

Understanding the Tyler rationale: Basic Principles of Curriculum and Instruction in historical context

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Abstract: This historical study attempts to contribute to our understanding of the widely recognized and widely critiqued Tyler rationale for the development of curriculum and instruction by explaining it in the historical context in which Ralph Tyler developed it, by tracing its origins in Tyler's work, and by reconstructing a history of the course, Education 360, Tyler taught at the University of Chicago. This analysis found that *Basic Principles of Curriculum and Instruction*, which emerged from Tyler's field work with teachers and professors and his conception of evaluation, is best understood as a study guide that Tyler prepared for the use of his students in the course by that name that he taught during the 1940s and 1950s. This analysis found that Tyler's rationale was remarkable in its time for its embrace of three curriculum sources, its conception of education essentially as experience, its approach to assessment as evaluation rather than as measurement, its approach to curriculum development as a problem-solving process, and its commitment to teacher participation in the development of curriculum and instruction.

Keywords: Tyler rationale; curriculum development; evaluation; teacher participation in curriculum development.

Recibido / Received: 19/09/2016

Aceptado / Accepted: 15/05/2017

1. Understanding the Tyler rationale: *Basic Principles of Curriculum and Instruction* in historical context

As every curriculum scholar knows, the Tyler (1949) rationale is an approach to curriculum development that many curriculum theorists seem to love to hate. Beginning with Kliebard's (1970, p. 270) representation of the Tyler rationale as a «production model of curriculum and instruction», it persistently has been depicted in this and other negative ways in the curriculum literature – even despite corrective analyses (Hlebowitsh, 1992, 1995) and some sympathetic representations (Antonelli, 1972; Tanner & Tanner, 1980; Franklin, 1987; Kridel & Bullough, 2007). Indeed, a

recent analysis posits that curriculum scholars have used the Tyler rationale largely as a straw man against which to define their preferred proposals (Wraga, 2016). Meanwhile, over the decades Tyler's rationale has enjoyed widespread attention as a practical approach to curriculum development, not only in the US, but internationally, as well, having been translated into at least six languages¹.

This paper aims to improve our understanding of the Tyler rationale by describing the contexts in which Tyler developed it, tracing the origins of the rationale in Tyler's earlier work, reconstructing the history of the course, Education 360: Basic Principles of Curriculum and Instruction, at the University of Chicago, examining an unpublished course outline (or class syllabus) Tyler used to teach the course in the summer of 1948, and analyzing the mimeographed course syllabus that was made available in 1947 through the University of Chicago bookstore, before the University of Chicago Press published it as a small book in 1950.

The Tyler rationale responded to definitive historical developments in US education during the first half of the twentieth century, including the growth of school enrollment, the emergence of curriculum development as a specialized professional role, the development of educational assessment, and the expansion of teacher training. Tyler's rationale emerged during the 1920s and 1930s from his field work with school teachers and university faculty, his efforts to clarify educational purposes, his development of test construction techniques, and his invention of educational evaluation as an alternative to educational measurement. Tyler designed the course Education 360 to engage his students in a process for developing curriculum and instruction for particular students in particular educational settings; the syllabus he prepared for his students was intended as a study guide. Understood in the historical context in which it was developed, Tyler's rationale is notable for its embrace of three curriculum sources, its conception of education essentially as experience, its approach to assessment as evaluation rather than as measurement, its approach to curriculum development as a problem-solving process, and its commitment to teacher participation in the development of curriculum and instruction. This is to say that Tyler's rationale is much more than the four questions he posed.

