of the school. Tyler (1976) reminded the reader that the purpose of school is "to help students acquire behavior that is important for constructive out-of-school activities" (p. 64). He noted this lack of transfer from school learning to application in society "is a problem related to the active role of the learner and one that has long been central to educational psychology" (p. 64). Tyler illustrated the findings of the National Assessment of Educational Progress (NAEP) during 1972-73, which conducted a mathematical assessment of knowledge and skills of 17 year olds throughout the nation. The study found that over 90% of students could answer simple computation problems involving addition, subtraction, and division of whole numbers. The percentage for multiplication was roughly 88%. In contrast, when it came to the application of mathematical knowledge in real life problem solving situations, approximately 45% could answer correctly. Tyler inferred from this data that students were following a "drill" curriculum focused on computation "at

the expense of practice in applying mathematics to situation common to contemporary life" (p. 64). For Tyler, students should be involved in application of knowledge to relevant situations in society. In addition to the NAEP results, Tyler reported that 50% of high school graduates and dropouts claimed many of the classes they took had no relevance to real life situations. He noted, the "'Get back to basics'" movement had limited the focus of education and the "importance of transfer-of-training is forgotten" (p. 65). Tyler believed,

Clearly, the curriculum rationale should strongly emphasize that, in curriculum planning, serious attention should be given to the interests, activities, problems, and concerns of the students. Where possible and appropriate, the students themselves should participate in planning and evaluating the curriculum. (p. 65)

The second area of change which Tyler (1976) discussed needed more emphasis involved the "non-school areas of student learning" (p. 65). According to Tyler, the educational objectives of the school provided only part of the total education a student needs. He stated,

What a young person experiences in the home, in school, in social activities, in the community, in the chores and jobs he or she carries on, in the religious institutions where he or she participates, in reading, in listening to radio and

viewing TV - all are included in the total educational system through which the individual acquires his or her knowledge, ideas, skills, habits, attitudes, interests, and basic values. (p. 65)

In order to improve the "total educational system," Tyler (1976) recommended: "making maximum use of the school's resources, strengthening the out-of-school curriculum, and helping students deal with the non-school environment" (p. 67). In order to strengthen the curriculum outside the school, Tyler proposed that curriculum developers and community leaders or council work together to assess and identify the educational needs and resources available to the students and outline a plan for meeting the identified needs.

Similarities and Differences between the Tyler Rationale and the 1970s Revision

The 1949 publication of *Basic Principles of Curriculum and Instruction* along with the drafted 1970s Revision of the Rationale share similarities and differences, which will be examined in this section. It is important to keep in mind that only six chapters were drafted for the revisions; therefore, the 1970s revisions did not address all the areas of the Rationale that Tyler intended in his proposed outline for the revisions. In fact, the drafted chapters of the 1970s Revision only focused on the first fundamental question for curriculum development,

which Tyler discussed in chapter one of the 1949 Rationale. This question dealt with the educational purposes of the school and the sources used to derive the educational objectives. The proposed outline for the 1970s Revision is noted in table 2. Tyler's revised chapters did not follow this proposed outline. From examining the revised chapters archived at the University of Chicago, it became evident that Tyler divided his discussion on objectives and sources for objectives, which he had outlined as one chapter in the proposed outline, and developed the discussion of each source into its own individual chapter. Table 3 compares the chapter contents from the 1949 version of *Basic Principles of Curriculum and Instruction* with the contents from the 1970s Revision. Unfortunately, Tyler's revised chapters ended with the role of psychology, leaving a minimum of four chapters, which one could infer would have focused on learning experiences, organization of learning experiences, evaluation, and the building of curriculum unchanged.

Table 2.

Proposed outline for Revision of *Basic Principles of Curriculum and Instruction*
 October 24, 1975

Chapters	Outline
Chapter One	Introduction Historical Background Purpose of the book Who may find the book useful? How can the book be used?
Chapter Two	Questions (or tasks) in curriculum development
Chapter Three	Objectives Why objectives? Problems in selecting objectives

Table 2 (continued).

Proposed Outline for Revision of *Basic Principles of Curriculum and Instruction*

October 24, 1975

Chapters	Outline
Chapter Three (continued)	Sources of objectives
	How objectives are derived
Chapter Four	Learning experiences
	Conditions for effective learning
	Connections between learning and teaching
	Designing learning experiences for
	multiple means and outcomes
	Materials for instruction
Chapter Five	Organization of learning experiences
	Why is organization important?
	Purposes for organizing

Table 2 (continued).

Proposed Outline for Revision of *Basic Principles of Curriculum and Instruction*
 October 24, 1975

Chapters	Outline
Chapter Five (continued)	What is involved in organization? Principles, elements, structures Designing organizations
Chapter Six	Evaluation Broad definition of evaluation Techniques
Chapter Seven	Curriculum development in practice Who are involved? How organized? Illustrate: Where do they begin?

Note. From "Proposed Outline for Revision," of *Basic Principles of Curriculum and Instruction* by R. Tyler, October 24, 1975, Tyler, Ralph W., Papers, [Box 4, Folder 1], Special Collections Research Center, University of Chicago Library.

Table 3.

1949 and 1970s Comparison of *Basic Principles of Curriculum and Instruction*

1949 Original Rationale

1970s Drafted Revisions

Introduction

Preface

Chap. 1 - Educational Purposes

Chap. 1 - Educational Objectives

Studies of Learner

Importance of Objectives

Studies of Contemporary Life

Sources for Objectives

Studies of Subject Matter

Author's Position

Use of Philosophy

Chap. 2 - Learner as Source

Use of Psychology

Needs of Learners

Stating Objectives

Student's Interests

Chap. 2 - Selecting Learning

Student Aspirations

Experiences

Methods for Studying

Meaning of "Learning Experiences"

Deriving Objectives

General Principles for Selecting

Table 3 (continued).

1949 and 1970s Comparison of *Basic Principles of Curriculum and Instruction*

1949 Original Rationale

1970s Drafted Revisions

Chap. 2 - Selecting Learning

Chap. 3 - Studies of Contemporary Life

Experiences

Why Study

(continued)

Criticisms of Use

Illustrations of Learning

Illustrations of Use

Experiences

Conducting Studies

Chap. 3 - Organizing Learning

Methods of Studying

Experiences

Deriving Objectives

What is Organization?

Chap. 4 - Subject Matter as Source

Criteria for Organization

Why Study

Elements to Organize

Functions of Subject Matter

Organizing Principles

Deriving Objectives

Organizing Structure

Chap. 5 - Use of Philosophy

Process of Planning a Unit

Chap. 6 - Use of Psychology

Table 3 (continued).

1949 and 1970s Comparison of *Basic Principles of Curriculum and Instruction*

1949 Original Rationale

1970s Drafted Revisions

Chap. 4 – Evaluating Learning

Experiences

Needs for Evaluation

Basic Notations

Procedures

Using Results

Other Values and Uses

Chap. 5 – Building Curriculum

Note. From *Basic Principles of Curriculum and Instruction*, by R. Tyler, 1949; From 1970s Revisions, Tyler, Ralph W., Papers, [Box 4, Folder 1], Special Collections Research Center, University of Chicago Library.

Therefore, when examining the similarities and differences in the 1949 Rationale and the 1970s Revision, the examination can focus only on the wording of the four fundamental questions for curriculum development along with the three sources and two screens for deriving educational objectives.

"Four Fundamental Questions in the 1949 Rationale and the 1970s Revision"

Tyler focused curriculum development on four areas: selecting educational purposes, selecting learning experiences, organizing learning experiences, and evaluation. In the 1949 publication of *Basic Principles of Curriculum and Instruction*, Tyler outlined four questions that must be answered in order to develop curriculum. These were:

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? (Tyler, 1949, p. 1)

In Tyler's (1976) "Two New Emphases in Curriculum Development," he was asked to share with the readers of

Educational Leadership some the changes anticipated in the revision of the Rationale. Tyler stated,

As I now review *Basic Principles*, a work more than 25 years old, I find no reason to change the fundamental questions it raises:

- What should be the educational objectives of the curriculum?
- What learning experiences should be developed to enable students to achieve the objectives?
- How should the learning experiences be organized to increase their cumulative effect?
- How should the effectiveness of the curriculum be evaluated? (p. 62)

In the Preface of the 1970s Revision of *Basic Principles of Curriculum and Instruction*, which was being revised when he wrote the 1976 article on "Two New Emphases in Curriculum Development," Tyler (1977) outlined the four fundamental questions as follows:

1. What things shall be taught?
2. What shall the students do to learn these things?
3. How should these learning experiences be organized?
4. How shall the effectiveness of the curriculum be appraised? (Preface, p. 2)

Although the Tyler's four questions continued to focus on educational purposes, selecting learning experiences, organizing learning experiences, and evaluation, the wording of the questions changed from the 1949 Rationale to the 1970s Revision especially when referring to question two, selecting learning experiences. Since Tyler did not complete his chapter on learning experiences, one is unaware of the changes he would have made in reference to learning experiences. However, when taking into account Tyler's (1976) article on "Two New Emphases in Curriculum Development," he clearly proposed a greater focus on the "active role of the student in the learning process and to the implications student involvement has for curriculum development" (p. 62). Therefore, one can infer Tyler's purpose in changing the wording from "What educational experiences can be provided that are likely to attain these purposes?" (Tyler, 1949, p. 1) which placed greater emphasis on the curriculum developer selecting or designing learning experiences, to "What shall the students do to learn these things?" (Tyler, 1977, Preface, p. 1) was to emphasize the importance of students being active in the learning process.