2. Representations of the Tyler Rationale

After its publication in 1950, for twenty years, the approach to developing curriculum and instruction that Tyler articulated in *Basic Principles of Curriculum and Instruction* went unchallenged until Herbert Kliebard's (1970) unsparing reevaluation of many of Tyler's assertions. Depicting Tyler's rationale as «revealed doctrine» (p. 259) in the US curriculum field, Kliebard dismissed Tyler's use of three sources for educational purposes as «simple eclecticism» (p. 260), rejected Tyler's representation of the Committee of Ten's curriculum recommendations (pp. 261-62), suggested that Tyler's model was value neutral (p. 265), associated it with Franklin Bobbitt's (1918, 1924) approach to activity analysis, characterized Tyler's call to use philosophy as a screen for tentative objectives as «trivial, almost vacuous» (p. 266),

¹ Including Danish, Dutch, German, Japanese, Portuguese, Spanish, and a Nigerian edition in English. Ralph W. Tyler Papers, Special Collections Research Center, University of Chicago Library.

portrayed Tyler's rationale as «relentlessly» step-wise (p. 267), and implied that Tyler's definition of education was narrowly behavioristic (p. 268). Kliebard concluded that Tyler's rationale «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). For Kliebard, in the final analysis, Tyler's rationale represented a «production model of curriculum and instruction» (p. 270).

Not long after the publication of Kliebard's (1970) critique, Antonelli (1972, p. 72), in what was mostly a biographical sketch of Tyler's lifework, refuted Kliebard's association of Tyler's rationale with Bobbitt's approach to job analysis, on the grounds that while job analysis almost exclusively drew from society as a source of educational objectives, Tyler (1949) also drew from the nature of the student and of subject matter in selecting educational purposes. Antonelli's analysis subsequently seems to have been largely overlooked by curriculum scholars in the US, for during the 1970s and 1980s Kliebard's critique of Tyler's rationale seemed to assume the status of near orthodoxy, especially among so-called reconceptualist curriculum theorists looking to repudiate the historic field of curriculum development in order to turn curriculum scholarship increasingly away from school practice and toward expansive theoretical inquiries.

About twenty years after the publication of Kliebard's (1970) critique, Hlebowitsh (1992) reviewed the accumulated criticisms of Tyler's rationale in the US curriculum literature. Focusing on the association of Tyler's rationale with Bobbitt's activity analysis, on the assertion that Tyler advocated highly specific objectives, and on depictions of Tyler's model as behavioristic, irrefragably linear, and philosophically neutral, Hlebowitsh found that these claims were problematic largely because they were based upon misrepresentations of what Tyler actually wrote – findings which Kliebard (1995) dismissed. Subsequently, Hlebowitsh's attempt to correct misrepresentations of Tyler's rationale seems to have had little impact, as US curriculum scholarship continued to interpret Tyler's model as an impossibly linear, behavioristic, and narrowly technical model of curriculum construction (e.g., Pinar, Reynolds, Slattery & Taubman, 1995, pp. 148-49; Ellis & Fouts, 1997; Slattery, 2006, pp. 52-53; Marsh & Willis, 2007, p. 72). Such renderings also have spread from the general curriculum field to other fields, such as adult education (Sork, 2000) and music education (Hanley & Montgomery, 2002; see Wraga, 2016).

Rather than analyzing each criticism of Tyler's rationale, this paper attempts to place Tyler's work in the context of education in the US during the first half of the twentieth century and to trace the emergence of Tyler's rationale for curriculum development in his early activities in education, as a prelude to reconstructing the history of the course, *Education 360 Basic Principles of Curriculum and Instruction*, that Tyler taught during the 1940s and 1950s at the University of Chicago.

3. Educational contexts

Tyler's curriculum work and his resultant rationale are best understood in the context of at least four historical developments that characterized education in the US during the first half of the twentieth century. The first was a dramatic expansion

of enrollments in US public schools. In 1900, for example, US high school enrollments represented 10.2 percent of the population of 14 to 17 year olds; by 1920 they were 31.2 percent; by 1940 72.6 percent (Snyder & Hoffman, 2003, p. 69). As enrollments expanded, the student population became more reflective of the adolescent population and increasingly diverse in competence, aptitude, and ambition. The traditional formalistic academic curriculum no longer sufficed to serve the educational needs of the new student population. In response to these new circumstances curriculum development became a specialized professional role in larger school systems in the US and new approaches to curriculum construction, among them activity analysis, the project method, planning by objective, and cooperative educational experimentation, appeared (Caswell, 1966; Bellack, 1969; Davis, 2005). Tyler's (1949) rationale represented another effort to identify an approach to curriculum development appropriate to an increasingly variegated student population.