"The 1949 Rationale and the 1970s Revision - What it is and what it is not"

In both the 1949 Rationale and the 1970s Revision, Tyler stated upfront, in the Introduction of the Rationale and in the Preface of the Revision, the purpose of the text.

In the 1949 Rationale, Tyler began his introduction by stating, "This small book attempts to explain a rationale for viewing, analyzing and interpreting the curriculum and instructional program of an educational institution" (p. 1). Tyler outlined the four fundamental questions that needed to be answered in order to develop curriculum. However, Tyler does not attempt to answer these questions "... since the answers will vary to some extent from one level of education to another and from one school to another" (pp. 1-2). Tyler added that this book was "not a textbook, for it does not provide comprehensive guidance and readings for a course" (p. 1). Finally, he stated that *Basic Principles of Curriculum and Instruction* was "... not a manual for curriculum construction, since it does not describe and outline in details the steps to be taken by a given school or college that seeks to build a curriculum" (Tyler, p. 1). Tyler recommended procedures, which "... constitute a rationale by which to examine problems of curriculum and instruction" (p. 2).

Similar to his 1949 introduction, in the Preface of the 1970s Revision, Tyler (1977) noted that the revised text, "does not present a theory of the school curriculum nor a catalogue of contemporary theories. It does not describe various curriculum forms and content" (Preface, p. 3). Tyler defined the purpose of the text "to help those engaged in curriculum development by furnishing a rationale for their efforts" (p. 3).

Critics have argued whether or not the Rationale represented a "*practical theory*" (Hlebowitsh, p. 1992, p. 544). Hlebowitsh maintained that indeed the Rationale did represent a "*practical theory* that can inform and guide argumentation for, and the conduct of, schooling" (p. 544). Kliebard (1995) countered, "I have never come across a scintilla of credible evidence that the Rationale is a '*practical theory*' in the sense that, when followed, it actually eventuates in a better curriculum than one in which it is ignored" (p. 85). Although Tyler himself pointed out that the purpose of the original and revised text was not to present a theory, it is important to differentiate Kliebard's claims that the Rationale did not present a "practical theory" (Kliebard, 1995, p. 86) from Tyler's explanation.

Kliebard (1995) claimed the Rationale did not represent a "practical theory" because it was not as "'practical'" as it seemed "on the surface" (p. 86). In addition, Kliebard

explained his process of curriculum development as "making wise and informed decisions in relations to a highly complex task - not a sequence of steps" (p. 86). Therefore, for these two reasons, Kliebard claimed the Rationale would not represent a "*practical theory*" (p. 86) for curriculum development. On the other hand, Tyler (1977) stated "The present book, like the earlier syllabus, does not present a theory of the school curriculum nor a catalogue of contemporary theories" (Preface, p. 3). He continued, "It is designed to help those engaged in curriculum development by furnishing a rationale for their efforts" (p. 3). Tyler added that the sequence of answering the questions did not have to occur in any other, but they would need to be reviewed continuously during the development of the curriculum. Therefore, Tyler was explaining curriculum development as a "highly complex task - not a sequence of steps" (Kliebard, 1995, p. 86).

Tyler did emphasize two important facts in the 1970s Revision, which were not included, at least not upfront, in the 1949 Rationale. First, Tyler described how different educational institutions could answer the four questions for curriculum development differently, which he learned through his involvement with the Eight-Year Study. Tyler explained that his experience working with the different schools as they collected

data in order to answer the four questions led him to create the outline for the Rationale.

The other area of significance, which Tyler (1977) outlined in the Preface of the Revision, was "there is no particular sequence in which the four guiding questions should be examined" (Preface, p. 3). Critics have described Tyler's Rationale as a linear model, which was noted in previous chapters. In the Preface, Tyler explicitly stated, "Although most persons start with the question of objectives, one can begin with any of the four questions and work through the others" (p. 3). What Tyler was clearly proposing was a problem-solving model, which would require continuous review of all four questions. "The 1949 Rationale and the 1970s Revision on educational objectives"

Tyler began both the 1949 Rationale and the 1970s Revision with a discussion of educational objectives. In the 1970s Revision, Tyler devoted the first chapter to explaining the importance of objectives, the sources used to derive objectives, and his position concerning objectives. This was in contrast to the brief three-page discussion in the 1949 Rationale.

In both texts, Tyler (1949, p. 3, 1977, p. 6) defined objectives as "consciously willed goals" and as "matters of choice". In addition, he stated, "objectives should be the considered value judgments of those responsible for educational

programs" (Tyler, 1949, p. 4, 1977, p. 6). Tyler explained that a great deal of debate between the progressives, essentialists, and sociologists or social functionists (as he noted in the Revision), as to what sources to use in order to derive objectives. A brief explanation of the role of philosophy was included in both texts.

Tyler focused the beginning of chapter one of the 1970s Revision on the importance of educational objectives. He stated the purpose of education in a democratic society was to help students "become increasingly able to meet his needs, to achieve his purposes, to participate constructively in the society, and to realize his own potential" (Tyler, 1977, chap. 1, pp. 1-2). This would be accomplished through "a clear conception of objectives" (p. 2). According to Tyler, clearly stated objectives were important because they helped to establish a common language for communication between teachers, teachers and students, as well as the public. In addition, the objectives guided the teachers in their selection of new instructional materials. For Tyler, "clear objectives are important in planning an educational program, conducting it, appraising it, improving it, and explaining it to the appropriate public" (p. 6). This explanation of the importance of objectives was discussed briefly on page three of the 1949 Rationale and later

in more detail toward the end of chapter one; however, the topic of objectives had been an issue of debate among critics.

Concerning Tyler's explanation of the sources used for deriving educational objectives, in the 1970s Revision, he provided a brief history of the focus of objectives prior to the twentieth century which included a concise overview of the theory of faculty psychology and the doctrine of formal discipline. He included experimental findings of Thorndike and other, which refuted the claims of mental training and noted these investigations had a significant impact on curriculum development.

Tyler concluded the revised chapter on educational objectives by noting his position, which he also stated in the 1949 Rationale. He stated, "The position I take is that no single source of information is adequate to provide a basis for wise and comprehensive decisions about objectives and that no one of the sources can be disregarded" (Tyler, 1977, chap. 1, p. 13). Tyler does add a statement in the 1970s Revision concerning the role that philosophy and psychology play in prioritizing objectives.

"The 1949 Rationale and the 1970s Revision: The learner as a source for educational objectives"

The learner as a source for deriving educational objectives was one area that Tyler wrote about in previous articles that

would receive greater emphasis in the 1970s Revision. In the 1970s Revision, Tyler wrote over twice as much on the learner as a source than he wrote in the 1949 Rationale.

Tyler began the 1970s Revision similar to the 1949 Rationale by defining education. However, he made a slight change in his wording of education in the 1970s Revision by focusing the action on the student. He defined education as "a process by which the student learns certain desired patterns of behavior" (Tyler, 1977, chap. 2, p. 1). In the 1949 Rationale, Tyler defined education as "a process of changing the behavior patterns of people" (p. 5). In both situations, behavior was used "in the broad sense to include thinking, and feeling as well as overt action" (Tyler, 1977, chap. 2, p. 1). Tyler's 1970s definition clearly focused the attention on what the student would do thereby emphasizing the importance of the student playing a more active role in the educational process.