Efforts to accommodate the increasing number and proportion of children and adolescents in US schools included not only new approaches to curriculum development, but also the development of new techniques to assess student learning, notably the aggressive expansion of group testing in public schools following its use in the US armed services during World War I, which boosted the field of educational measurement (DuBois, 1970; Sokal, 1987; Chapman, 1988). The increase in the number of students also created a demand for increased numbers of teachers; as a result, normal schools evolved into teachers' colleges and research universities not only opened teacher training programs, but also began to systematically study the problems of education on an unprecedented scale (Clifford & Guthrie, 1988; Lagemann, 2000).

Tyler was involved in all of these developments, from supervising student teachers at the University of Nebraska, to his work at Ohio State and subsequently in the Eight-Year Study with evaluation methods--which challenged the educational measurement approach--and through the development of his curriculum rationale, which grew out of his original evaluation work and his experience with the Eight-Year Study, a national project conducted by the Progressive Education Association during the 1930s involving about thirty high schools which were freed from college entrance requirements to experiment with alternative curriculum designs, and with the Cooperative Study in General Education, a project modeled after the Eight-Year Study that involved twenty-two colleges. Tyler's rationale emerged from his efforts to respond to these educational realities of his day.

4. Tyler's early work and the emergence of the rationale

After graduating from Doane College in 1921, Tyler taught high school science in Pierre, South Dakota for one year. In 1921-22 he obtained a master's degree and taught at the university high school at the University of Nebraska, staying on for four years to continue high school teaching and to supervise student teachers. In 1927, Tyler completed his Ph.D. at the University of Chicago after one year, studying with educational psychologist Charles Judd, curricularist W. W. Charters, and educational sociologist George S. Counts. He then worked for two years at the University of North

Carolina, where he coordinated the state testing program and consulted through the extension service with public school teachers around the state, after which he followed Charters to The Ohio State University, where Tyler directed the testing and statistics section of the Bureau of Educational Research (Finder, 2004; Lackey & Rowls, 1989, pp. 10-11; also see Kridel & Bullough, 2007, pp. 89-96). Although he was primarily interested in curriculum, at Ohio Tyler expanded his expertise in assessment, and in effect invented evaluation as an alternative to measurement, which led to his appointment as director of the Evaluation Staff of the Eight-Year Study.

Antecedents to Tyler's curriculum rationale are evident in his early practical work with teachers and with university faculty members, in his early concerns about clarifying objectives, in his development of test construction techniques, and in his invention of evaluation as an alternative to the prevailing educational measurement paradigm. According to Tyler (1966), his evaluation process expanded into a curriculum development method in 1936 during the Eight-Year Study, and then was refined during his work on the Cooperative Study in General Education from 1939 to 1946. A brief examination of Tyler's earlier work, drawing from two overlooked dissertations on the topic (Levy, 1972; Echols, 1973) as well as from other sources, establishes the origins of his rationale.

4.1. Focusing on practice

Antonelli (1972, p. 68) attributed Tyler's «pragmatic inclination» not only to his experience as an undergraduate at Doane College, but also to the experimental kindergarten that Tyler attended as a child at the Peru (Nebraska) Normal School. As an adult, it certainly was in the experiences that preceded his return to the University of Chicago as a faculty member that Tyler developed an inclination to study educational problems directly in educational settings. Tyler recalled that during his doctoral studies, «Judd had every one of us in every course go out and do a study, working with kids to discover how they learned and the ways they learned . . . [Judd's] great influence was the view that one learned about education from being in the classroom . . .» (Tyler, 1987, p. 398).

Similarly, in North Carolina Tyler travelled around the state working directly with teachers (Levy, 1972; Echols, 1973), and during the Eight-Year Study, Tyler and his evaluation staff visited each of the approximately 30 participating schools three times a year, making at least 35 cross country drives to work on problems of evaluation and assessment (Tyler, 1987, pp. 79-80). Tyler (1986) recounted that in working in the Thirty Schools he «became such a devotee of having curriculum planning proceed, with certain guidance and technical assistance, with the actual participation of teachers in the development of the program» (p. 73). He continued, «If you are going to have a program which is enacted, the teachers must participate» (p. 73, emphasis in original). As he put it in another interview, from the Eight-Year Study Tyler learned, «the importance of working from where the action is, where the real thinking and action take place, where the children are, the parents are, and the teachers and principals are» (Tyler, 1987, p. 104). Tyler's early field experience in schools is reflected in the practical, local orientation of Tyler's rationale.

4.2. Clarifying objectives

Tyler's early realization of the importance of clarifying objectives contributed to his thinking about curriculum. While studying for his master's degree and teaching at the University of Nebraska, Tyler was dissatisfied that prevailing opinion about the purposes of teacher training programs was just that--sheer opinion. In order to identify objectives for his program that were actually relevant to teaching realities, Tyler «sent out a questionnaire to all the science teachers in the state asking what their activities were and what they felt they needed to know» (Echols, 1973, p. 172). Similarly, while directing the state testing program at the University of North Carolina, Tyler concluded, based upon his finding «that numbers of black and poor white students with no prospect of attending college were memorizing Latin in order to make high scores on a Latin achievement test», that «the objectives that were being tested [were] irrelevant» (Echols, 1973, p. 180).

And in his work with zoology and botany courses taught through the College of Agriculture at the Ohio State University, the first task Tyler engaged faculty in was that of clarifying their course objectives (Echols, 1973, p. 183). Levy (1972, pp. 38, 41) argued that not only Tyler's conception of a proper objective, but also what became the four fundamental questions of Tyler's rationale, were evident in the service studies of curriculum problems and problems of method that Tyler and Waples explored in their 1930 work titled, *Research Methods and Teachers' Problems* (Waples and Tyler, 1930). Levy (1972, 46, also 43, 47) also found «a close parallel» between Tyler's (1931a) proposal for a ten-step process for constructing achievement tests and what became the four fundamental questions of his 1950 rationale. Tyler extended and elaborated these tasks first into his procedure for developing tests, then into his evaluation method, and finally into his curriculum rationale.

4.3. Inventing evaluation

In his work at the Ohio State University during the early 1930s Tyler, in effect, single-handedly invented evaluation as an approach to educational assessment that challenged contemporary conventions of educational measurement, which had appeared by about 1910. The unique feature of evaluation was that it was «curriculum-oriented», that is, focused on serving the particular teaching situation, rather than on serving the science of measurement (Echols, 1973, p. 167). As Echols (1973) put it, evaluation was «a thoroughly articulated theory proceeding from curriculum assumptions» (p. 168) that was definitively articulated by Tyler in 1930 and 1931.

While measurement sought standardization and comparability by imposing externally developed tests on local situations, evaluation sought to assess behaviors manifest in educational objectives developed in local situations. Evaluation assessed students against the criteria of local educational objectives rather than against a statistical norm of performance on a standardized instrument. Unlike measurement, evaluation used multiple, really any, valid sources of information about student learning, not just standardized tests, required «cooperation between the teacher and the test expert», and was subject to continual modification and improvement in use (Echols, 1973, pp. 213, 399).

Levy (1972) found that the evaluation procedure that Tyler employed in the Eight-Year Study emerged from his previous evaluation work and formed the basis for his curriculum rationale. As the Eight-Year Study emancipated its participating schools from the domination of college entrance requirements, it was not initially clear to teachers and administrators what alternatives to the college prep curriculum were available for secondary schools (Aikin, 1942, p. 16; Kridel & Bullough, 2007, pp. 147-49). Teachers in the participating schools needed a new way to think about the high school curriculum, and it was to come from Tyler.

4.4. *The rationale emerges*

In an interview Levy conducted with Tyler in 1970, Tyler recounted that in 1936, after the problem of a lack of a curriculum rationale as clear as Tyler's evaluation rationale was broached to him before lunch by Harold Alberty (who told Levy that he himself did not recall this conversation), following the luncheon Tyler presented his nascent curriculum rationale to a meeting of the curriculum and evaluation staffs of the Eight-Year Study. Levy (1972, p. 55) summarized Tyler's account this way:

. . . when the group met that afternoon he drew on the blackboard four boxes to represent what he considered to be «four major curriculum problems». He then filled the boxes in with some of the procedures he suggested to deal with each «problem».