In both texts, Tyler defined the two definitions of needs and illustrated application of both definitions. Likewise, Tyler outlined the steps involved for identifying the interests and needs of students. He pointed out in both texts that lists of students' needs do not always correspond to appropriate educational objectives. Tyler (1949) emphasized for the teachers to "identify implications relevant to educational objectives and not confuse them with implications that do not relate to

education" (p. 15). In addition, Tyler pointed out the role that norms and philosophy of life would play in guiding the teachers through their interpretation of the data collected concerning the needs and interest of learners.

In the 1949 Rationale, Tyler outlined different methods that could be used for conducting studies on the needs and interests of the learners. He included observations, student interviews, parent interviews, questionnaires, tests, and community records and gave a brief description of each method. In the 1970s Revision, Tyler included all the methods recommended in the 1949 Rationale and added the use of student essays. He described student essays as "brief, informal, and quiet sharply focused" often "in the form of an unfinished opening sentence" (Tyler, 1977, chap. 2, p. 32). Also with the 1970s Revision, Tyler described the different methods for gathering information in more detail citing the uses, limitations, and skills needed, and the types of data generated.

In the 1970s Revision, Tyler (1977) included four additional sections in the chapter on learners as a source for educational objectives. These sections included:

1. Relationship of Needs to Objectives
2. Translating Needs into Objectives

3. Relating Teaching Goals to Students Needs: An Illustration

4. Student Aspirations and Expectations

Within the section on "Relationship of Needs to Objectives" (Tyler, 1977, chap. 2, p. 7), Tyler stated, "Meeting students' needs is not, primarily, the function of an educational institution" (p. 8). For Tyler, the function of schooling was "to educate students in such a way that they themselves are better able to meet their own needs ... to help students acquire those patterns of behavior which assist them in meeting all of their basic needs" (p. 8). The focus here again was on the student, and what the student was able to do, not what the teacher planned or organized for the student to learn, emphasizing a more active role for the student.

In order for the school to assist students in acquiring the necessary behavior changes to allow students to meet these basic needs, the information concerning the students' needs must be translated into teaching goals or objectives. In the section on "Translating Needs into Objectives" Tyler (1977) identified three generalizations for aiding the classroom teacher in translating these needs into educational objectives:

1. Student needs imply educational goals when the student is not able to meet the needs satisfactorily without developing new patterns of behavior, that is,

without learning something. If he is able to meet his needs without further learning, then such needs do not suggest significant teaching goals.

2. Teaching goals can be derived from the needs of students by identifying the patterns of behavior which will help students meet these needs.

3. The patterns of behavior thus identified are appropriate teaching goals, if they are consistent with the educational philosophy of the school and are capable of being learned in the school. (chap. 2, pp. 10-11)

Once again, Tyler emphasized the importance of teachers considering the behavior patterns that "could be developed by students" (p. 13).

In the 1970s Revision Tyler provided a five-page illustration outlining the steps for relating the teaching goal to the needs of the students. He took the example of "'achieving emotional independence of parents and other adults'" (Tyler, 1977, chap. 2, p. 14) and illustrated the "creative process" (p. 18) of deriving educational objectives from the needs and interests of learners.

Although brief, one paragraph in length, Tyler (1977) included a section on "Student Aspirations and Expectations" (chap. 2, p. 28) in the 1970s Revision. The aspirations and expectations of students represented their "hopes, desires, and

future goals" (p. 28). Tyler pointed out that the identification of either of these could suggest positive and/or negative learning objectives. If the student's goals are in alignment with the acceptable norms and the philosophy of the schools, they could serve as a motivation factor for the student. Needs could be indentified when the student's expectations are lower than the norms. Tyler saw student's aspirations and expectations as similar to student's interests serving as a motivator for learning.

"The 1949 Rationale and the 1970s Revision: Contemporary life as a source of educational objectives"

Tyler's discussion of the studies of contemporary life as a source for deriving educational objectives was similar in both the 1949 Rationale and the 1970s Revision. Few changes were noted. In both texts, Tyler (1978) identified the two main arguments for studying contemporary life: "socialization and the ways in which learning takes place" (chap. 3, pp. 2-3). Likewise, he cited the three main criticisms against the use of contemporary life and countered each one. Tyler noted that the studies of contemporary life could be conducted at several levels, ranging from international to the local community. In addition, Tyler reminded those engaged in the collection of and interpretation of data, that similar to the data collected in

the study of the learner, multiple interpretation of the data can occurred.

When examining the major differences between the two texts, in the 1970s Revision, Tyler (1978) described contemporary life as "the environment in which the learner now lives or can be expected to live in the future" (chap. 3, p. 1). Tyler illustrated different aspects of the environment that would need to be taking into consideration by those working to develop the curriculum: demands of the environment on the learner, employment opportunities, civic responsibilities, and the development of new media for communication. This is in contrast to the focus of "cultural heritage" (Tyler, 1949, p. 16), which was noted in the 1949 Rationale. Tyler (1978) emphasized the significance of studying contemporary life in order to "throw light on the aspects of the environment with which the learner can be actively engaged" (chap. 3, p. 1). He described the purpose of using contemporary life as a source was "not to outline or describe those aspects which are merely the background in which the learner exists but rather to focus on those parts with which he is or can be meaningfully involved" (chap. 3, p. 2). Once again, Tyler placed greater emphasis on the active role of the student.

Another addition included in the 1970s Revision was a more detail discussion on deriving objectives from contemporary life.

Tyler noted as in the case of the studies of the learner, a list of educational objectives are not directly provided. He recommended using the data collected in order to answer the question: "What do these data suggest regarding what these students should learn in order to meet the demands and opportunities of contemporary life?" (Tyler, 1978, chap.3, pp. 11-12). Tyler stressed the objectives were to "teach persons ways of approaching activities or problems of contemporary life so that the learner himself can devise the particular course of action likely to be effective ... in solving the problem in the particular situation he encounters" (p. 12). In other words, Tyler maintained the purpose was to teach the professionals "how to recognize problems, analyze them, and use principles in developing a solution to the problem" (p. 13). In order for curriculum developers to derive objectives from contemporary life, Tyler proposed they answer the question: "What should the student learn that will enable him to carry on these activities or deal with these problems in an intelligent way, not blindly following rules?" (p. 13). This approach involved active student participation as well as allowed students to adapt their learning to different situations.

"The 1949 Rationale and the 1970s Revision: Subject matter as a source of educational objectives"

Tyler's discussion of subject matter as a source of educational objectives was similar in both texts in terms of his interpretation of the failure of the Committee of Ten to ask the right question concerning the purpose of subject specialists knowledge as well as the different functions of subject matter knowledge. Though in the 1970s Revision Tyler still used the term objectives when referring to the Committee of Ten report, Tyler elaborated in more detail on the importance of establishing the purposes for schooling and defining its main responsibility. For Tyler (1977), the school's responsibility was to establish "a program of general education for all students, with modifications, as needed, for those whose continuing education may lead to specialization and those who may soon move into an occupation" (chap. 4, p. 7).

The differences between the 1949 Rationale and the 1970s Revision were in the three additions Tyler added to his discussion of subject matter. At the beginning of the revised chapter four, Tyler (1977) provided a brief history of the use of subject matter, from the times when subject matter knowledge was used mostly by "priests, medicine men and philosophers" (chap. 4, p. 2) to when the knowledge was used to educate many. Tyler identified that subject matter served different purposes and outlined those purposes: specialist training, general education, and occupational training. In addition, Tyler

outlined different steps for using subject matter as a source of deriving objectives for the purpose of general education and steps for deriving objectives for the purpose of occupational training.

"The 1949 Rationale and the 1970s Revision: The role of philosophy"

The 1970s revised chapter on the role of philosophy modeled, almost word for word, the 1949 Rationale's section on philosophy with the exception of the inclusion of Charles Frankel's definition of educational philosophy along with the added discussion of affective behaviors and the "privacy of the individual" (Tyler, n.d., chap. 5, p. 9).

Tyler noted in the 1970s Revision that many faculties do not have or even understand the role of philosophy of education on the development of curriculum. Therefore, Tyler offered Charles Frankel's definition for philosophy of education as a guide to outline some questions that a philosophy of education would seek to answer.