To determine the objectives, Tyler suggested that the three primary data sources and two screens, as stated in his rationale, were necessary. In the second box he simply noted that the nature of the objective would determine the kinds of experiences required to attain them. In the third box he mentioned only that in the organization of the experiences some sequential development as well as relationships among the things going on at the time were necessary. Finally, in terms of the fourth box, he commented that evaluation was required but did not elaborate since he felt that his ideas on evaluation were already known.

The similarity between Tyler's account of his nascent rationale and the scheme used by the curriculum staff of the Eight-Year Study (Giles, McCutchen & Zechiel, 1942, p. 2) was noted by Levy, as it has been by others (Tanner & Tanner, 1980; Kridel & Bullough, 2007, p. 94). Levy (1972) concluded, however, «The exact extent of Tyler's influence on the work of the Curriculum Staff, and vice versa, cannot be ascertained» (p. 57).

Tyler has recollected the story of the origin of his rationale in several interviews, with some variation in the details. In 1980 he told Schubert and Schubert, «One day, in 1936-37, we were sitting at the faculty club at Ohio State University with the curriculum associates . . . Wilford Aikin, who was the Director of the entire study, interviewed the heads of the schools and they were saying that the evaluation staff was so much more helpful than the curriculum staff. Aikin said, "That's very funny because they need curriculum help". McCutchen said, "It's because Tyler has a rationale for evaluation that made sense to them, and they know how to proceed, but there isn't any rationale for curriculum". We got this from the morning session». Tyler

continued, «Then we adjourned for lunch, and I said to Hilda Taba (who was on our staff in social studies--one of the best of my associates), “Shucks, we can produce a rationale for them”. She said, “You can!” I said, “Yes”, and on a napkin I sketched out the basics of what later became the Basic Principles of Curriculum and Instruction; that is, the need to get data about the society, about the students, and all of these things» (Tyler, Schubert & Schubert, 1986, p. 94).

In 1981 Tyler told Ridings that it was in 1938 when «the curriculum staff complained that the schools were saying they were getting more help for [sic] the evaluation staff than from the curriculum staff. Albery explained this by saying: “Tyler has a rationale for evaluation and there isn’t any rational for curriculum”. So when we were having lunch, I said to Hilda Taba, my right-hand associate, “Why, that’s silly, of course there’s a rationale for curriculum”. I sketched out on the napkin what is now often called “The Curriculum Rationale”» (in Finder, 2004, p. 100).

In a 1966 article in *Phi Delta Kappan*, Tyler (1966) indicated that the «stimulus for me to construct a comprehensive outline of the questions to be answered and the steps to be taken in developing a curriculum, including the program of instruction, arose from my work with the staff of the Eight-Year Study» (p. 25). He then elaborated,

The rationale developed in 1936 was also employed in the Cooperative Study in General Education, a curriculum project of 22 colleges carried on in the period 1939-46. The modifications which resulted from its use at the college level were incorporated in 1950 in the syllabus written for a course I taught at the University of Chicago entitled «Basic Principles of Curriculum and Instruction» (p. 25).

Although some of the particulars of Tyler’s recollection vary, he consistently recalled that during his work with the Eight-Year Study his evaluation rationale expanded into a curriculum rationale.

4.5. *Other antecedents*

Levy (1972, p. 68) also found evidence of principles presented in Tyler’s *Basic Principles of Curriculum and Instruction* in work Tyler (1931b) had done during the early 1930s on learning activities, in his work as Director of the Evaluation of the United States Armed Forces Institute during World War II, and in his discussion of curriculum organization (Tyler, 1950b) at the October 1947 Curriculum Theory Conference held at the University of Chicago. The clearest manifestation of Tyler’s rationale that preceded its formal publication as a syllabus was in his work with the Cooperative Study in General Education. In Tyler’s (1939) description of the study the four fundamental questions of his curriculum rationale were clearly evident, as they were in the final report of that multi-year project (Cooperative Study in General Education, 1947, pp. 208-16). Levy (1972) concluded that the curriculum rationale Tyler presented to his colleagues during the Eight-Year Study «was an extension of the “evaluation rationale”» he used the Eight-Year Study, which in turn «was an elaboration of his “General Technique for Constructing Achievement Tests” published in 1931», and also likely «developed from his work with Waples on systematic studies of classroom procedure» (pp. 77-78).