The discussion of affective behaviors was another addition in the revised chapter on philosophy. He noted that human behaviors tended to fall into one of three domains: cognitive/thinking, affective/feeling, or psychomotor/acting. Tyler pointed out few behaviors involve just one domain; in fact, he noted, "... most behavioral events accessible to

consciousness involve all these aspects" (n.d., chap. 5, p. 6). In order to label the event, as cognitive, affective, or psychomotor, one has to consider which of these aspects dominated. In the area of affective domains, Tyler offered two caveats for consideration. First was the "political principle" which stated "... that the function of the school in a democratic society is to help the student gain the means for increasing independence in judgment and action, and not to urge him to adopt particular doctrines or views" (n.d., chap.5, pp. 8-9). The second was the "ethical principle" which stated "...that each individual has a right to privacy not to be invaded by the school" (n.d., chap. 5, p. 9). Schools needed to ensure objectives falling within the affective domain do not infringe upon the rights of the individual nor required the individual to confirm to any preconceived values or behaviors.

"The 1949 Rationale and the 1970s Revision: The role of psychology"

The first eight paragraphs and the concluding paragraph of the role of psychology in Tyler's 1949 Rationale and the 1970s Revision are almost verbatim. The major difference in the two texts is the inclusion of different theories of learning along with effective conditions for learning.

In the 1970s Revision, Tyler examined the similarities and differences between "simple conditioning" and what he called

"self-directed complex learning" (n.d., chap. 6, p. 7). Tyler noted there are situations, such as eating, driving, and punctuality, where conditioning would be an acceptable theory of learning. Tyler emphasized, "the development of the behavior required for human responsibility implies consciousness on the part of the learner and an increasing understanding of the goals of his learning and the means by which they may be attained" (p. 19). Tyler wrote over 11 pages on this topic. Was this added discussion due to Kliebard's comparison of Tyler's theory of learning to that of Pavlov's theory of conditioning? In Kliebard's *Reappraisal of Tyler's Rationale*, Kliebard (1970) wrote in reference to Tyler's definition of education, "It would be important to know the ways in which education would be different from other means of changing behavior, such as, hypnosis, shock treatment, brainwashing, sensitivity training, indoctrination, drug therapy, and torture" (p. 263). Tyler noted in the 1970s Revision that he outlined a complex learning model in order to show an alternative to the conditioning theory and stated that those who criticize the use of conditioning have offered no alternative. This explanation of complex learning could have been in response to Kliebard's comparison of Tyler's *Rationale* to Pavlov's theory of conditioning.

Summary

This chapter examined three major writings by Tyler after the publication of *Basic Principles of Curriculum and Instructions*. These articles highlighted some of Tyler's (1966) "changed, updated, clarified" (p. 25) positions on the 1949 Rationale. Similarities and differences between the 1949 Rationale and the 1979s Revision were discussed.

In "New Criteria for Curriculum Content and Methods", Tyler (1957) identified five new criteria for curriculum development. Tyler's (1966) focus in "New Dimensions in Curriculum Development" related to his thinking concerning the active role of students in curriculum development. He stated, "I now think it is important in curriculum development to examine the concept of the learner as an active, purposeful human being" (p. 26) and identified ten conditions for effective learning which focused on the learner. In the 1976 article "Two New Emphases in Curriculum Development" Tyler identified the "active role of the student" and "the need for a comprehensive examinations of the non-school areas" (p. 62) as the two areas of greater emphases in the 1970s Revision.

The wording of the four fundamental questions differed from the 1949 Rationale to the 1970s Revision especially question two which dealt with learning experiences. The wording in the 1970s Revision focused on what the student would do rather than on the

teacher. In both texts, Tyler stated upfront the purpose of the text. He did note in the preface of the 1970s Revision "there is no particular sequence in which the four guiding questions should be examined" (Tyler, 1977, Preface, p. 3). This has been an area of debate among critics and was included on the last page of the Rationale.

In the 1970s Revision, Tyler devoted an entire chapter to the importance of educational objectives, the sources used to derive objectives, and his position concerning them, which contrasted his brief discussion in the 1949 Rationale.

Tyler placed greater emphasis on the learner as a source for objectives in the 1970s Revision and wrote over twice as much on the topic than in the 1949 Rationale. He made a slight change in his definition of education by changing it from "a process of changing the behavior patterns of people" (Tyler, 1949, p. 5) in the 1949 Rationale to "a process by which the student learns certain desired patterns of behavior" in the 1970s Revision (Tyler, 1977, chap. 2, p. 1).

Tyler's (1978) discussion concerning contemporary life was similar in both texts. The main difference was noted in the description of contemporary life in the 1970s Revision as being "the environment in which the learner now lives or can be expected to live in the future" (chap. 3, p. 1) as contrasted to

just "cultural heritage" (Tyler, 1949, p. 16) in the 1949 Rationale.

In the 1970s Revision, Tyler provided a brief history of the use of subject matter, the different purposes subject matter served and outlined different steps for using subject matter as a source for deriving objectives.

Tyler's discussion of the role of philosophy and the role of psychology were very similar in both texts. The inclusion of Charles Frankel's definition of educational philosophy along with an added discussion concerning affective behaviors were the only differences in the revised chapter on philosophy. Tyler's chapter on psychology in the 1970s Revision was almost verbatim to his discussion in the 1949 Rationale with the only difference being the inclusion of different theories of learning along with effective conditions for learning.

CHAPTER 6

FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

Ralph W. Tyler has been identified as the “quintessential educator” (Goodlad, n.d., p. 80), and his best-known publication, *Basic Principles of Curriculum and Instruction*, has been called “the most influential curriculum book of the twentieth century” (Marshall, Sears, & Schubert, 2000, p. 3). Although influential, ongoing controversy has surrounded the Rationale, beginning with Kliebard’s 1970’s “Reappraisal: The Tyler Rationale.” Twenty-five years after the publication of *Basic Principles of Curriculum and Instruction*, Tyler began revising and expanding the Rationale. The purpose of this study was to determine the extent to which Tyler’s 1970s Revision illuminated understanding of the 1949 Rationale. This chapter will examine the five research questions stated at the outset:

1. What were the origins of the Tyler Rationale?
2. What the features of the Tyler Rationale?
3. What are the major interpretations of the Tyler Rationale?
4. What are the similarities and differences between the Tyler Rationale and the 1970s Revision?
5. How does the work of the 1970s Revision help us understand the Tyler Rationale?

Research Questions

1. What were the origins of the Tyler Rationale?

Tyler began generating his Rationale as America was suffering through the Great Depression and the fundamental purpose of education and of the school curriculum was being questioned. The curriculum being implemented in the schools during this time was considered outdated because it benefited only a small percentage of students (Tyler, 1986). Educational theorists were in conflict with one another concerning the type of curriculum that would benefit society but at the same time provide for the individual needs of students.

In order to give schools flexibility in which to experiment with different types of curriculum, the Eight-Year Study (Tyler, 1986) was conceptualized. This study involved 30 schools and evolved over a 12-year period from 1930 to 1942. Participating schools were freed of most state or college entrance requirements in order to provide freedom for experimentation. As the schools began to work developing their curriculum, they commented that the evaluation staff provided more support than the staff helping with the curriculum. The difference between the levels of support at that time was due to the fact that although a rationale for evaluation was available, no rationale for curriculum development was available (Tyler et al., 1986). In a response to this need, Tyler sketched an outline of his

Rationale for curriculum development on a napkin over lunch (Tyler et al., 1986). This outline would later develop into Tyler's syllabus, *Basic Principles of Curriculum and Instruction*, which is often referred to as the Tyler Rationale.

2. What are the features of the Tyler Rationale?

Tyler's *Basic Principles of Curriculum and Instruction* was written as a course syllabus during his tenure at the University of Chicago and is considered his major contribution to the field of curriculum. Kiester (1978) noted in reference to the Rationale that it was "the first time anything made sense ... in the messiest of all fields" (p. 32).

Basic Principles of Curriculum and Instruction was composed of 128 pages, focusing on the "four fundamental questions, which must be answered in developing any curriculum and plan of instruction" (Tyler, 1949, p. 1). The content consisted of an introduction, which stated the purpose as well as the limitations of the Rationale; four central chapters, which identified and outlined procedures for each of the four fundamental questions; and a brief final chapter, which explained how a school or staff could use the Rationale. The four fundamental questions included:

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? (Tyler, 1949, p. 1)

Chapter 1 addressed the question, "What educational purposes should the school seek to attain?" (Tyler, 1949, p. 3). This was the longest chapter, consisting of about 60 pages, because Tyler believed "they are the most critical criteria for guiding all the other activities of the curriculum-maker" (p. 62). Tyler divided this chapter into six sections. Sections one-three identified the three different sources from which educational purposes could be obtained: the learner, contemporary life, and subject specialists. Sections four and five examined the role of philosophy and psychology as screens in the selections of objections. Section six outlined different ways of stating objectives in order to facilitate the selection of learning objections.

Chapter 2 raised the question, "How can learning experiences be selected which are likely to be useful in attaining these objectives?" (Tyler, 1949, p. 63). The procedures for answering this question are explained more briefly than the first question. Tyler defined learning experiences as "the interaction between the learner and the external conditions in the environment to which the learner can react" (p. 63). Tyler

outlined five general principles for selecting learning experiences:

1. A student must have an opportunity to practice the behavior implied by the objective.
2. The learning experience must be such that the student obtains satisfaction from the behavior.
3. The reactions desired are in the range of possibilities for the students.
4. Many particular experiences can be used to attain the same educational objectives.
5. The same learning experiences will usually bring about several outcomes. (pp. 65-67)

Chapter 3 focused on the question, "How can learning experiences be organized for effective instruction?" (Tyler, 1949, p. 83). Tyler saw "organization ... as an important problem in curriculum development because it greatly influences the efficiency of instruction and the degree to which major educational changes are brought about in the learner" (p. 83). He emphasized the importance of both vertical and horizontal relationships when organizing the learning experiences since they provide the depth and breadth in the development of learning. In addition to these two broad organizational structures, Tyler identified "continuity, sequence, and integration" (p. 84) as three criteria for effective

organization. Several organizing principles can be utilized to help achieve continuity, sequence, and integration in the learning experiences. Tyler identified several organizing principles that included:

1. chronological
2. increasing breadth of application
3. increasing range of activities included
4. use of description followed by analysis
5. development of specific illustrations followed by broader and broader principles to explain these illustrations
6. attempt to build an increasingly unified world picture from specific parts which are first built into larger and larger wholes. (p. 97)

Chapter 4 addressed the question, "How can the effectiveness of learning experiences be evaluated?" (Tyler, 1949, p. 104). Tyler believed "evaluation is also an important operation in curriculum development" (p. 104). According to Tyler, evaluation was "a process for finding out how far the learning experiences as developed and organized are actually producing the desired results and ... will involve identifying the strengths and weaknesses of the plans" (p. 105). Tyler outlined two aspects of evaluation. First, the evaluation must assess the student's behavior. Second, the evaluation must include at least

two appraisals. Tyler identified several appropriate methods of evaluations including paper and pencil tests, interviews, questionnaires, collections of actual products, and sampling of students' work or behavior. Near the end of the chapter, Tyler summarized the use of evaluation and its role in the "continuous process" (p. 123) of curriculum planning. The "replanning, redevelopment, and then reappraisal" (p. 123) of the curriculum and instructional programs was Tyler's Rationale for a problem-solving approach to curriculum development.

Chapter 5 was the shortest chapter, consisting of only three pages. In this concluding chapter, Tyler (1949) answered, "How a school or college staff may work on curriculum building" (p. 126). Tyler emphasized, "If a school-wide program of curriculum reconstruction is undertaken, it is necessary that there be widespread faculty participation" (p. 126). In other words, Tyler was stressing the importance of teacher buy-in as well as understanding of the curriculum development process. It is important to note that in the concluding paragraph, Tyler emphasized that the order of steps in the syllabus are not linear. He stated, "The concern of the staff, the problems already identified, the available data are all factors to consider in deciding on the initial point of attack" (Tyler, p. 128). He added, "The program may be improved by attacks beginning at any point, providing the resulting modifications

are followed through the related elements until eventually all aspects of the curriculum have been studied and revised" (p. 128). This statement has often been overlooked, leading to misinterpretations of the Rationale.

3. What are the major interpretations of the Tyler Rationale?

The major interpretations of the Tyler Rationale have consisted of a series of exchanges between Kliebard and Hlebowitsh. In his 1970 reappraisal, Kliebard focused on the selection of objectives, the selection and organization of learning experiences, and evaluation. His analysis of the selection of objections was the major focus, consisting of seven pages, whereas his discussion of the selection and organization of learning experiences amounted to one paragraph and of evaluation consisting of three paragraphs.

Kliebard (1970) criticized the use of subject matter as a source of objectives by claiming it was "curiously distorted and out of place" (p. 261) and "more than a trivial historical misconception" (p. 262). Kliebard emphasized Tyler's "misconceiving the role and function of the Committee of Ten" (p. 261) in relation to the term "objectives." Kliebard noted that the Committee of Ten used the term "objectives" in reference to "programmes" (p. 261) or content areas not in terms of specific skills that students should learn and be able to do.

In terms of studies of contemporary life and evaluation, Kliebard (1970) compared Tyler with who he called Tyler's "spiritual ancestor, Franklin Bobbitt" (p. 265), which inferred a scientific engineering, product controlling approach to curriculum development with which the Rationale has been criticized of promoting.

Kliebard (1970) pointed out that among the three sources and two screens recommended by Tyler for the selection of educational objections, in reality, it was "the philosophical screen that determines the nature and scope of the objectives" (p. 269). To Kliebard, the use of philosophical screens said "little about the process of selecting objectives as to be virtually meaningless" (p. 269).

Kliebard's appraisal of learning experiences was brief. For him, the learning experiences should consist of "the interaction between a student and his environment" (Kliebard, 1970, p. 268) and not the teacher's selection. He criticized Tyler for the behavioristic nature of the Rationale by noting Tyler's definition of education as being "'a process of changing behavior patterns of people'" (as cited in Kliebard, 1970, p. 263). In addition, Kliebard suggested that Tyler's (1949) idea of "manipulation of the environment ... that will evoke a kind of behavior desired" (p. 42) implied a Pavlovian conditioning

similar to "hypnosis, shock treatment, brainwashing, sensitivity training, indoctrination, drug therapy, and torture" (p. 263).

Kliebard (1970) compared Tyler's idea of evaluation with that of Bobbitt's, which he referred to as "product control" (p. 269). According to Kliebard, the difficulties when using this process for evaluation is deciding whether the objective served as the "end point or a turning point" (p. 268). However, Kliebard stressed that in evaluation, all areas need to be assessed even those areas that were not planned.

Throughout Kliebard's (1970) "Reappraisal", he described Tyler's 1949 Rationale as the "familiar four-step process" (p. 260) where the "statement of objectives" is the "crucial first step ... on which all else hinges" (p. 269). According to Kliebard, once the educational objectives are outlined, "the rationale proceeds relentlessly through the steps of selection and organization of learning experiences ... and, finally, evaluating" (p. 267).

Kliebard (1970) concluded that Tyler's 1949 Rationale was a "production model" (p. 270). Kliebard noted the Rationale was "imperishable ... for those who conceive of the curriculum as a complex machinery for transforming the crude raw material that children bring with them to school into a finished and useful product" (p. 270).

Approximately 20 years after Kliebard's (1970) "Reappraisal: the Tyler Rationale," Peter Hlebowitsh (1992) responded in "Amid behavioural and behaviouristic objectives: reappraising appraisals of the Tyler Rationale", to "the unjustified treatment of Tyler" and the "historical interpretation of curriculum studies" (p. 534).

Hlebowitsh's (1992) reappraisal analyzed Kliebard's comparison of Tyler to Bobbitt and the accusations of "educational engineering" made against the Tyler Rationale (p. 534). Hlebowitsh noted that Tyler and Bobbitt were more divergent than similar especially in number of objectives and the level at which the objectives should be derived. Tyler called "for a small number of objectives which would be structured at "high levels of generalizability" (p. 535). In addition, Hlebowitsh believed this "issue of generalizability" was "central to the understanding of the Rationale", because "it defuses a large part of the argument that describes the Tyler Rationale as a systems management device that imposes an industrial ideology on the school" (p. 537).

Hlebowitsh (1992) argued the Rationale was a method in a "psycho-philosophic context" and not a "neutral methodological device" (p. 539). The use of Tyler's four fundamental questions served as "a frame of reference, not the imposition of universally precise rules" (p. 539). He noted that philosophical

judgments guide the planning of the learning experiences and that these judgments are significant because they draw attention to the socio-political function of the school.

Kliebard responded in his 1995 article titled, "The Tyler Rationale revisited." Kliebard examined the conflicting views of structure and boundaries established by the Rationale. Kliebard (1995) elaborated on his earlier statement, "The Rationale failed to structure enough boundaries" by explaining that this statement did not "capture the argument" (p. 82) as he intended. Kliebard clarified by saying, "The sine qua non of the Rationale is the clear specification of objectives, but that poses a dilemma" (p. 82). According to Kliebard, "Since the philosophical screen (and the psychological screen for that matter) are essentially arbitrary statements of beliefs, they can just as easily screen out what is worthy and commendable as what is trivial and senseless" (p. 82).