In addition to attempting on several occasions to recount the moment during his work with the Eight-Year Study at which his rationale emerged, Tyler (1986) in retrospect identified five ideas that influenced his thinking about curriculum making, which further contextualize his work. First, during the early twentieth century the notion that subjects held varying disciplinary values – a notion that during the nineteenth century had guided the selection of subjects in the curriculum – was undermined by Thorndike's empirical test of the idea of disciplinary value. Tyler recalled that, as a result, «there was this tremendous feeling that all the underpinnings of the curriculum – the faith which we had in various subjects – had disappeared» (p. 71). The new approach was to seek a psychological justification for curriculum. Tyler preferred Judd's argument for generalized modes of action over Thorndike's emphasis on specific elements for transfer, and associated Bobbitt's early activity analysis with the latter.

Tyler (1986) also explained that his observation of «considerable change in society» during the 1920s and 1930s (p. 72) resulted in his recognition of «what we knew about the larger society as a basis for schooling» (p. 72). Tyler was also impressed by Dewey's ideas about interest and effort in education and thought that in order to improve learning student interests should be considered in curriculum development. Further, while disciplinary value was no longer a consideration, Tyler saw knowledge continually developing and thought that curriculum development should reflect advances in knowledge. Finally, as noted above, through his work in the Eight-Year Study Tyler (1986) «became such a devotee of having curriculum planning proceed... with the actual participation of teachers in the development of the program» (p. 73). All of these ideas, of course, eventually found expression in Tyler's (1950a) published rationale, the impetus behind which was a course he taught at the University of Chicago during the 1940s and early 1950s.

5. «Basic Principles of Curriculum and Instruction» at the University of Chicago

When on September 1, 1938, Tyler began his tenure at the University of Chicago, he was age 36 and 11 years out of graduate school. Despite Tyler's reputation as a progressive educator, President Robert Maynard Hutchins, who harbored little sympathy for progressive education, had brought Tyler back to the Hyde Park campus in the hope that the college examination system would benefit from Tyler's expertise in evaluation (White, 1977). Tyler's principal responsibilities at Chicago included serving as Chief of the Examiner's Office, which five years earlier as a consultant Tyler had helped establish, and as Head of the Department of Education, replacing Judd (Lackey & Rowls, 1989, pp. 15-16; White, 1977). Later, he served as acting dean from 1946 to 1948 and then from 1948 as dean of the Division of the Social Sciences until his retirement from Chicago in 1953 (Dzuback, 1991).

Given Hutchins's reason for bringing Tyler to the University of Chicago in 1938, and given Tyler's by then recognized expertise in evaluation, his initial teaching responsibility was the course Education 396 Construction of Tests (*Announcements*, 1939-40, p. 46). In fact, at the time of Tyler's appointment, a general curriculum course already existed at the University of Chicago: Education 362 The Curriculum,

taught two to three times a year by Franklin Bobbitt (*Announcements*, 1939-40, p. 45). Given the utility of Tyler's curriculum rationale to the Eight-Year Study and his then current use of it in the Cooperative Study in General Education, it is understandable that Tyler would have wanted to teach a course based upon that rationale. As it happened, Educational 360 Basic Principles of Curriculum and Instruction was first offered during summer quarter 1940 (*Announcements*, 1940-41, p. 40). The course description was as follows:

Principles involved in formulating the objectives to be achieved by education; selection and organization of learning experiences; determining the effectiveness of content and method. This is the basic course in the field of curriculum and instruction and provides an overview of problems and principles. It is prerequisite to other courses in this field. (*Announcements*, 1940-41, p. 40)

Education 360 and 362 coexisted for one year; Bobbitt taught 362 for the last time during summer quarter 1941, retiring that year. During the 1940s, Tyler typically taught Education 360 twice per year, along periodically with the course on test construction and a practicum on curriculum development in educational agencies. An analysis of two unpublished iterations of Tyler's Education 360 syllabus that have not previously been examined can shed light on Tyler's rationale. In order to focus on understanding Education 360 Basic Principles of Curriculum and Instruction as a course, this analysis discusses these two documents not in the chronological order in which each is dated, but in the logistical order in which Tyler created them for his course.