Linearity of the Rationale was another area of debate. Although Hlebowitsh noted the last paragraph of the Tyler Rationale a question was asked, "... whether the sequence of steps to be followed should be the same as the order of presentation in this syllabus. The answer is clearly no" (Tyler, 1949, p. 128). Kliebard's interpretation concerning linearity was that Tyler meant that although one could begin with any one of the sources or the screens in order to determine the objectives, it

is not possible to begin with the other three questions posed by Tyler in the Rationale.

Another area of criticism Kliebard explored was whether or not Tyler's Rationale made any improvements over the work of Bobbitt. Kliebard emphasized the main differences between the two was Tyler's use of three sources and two screens for the identification learning objectives while Bobbitt relied mostly on contemporary life as the source for deriving objectives. Kliebard questioned at what level the two educators, Tyler and Bobbitt, should be compared? Kliebard (1995) noted that the major difference between the two was "that Bobbitt was ... a zealot, and Tyler, above all," was "the epitome of moderation" (p. 84).

The last principle of criticism Kliebard addressed was the neutral quality of the Rationale's use of philosophy. Kliebard (1995) pointed out the use of philosophy in order to make choices or screen the learning objectives is "just as arbitrary" (p. 85) as the choosing of the objectives from the three sources. Kliebard believed "too great a burden was being placed on philosophy and that the notion that the philosophical screen will somehow resolve the inherent problems in the Rationale was an illusion" (p. 85). He explained that although each school has a statement of philosophy and beliefs, these statements are typically very vague, and do not serve as a guide in excluding

different learning objectives; therefore, they have limited influence on the curriculum.

Kliebard (1995) concluded his article by examining Hlebowitsh's referral to the Tyler Rationale as a 'practical theory' (p. 85). Kliebard criticized this idea of 'practical theory' by stating he has "never come across a scintilla of credible evidence that the Rationale is a practical theory in the sense that, when followed, it actually eventuates in a better curriculum than one in which it is ignored" (p. 85). Kliebard noted he had purposely avoided creating a practical theory because in doing so, he would be suggesting there is a best way to design curriculum.

Kliebard (1995) concluded his reappraisal by challenging what he called the "longstanding injunction that a statement of objectives is an indispensable prerequisite to the process of curriculum planning" (p. 87). He believed, "That misguided human tendency is nowhere more evident than in the almost universal belief that objectives are an indispensable ingredient in the curriculum planning process" (p. 87). For Kliebard, the Tyler Rationale, concurred with this process of curriculum planning.

Hlebowitsh (1995) responded to Kliebard's appraisal in "Interpretations of the Tyler Rationale: a reply to Kliebard," because he discovered that many of the criticisms were "simply

unfounded" (p. 89). Hlebowitsh focused his discussion around three areas of disagreement between himself and Kliebard concerning the rationale: role of philosophy, predetermined objectives, and the idea of practical theory.

The role philosophy played and continues to play in the development of curriculum was one area of discord between Kliebard and Hlebowitsh. Hlebowitsh saw within the Rationale framework certain elements, which would guide the philosophical choices. According to Hlebowitsh, the use of philosophical screens in determining the learning objectives do not work in isolation but are coupled with the other factors, such as the learner, the society, and subject matter in order to arrive at the learning objectives. This multi-factor framework provided the teachers and other school administrators with the "solid philosophical boundary" (Hlebowitsh, 1995, p. 91) for curriculum development without imposing a prescriptive curriculum.

The labeling of Tyler as a social efficiency advocate was another area of dissension between the two scholars. Hlebowitsh (1995) argued against this label by explaining Tyler's idea of behavioral objectives as being "broadly framed and highly generalizable ones" (p. 91). According to Hlebowitsh, the notion of stating, "frame objectives at levels of high generalizability" (p. 91) is an aspect Kliebard did not want to address. Hlebowitsh explained what separated Tyler from the

other social efficiency advocates was Tyler's commitment "to see learning experience in the context of generalized modes of attack upon problems and as generalized modes of reaction to generalized types of situations" (p. 91), as well as the considerations of the three sources, learner, society, and subject-matter, in the development of the school curriculum.

Next, Hlebowitsh (1995) addressed what he called "perhaps [the] most provocative ... contention" by Kliebard which was his claim that "the Tyler Rationale has no real credibility even as a practical theory of curriculum development" (p. 92). Hlebowitsh emphasized the Rationale "has been in print now for over 40 years" (p. 92), translated into many languages, and still influencing school curriculum development. Furthermore, Hlebowitsh explained that Tyler "did not pull the idea for the Rationale out of a hat" (p. 93). He reminded the reader that the Rationale was fashioned during Tyler's work on the Eight-Year Study where 30 different schools were experimenting with different curriculum initiatives. Of course, the data from this study proved to be favorable for the experimental schools and the evaluation methods, which Tyler developed as part of the study are still recognized in educational evaluation (Hlebowitsh). Hlebowitsh (1995) stated, "The Rationale follows a long line of historical argumentation that other progressive-experimentalist interested in curriculum development has

embraced during the century" (p. 93). To him, "The Tyler Rationale is really a framework that re-orchestrates key sources, determinants and questions that other progressive-experimentalists championed" (p. 93).

Additionally, other curriculum scholars have analyzed Tyler's Rationale and offered different interpretations of it. The 1949 Rationale has been described as a "rational-linear approach" (Marsh and Willis, 2007, p. 72) and a model of "social efficiency" (Pinar et al., 1995, p. 151), while Tanner and Tanner (1995) characterized it as a "problem-solving model" (p. 241). Wraga (1998) noted Tyler's Rationale was developed from the "most democratic and effective approach to curriculum improvement known to the field" (p. 12), while Pinar et al. (1995) argued that the 1949 Rationale represented "bureaucrat's" (p. 149) approach. The criticism of oversimplification is seen in the writing of Eisner (1994), but Tanner and Tanner (1995) as well as Kridel and Bullough (2007) clarify this criticism by noting it was Tyler's purpose to develop a rationale that could be "tested in practice" (Tanner and Tanner, p. 245) not a "curriculum theory or 'theoretical formulation of what a curriculum should be'" (Kridel and Bullough, p. 94).

4. What are the similarities and differences between the 1949 Rationale and the 1970s Revision?

When examining the 1949 Rationale and 1970s Revision, many similarities are noted. In the 1970s Revision, Tyler also made additions and clarifications to the 1949 Rationale.

Looking at the four fundamental questions Tyler posed for developing curriculum, the focus of the questions remained the same in both texts: educational purposes, selections of educational experiences, organizing educational experiences, and evaluating educational experiences. It is important to note that the wording of the questions changed, especially with regard to question two on the selection of educational experiences, as noted in table 4. The wording changed from "what educational experiences can be provided" (Tyler, 1949, p. 1) to "what should the students do" (Tyler, 1977, Preface, p. 2) which placed a greater emphasis on the active role of the student. This was an area in which Tyler had written would receive a greater emphasis in the 1970s Revision.

Table 4.

Comparison of four fundamental curriculum questions

1949 Rationale	1970s Revision
1. What educational purposes should the school seek to attain?	1. What things shall be taught?
2. What educational experiences can be provided that are likely to attain these purposes?	2. What shall the students do to learn these things?
3. How can these educational experiences be effectively organized?	3. How should these learning experiences be organized?
4. How can we determine whether these purposes are being attained?	4. How shall the effectiveness of the curriculum be appraised?

Note. From *Basic Principles of Curriculum and Instruction* by R. Tyler, 1949, Chicago: The University of Chicago Press, p. 1; Preface by R. Tyler, 1977, Tyler, Ralph W., Papers, [Box 4,

Folder 1], Special Collections Research Center, University of Chicago Library, p. 2.

Tyler began both texts with an introduction (in the Rationale) and a Preface (in the Revision) by explaining to the reader the purpose of the text, stating what the book is and what it is not. Although his wording was not exact in both texts, the underlining meaning was the same, and he stated in the Revision, "The present book, like the earlier syllabus, does not present a theory of the school curriculum nor a catalogue of contemporary theories. It does not describe various curriculum forms and content" (Tyler, 1977, Preface, p. 3). In the 1970s Revision, Tyler noted some additional information that is not found in the 1949 Rationale. Tyler began the Preface by explaining how "this book grew out" (Preface, p. 1) of his many experiences within different educational environments. He noted that it was during his work with the Eight-Year Study that the outline for the 1949 Rationale was developed and that the book was "first written as a syllabus for a course in curriculum development ... at the University of Chicago" (Preface, p. 2). This background information provides the reader the foundation from which the 1949 Rationale was developed. It was developed using a problem solving process by the 30 schools during the Eight-Year Study, not a theory generated absent of application of practice.

An important point that Tyler discussed in the Preface of the 1970s Revision, which he also discussed on the last page of the 1949 Rationale, was whether or not the four curriculum questions had to be asked in any particular order. In the 1949 Rationale Tyler stated:

Another question arising in the attempt at curriculum revision by a school or part of a school is whether or not the sequence of steps to be followed should be the same as the order of presentation in this syllabus. The answer is clearly 'No'. (p. 128)

This has been an area of debate among the critics of the Rationale, and some have misinterpreted Tyler's explanation in the Rationale. Kliebard (1995) in "The Tyler Rationale Revisited" stated:

If one reads the rest of that paragraph, however, it seems clear that Tyler is referring not to the order in which his four questions should be answered but to the sequence in considering the three sources and the two screens in formulating the objectives (the first of the steps). (p. 83)

Tyler included this discussion on page three of the Preface of the 1970s Revision. He stated, "There is no particular sequence in which the four guiding questions should be examined. Although most people start with the question of objectives, one can begin with any of the four questions and work through the

others" (Tyler, 1977, Preface, p. 3). In other words, "the planning, implementation, and evaluation of a curriculum involve continuing review of all basic questions" (Preface, p. 3). For Tyler, curriculum development was a continuous problem-solving process, which he stated in the fourth chapter of the 1949 Rationale. In the 1970s Revision, Tyler emphasized this continuous review by stating it upfront in the Preface.

Tyler devoted the first chapter of the 1970s Revision to the topic of educational objectives, which only received a brief three-page discussion in the 1949 Rationale. In both texts, Tyler (1949, 1977) defined objectives as being "consciously willed goals" and "matters of choice" (p. 3, p. 6). In this opening chapter, Tyler stressed the importance of educational objectives in a democratic society by stating that they help students "become increasingly able to meet his needs, to achieve his purposes, to participate constructively in the society, and to realize his own potential" (Tyler, 1977, chap. 1, pp. 1-2). The clearly communicated objectives would help to establish a common language between teachers, teachers and students, and the public. Tyler emphasized, "Clear objectives are important in planning an educational program, conducting it, appraising it, improving it, and explaining it to the appropriate public" (chap. 1, p. 6).

Absent in the 1949 Rationale was a brief history of the focus of objectives prior to the twentieth century which Tyler added in the 1970s Revision. This overview included a brief discussion of the theory of faculty psychology and the doctrine of formal discipline. Tyler included the findings of Thorndike and others who had refuted the claims of mental training, which had influenced curriculum development significantly.

Tyler concluded chapter 1 of the 1970s Revision by stating his position on educational objectives, which he had expressed in the 1949 Rationale. He wrote, "The position I take is that no single source of information is adequate to provide a basis for wise and comprehensive decisions about objectives and that no one of the sources can be disregarded" (Tyler, 1977, chap. 1, p. 13).

Tyler's (1978) discussion concerning contemporary life was similar in both texts with the main arguments for studying including "socialization and the ways in which learning takes place" (chap. 3, pp. 2-3). The main difference was noted in the description of contemporary life in the 1970s Revision as being "the environment in which the learner now lives or can be expected to live in the future" (chap. 3, p. 1) as contrasted to just "cultural heritage" (Tyler, 1949, p. 16). In the 1970s Revision, Tyler (1978) described contemporary life as "the environment in which the learner now lives or can be expected to

live in the future" (chap. 3, p. 1). This definition was more focused and defined than that in the 1949 Rationale, which focused on "cultural heritage" (Tyler, 1949, p. 16).

In the 1970s Revision, Tyler mentioned different areas of the environment that need to be considered when developing the curriculum such as the demands of the environment on the learner, employment opportunities, civic responsibilities, and the development of new media for communication. For Tyler (1978), the significance of studying contemporary life was to "throw light on the aspects of the environment with which the learner can be actively engaged" (chap. 3, p. 1). This was to focus the learning on the active participation of the student.

Tyler, also, provided a detailed discussion of deriving objectives from contemporary life in the 1970s Revision. For Tyler (1978), the purpose of the objectives was to "teach persons ways of approaching activities or problems of contemporary life so that the learner himself can devise the particular course of action likely to be effective ... in solving the problem in the particular situation he encounters" (chap. 3, p. 12). Therefore, he proposed curriculum makers ask the question: "What should the student learn that will enable him to carry on these activities or deal with these problems in an intelligent way, not blindly following rules?" (chap. 3, p.13).

Once again, Tyler was calling for active student participation in the problem solving process.

Subject matter as a source of educational objectives was similar in both texts except for the addition of three areas of discussion. In the 1970s Revision, Tyler provided a brief history of the use of subject matter; the different purposes subject matter served and outlined different steps for using subject matter as a source for deriving objectives.

Tyler's discussion of the role of philosophy and the role of psychology were very similar in both texts. In the 1970s Revision, Tyler devoted a separate chapter to discuss each. The inclusion of Charles Frankel's definition of educational philosophy along with an added discussion concerning affective behaviors were the only differences in the revised chapter on philosophy. Tyler's chapter on psychology in the 1970s Revision was almost verbatim to his discussion in the 1949 Rationale with the only difference being the inclusion of different theories of learning along with effective conditions for learning.

Perhaps the greatest difference in the 1970s Revision related to Tyler's discussion of the learner as a source for determining educational objectives. Compared to the 1949 Rationale, the Revision was over twice the length and included four additional sections: relationships of needs to objectives,

translating needs into objectives, relating teaching goals to students' needs, and student aspirations and expectations.

The first area that Tyler discussed was the relationships of needs to objectives. Tyler clarified in the 1970s Revision that the focus of the school should not be on establishing educational experiences, which the students are benefiting from outside the school; instead the focus should center on the gaps or needs in the students' development. Tyler (1977) noted, "... meeting students' needs are not, primarily, the function of an educational institution" (p. 8). He maintained, "... the function of the school is to educate students in such a way that they themselves are better able to meet their own needs." Tyler stressed that the school's responsibility was "to help students acquire those patterns of behavior which assist them in meeting all of their basic needs" (p. 8). The focus for Tyler in the 1970s Revision was on what the student was able to do, not what the teacher planned or organized for the student to learner, which called for a more active role for the student.

In the section entitled, "Translating Needs into Objectives" Tyler (1977) identified three generalizations for aiding the classroom teacher in translating students' needs into educational goals. Tyler's focus was on the behavior patterns that "could be developed by the students" (chap. 2, p. 13) once again emphasizing the active participation of the students.

Tyler's (1977) final addition in this section was the inclusion of "Student Aspirations and Expectations" (chap. 2, p. 28). The students' aspirations and expectations represented their "hopes, desires, and future goals" (chap. 2, p. 28). Tyler noted that the identification of either of these could suggest positive or negative learning objectives. For Tyler, a student's aspirations or expectations were similar to the student's interests and could serve as a motivator for learning.

Similarly in both texts, Tyler began by defining education, although within the Revision, he made a slight change in the wording that clearly focused on the student playing a more active role in the educational process in the 1970s revised definition. Education was defined as "a process by which the student learns certain desired pattern of behavior" (Tyler, 1977, chap. 2, p. 1). Whereas in the 1949 Rationale, Tyler (1949) defined education as "a process of changing the behavior patterns of people (p. 5).

In both texts behavior was used "in the broad sense to include thinking, and feeling as well as overt action (Tyler, 1977, chap. 2, p. 1). Tyler. Additional similarities included the two definitions of needs; the steps involved for identifying the interests and needs of students, as well as the fact that lists of students' needs do not always correspond to appropriate educational objectives. Tyler also outlined different methods

that could be used to collect data on the needs and interests of the learners. The methods identified were similar in both texts with the addition of student essays in the 1970s Revision. Also noted in the 1970s Revision were more detailed descriptions of the methods, which included their uses, limitations, skills needed for use, and type of data each could generate. Whereas in the 1949 Rationale, the description of the assessment methods was brief, consisting of one to two sentences.