5.1. *The 1948 course outline*

The 1948 course outline (*Education 360*, 1948, p. 1), or class syllabus, opened with a statement of «four fundamental questions» that «must be answered» in «the development of a curriculum and plan of instruction», which are nearly verbatim to the questions presented in the later published book (Tyler, 1950a, p. 2). Next, a brief statement noted that the answers to these questions will vary from one educational situation to another and that, therefore, students in the course should focus on becoming «familiar with procedures by which these questions can be answered, [and] should develop a rationale by which to examine curriculum problems» (*Education 360*, 1948, p. 1). A reading of the 1948 course outline reveals that the focus of the course was not on examining ways to manage a curriculum development procedure in a school, but on engaging Tyler's students in a process for deciding what their students should learn in a particular education setting with which Tyler's students were familiar. Tyler's course focused not on the bureaucratic administration of curriculum development, but on a practical-intellectual process of planning educational experiences for particular students in local educational settings.

With respect to course readings, the 1948 course outline indicated the following: «A mimeographed syllabus is available at the University College Bookstore. This syllabus includes the basic reading material for the course. Additional suggested readings are listed in the following course outline» (*Education 360*, 1948, p. 2).

Before examining the mimeographed syllabus, it is useful to consider the «additional suggested readings» listed in the course outline.

Although the published version of the *Basic Principles of Curriculum and Instruction* syllabus (Tyler, 1950a) contained no formal references – though its text named about thirty works – the 1948 course outline (*Education 360*, 1948) provided a total of 66 references. (In this section, these references are cited in-text only). Three of these were listed more than once: Smith and Tyler's (1942) evaluation volume for the Eight-Year Study three times, and Taba's (1945) chapter for the 44th NSSE Yearbook and the NSSE Yearbook on Adolescence (1944) twice each. Tyler's multiple citing of these works may be explained by consideration of the facts that the Smith and Tyler (1942) volume provided a definitive description of Tyler's approach to evaluation, that the NSSE Yearbook on Adolescence presented a comprehensive and contemporary study of adolescent needs, and that Taba presented a thorough and concise discussion of selecting and organizing learning experiences. The 1948 course outline listed suggested readings for each class session, corresponding to the four fundamental questions, and to sub-questions for the first question.

Assuming for a moment that these readings may suggest the origins or sources of Tyler's thinking, it is interesting to consider what well-known early twentieth century US curriculum works did not appear in the 1948 course outline. Neither Bobbitt's (1918, 1924) nor Charters's (1923) curriculum texts, the *Report of the Committee of Ten* (National Education Association, 1893), the Cardinal Principles report (Commission on the Reorganization of Secondary Education, 1918), the Twenty-Sixth Yearbook (Whipple, 1926), the Harvard report (Harvard Committee, 1945), any report by the Educational Policies Commission (e.g. 1944), nor the series of Eight-Year Study reports (e.g., Aikin, 1942) other than the evaluation volume, were listed in the suggested readings for Education 360. However, an analysis of the readings that do appear indicates that, significantly, the purpose of these readings was not to identify the sources of Tyler's thinking about curriculum, but rather to provide Tyler's students with resources for answering the four fundamental questions following the process Tyler presented in Education 360.

Under the heading of «How Can Suggestions Regarding Objectives Be Obtained by Studies of Children, Youth, and Adults?» the 1948 course outline listed 18 references under the subheadings of Children, Adolescents, Adult Level, and All Levels (*Education 360*, 1948, p. 2). Published between 1935 and 1947, these readings provided a range of perspectives on personal-social development within each age group and included psychological, educational, and social studies. These readings provided Tyler's students with opportunities to consult general studies of the nature of learners, as his published rationale later suggested (Tyler, 1950a, p. 7).