5. How does the work of the 1970s Revision help us understand the Tyler Rationale?

Tyler's 1970s drafted Revision to *Basic Principles of Curriculum and Instruction* helps explain many of the questions and areas of criticism that have surrounded the Tyler Rationale. Nowhere in the 1970s Revision did Tyler mention the names of his critics or specifically point out that the clarification of information or changes were included to address the criticisms of the Rationale. However, Tyler did in effect address some of the concerns in the drafted chapters that were completed.

One of the most consistent criticisms concerning the 1949 Rationale centered on the linearity of the four fundamental questions for curriculum development. Critics have claimed that Tyler's model called for the questions to be answered in a linear sequential order. On the last page of the Rationale, Tyler (1949) had clearly stated, "The program may be improved by

attacks beginning at any point, providing the resulting modifications are followed through the related elements until eventually all aspects of the curriculum have been studied and revised" (p. 128). In the 1970s Revision, Tyler (1977) moved this statement to the preface, stating, "there is no particular sequence in which the four guiding questions should be examined" (Preface, p. 3). He explicitly stated, "Although most persons start with the question of objectives, one can begin with any of the four questions and work through the others" (p. 3). Tyler's Rationale called for a continuous review of all four questions clearly supporting a problem-solving model for curriculum development. This seems to address Kliebard's contention that Tyler meant one could begin with any one of the sources or screens to determine educational objectives, but one could not begin with any of the other three questions Tyler posed.

Tyler's explanation for studying contemporary life in the 1970s Revision helps us further understand the significance of the active role the student should play in the development of the curriculum. Tyler (1978) described contemporary life as "the environment in which the learner now lives or can be expected to live in the future" (chap. 3, p. 1). For Tyler (1978), studying contemporary life as a source for deriving education objectives was "not to outline or describe those aspects which are merely the background in which the learner

exists but rather to focus on those parts with which he is or can be meaningfully involved" (chap. 3, p. 2). For Tyler, greater emphasis needed to be placed on the active participation of the student in the development of the curriculum.

The use of subject matter as a source for objectives has been criticized as being "curiously distorted and out of place" (Kliebard, 1970, p. 261). Kliebard stated, "The suggestions from subject matter specialist are really not a source in the sense that the other two are" (p. 262). In the 1970s Revision, Tyler identified three different purposes for studying subject matter as a source for deriving educational objectives: specialist training, general education, and occupational training. Tyler emphasized the importance of curriculum makers asking the right questions from subject matter specialist and gave a more detailed example of the Committee of Ten, while still choosing to use the term objectives. Although Tyler continued to use the term "objective" with reference to the Committee of Ten, to which Kliebard had objected, this could be a clarification to Kliebard's interpretation of Tyler's "misconceiving the role and function of the Committee of Ten" (Kliebard, 1970, p. 261). Tyler further outlined the different steps for using subject matter as a source for general education as compared when using it for the purpose of occupational training and gave examples for each.

The inclusion of a separate chapter on educational objectives in the 1970s Revision provided additional insight into Tyler's beliefs concerning the importance of and purpose for their use. In the 1949 Rationale, Tyler briefly discussed educational objectives and critics have claimed Tyler's explanation was behavioristic in nature. The critics often reference Tyler's (1949) definition of education in the 1949 Rationale, which stated, "a process of changing the behaviour patterns of people" (p. 5). Tyler changed his wording for education in the 1970s Revision, which he noted in chapter two. There Tyler (1977) defined education as "a process which the student learns certain desired patterns of behavior" (chap. 2, p. 1). In chapter one of the 1970s Revision, Tyler explicitly defined the purpose of education in a democratic society as helping students "become increasingly able to meet his needs, to achieve his purposes, to participate constructively in the society, and to realize his own potential" (chap. 1, pp. 1-2). Tyler noted that this could only be accomplished through clearly defined objectives.

As stated previously, the learner as a source for deriving learning objectives was the area of greatest additions in the 1970s Revision. These additions help us understand Tyler's (1977) commitment to the active participation of the student in all areas of the educational process beginning with his change

in the definition of education which stated, "the process which the student learns certain desired patterns of behavior" (chap. 2, p. 1). Behavior, for Tyler, was used "in the broad sense to include thinking, and feeling as well as overt action" (chap. 2, p. 1). In the 1949 Rationale, Tyler (1949) had defined education as "a process of changing behavior patterns of people" (p. 5). Kliebard (1970) questioned how Tyler's idea of education would be different from other means of changing behavior, such as, "hypnosis, shock treatment, brainwashing, sensitivity training, indoctrination, drug therapy, and torture" (p. 263). Tyler, although he never mentioned Kliebard's criticisms per se in the 1970s Revision, addressed this concern in several places.

In chapter two of the 1970s Revision, Tyler focused on the learner as a source for learning objectives. In this chapter, Tyler noted the importance of considering students' aspirations and expectations for deriving educational objectives. Tyler (1977) noted that the aspirations and expectations of the students represented their "hopes, desires, and future goals" (chap. 2, p. 28). These desires could serve as motivators for student learning.

Within the section on "Relationship of Needs to Objectives" Tyler (1977) noted the function of schooling was to "educate students in such a way that they themselves are better able to

meet their own needs ... to help students acquire those patterns of behavior which assist them in meeting all of their basic needs" (chap. 2, p. 8). This would be accomplished through the use of effective conditions for learning as well as an understanding of the different theories of learning and the appropriateness of their use. Tyler (n.d., chap.6) compared different theories of learning in the 1970s Revision examining the differences between "simple conditioning" and what he called "self-directed complex learning" (p. 7). He noted that there were certain situations where conditioning would be appropriate, such as for eating, driving, and punctuality. On the other hand, Tyler (n.d., chap. 6) emphasized, "the development of the behavior required for human responsibility implies consciousness on the part of the learner and an increasing understanding of the goals of his learning and the means by which they may be attained" (p. 19). For Tyler, learning was more than "hypnosis, shock treatment, brainwashing" (Kliebard, 1970, p. 263) since "consciousness on the part of the learner" (Tyler, n.d., chap. 6, p. 19) was needed in order for the student to have "an increasing understanding of the goals of his learning and the means by which they may be attained" (n.d., chap. 6, p. 19).

In addition, Tyler added a brief discussion in the 1970s Revision of the political and ethical principles. The "political principle" stated "... the function of the school in a

democratic society is to help the student gain the means for increasing independence in judgment and action, and not to urge him to adopt particular doctrines or views" (Tyler, n.d., chap. 5, pp. 8-9). The "ethical principle" stated, "... each individual has a right to privacy not to be invaded by the school" (p. 9). These principles pointed out to schools that objectives should not infringe upon the rights of the individual nor require students to conform to preconceived values or behaviors. Learning, therefore, for Tyler, was not indoctrination, but required active participation and consciousness of the student.

Without a doubt, *Basic Principles of Curriculum and Instruction*, Tyler's 1949 Rationale, has influenced curriculum development for over five decades. The positive and negative criticisms that have surrounded Tyler's Rationale have indicated its importance in the field. According to Schubert (1986), some have argued, "it synthesizes the paradigmatic questions of the curriculum field" (p. 170). Nevertheless, the influence of the Rationale has persisted, and "it is doubtless the most widely cited curriculum book" (p. 171). An examination of Tyler's 1970s Revisions clarifies some of the questions and criticisms surrounding Tyler's 1949 Rationale.

Implications for Further Research

This study focused on the Tyler Rationale and the drafted revised chapters from the 1970s Revision. Tyler did not finish

his revision in the areas of learning experiences, organization of learning experiences, evaluation, and curriculum development in practice. However, Tyler continued to publish articles on these topics after the 1970s Revision was terminated. Research into his published and unpublished articles archived at the University of Chicago on these topics would further illuminate any changes to his theory or practice. What clarifications or changes did Tyler recommend in the areas of learning experiences, organization of learning experiences, and evaluation? How do these changes or clarifications further aid in the understanding of the original 1949 Rationale? Were any of these additions or clarifications in response to some of the criticisms toward the 1949 Rationale? Further research of this type would shed light on these questions and possibly inform the debates and misinterpretations of 1949 Rationale.

As stated at the onset, Tyler prepared *Basic Principles of Curriculum and Instruction* for Education 360, as a syllabus, at the University of Chicago. With this syllabus, Tyler also prepared a list of professional literature, which would serve as the class readings. This list is located in Tyler's papers at the University of Chicago. An examination of the recommended readings listed could further clarify Tyler's beliefs and interests and at the same time help to dispel additional criticisms surrounding the Rationale.

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