Under the heading «How Can Suggestions Regarding Objectives Be Obtained From Analyzing Life Outside the School?» the 1948 course outline listed eleven references, dating from 1933 to 1947, comprising educational and social studies of contemporary life (*Education 360*, 1948, p. 4). Among these references were included the American Youth Commission's (1940) *What the High Schools Ought To Teach*, Stuart Chase's (1942) *Goals for Americans*, George Counts's (1943) *The Social Foundations of Education*, the NSSE 43rd Yearbook on *Adolescence* (1944), the 1938 Regent's Inquiry (Spaulding, 1938), a study of rural communities (Public

Administration Service, 1947), a study of wartime society (Clark, 1943), and William Whyte's (1943) *Street Corner Society*. Under the heading «How can Suggestions Regarding Objectives Be Obtained From Specialists in Various Fields?» the 1948 course outline (*Education 360*, 1948, p. 4) listed one to three references for each of six subject areas, published between 1934 and 1947. Interestingly, these 14 readings were almost exclusively progressive education sources--for example, five from the Progressive Education Association's Commission on Secondary School Curriculum (1940). No sources from perennialists, who considered eternal truths deposited in the Great Books as the most important knowledge for students to learn, or essentialists, who considered essential disciplinary subject matter as the most important knowledge for students to learn, that were widely discussed at the time--such as Tyler's boss Robert Hutchins's (1936) *The Higher Learning in America*--appeared in this list of readings about subject matter.

For the question, «How can An Educational and Social Philosophy Be Used in Selecting Objectives From These Suggestions?» the 1948 course outline (*Education 360*, 1948, p. 6) listed six references, which included general treatments of education philosophy, such as Brubacker's (1939) *Modern Philosophies of Education*, the NSSE 41st yearbook on *Philosophies of Education* (1942), and chapter 5 about principles behind curriculum from Caswell and Campbell's (1935) curriculum textbook, as well as a progressive treatment in Dewey's (1938) *Experience and Education*, and academic traditionalist perspectives found in Kandel's (1943) *The Cult of Uncertainty* and Maritain's (1943) *Education at the Crossroads*.

For use in answering the question «How Can the Psychology of Learning Be Used in Selecting Objectives From These Suggestions?» the 1948 course outline (*Education 360*, 1948, p. 6) presented a similarly eclectic overview of learning theories, pointing to three chapters in an introduction to educational psychology anthology edited by Skinner (1936) that summarized perspectives on the nature of learning, transfer, and the various schools of psychological thought of the day. Additionally, the 1948 class syllabus listed Cantor's (1946) *Dynamics of Learning*, which articulated an unconventional approach to college teaching, couched in a scathing critique of mid-century western society, that rejected traditional teaching and applied what Cantor called «mental hygiene», which was comprised of concepts from psychiatry, to an analysis of both the teacher and the student as they interacted in the learning environment.

For the question of «How Can Objectives Be Stated So That They Are Helpful in Selecting Learning Experiences and In Guiding Teaching?» the 1948 course outline (*Education 360*, 1948, p. 6) listed two resources: chapter one of Smith and Tyler's (1942) volume on evaluation in the Eight-Year Study, in which Tyler articulated the evaluation process used in the Eight-Year Study, and a chapter Tyler contributed to Hawkes, Lindquist, and Mann's (1936) *The Construction and Use of Achievement Examinations*, in its day the authoritative reference on the topic, titled «Identification and Definition of The Objectives to Be Measured». Here Tyler explained the development of and the role of objectives, comprised of both content and behavior, in guiding a comprehensive examination program.

Under the question «How Can Learning Experiences Be Selected Which Are Likely to Be Useful in Obtaining These Objectives?» the 1948 course outline (*Education 360*, 1948, p. 7) listed nine references that provided a range of

perspectives on the classroom environment, including volumes on classroom life in rural schools, elementary schools, colleges, and small schools, the chapters on teaching procedures and organizing instruction in Caswell and Campbell (1935), Taba's chapter for the 44th NSSE Yearbook, as well as resources on using audio-visual aids. For the question, «How Can Learning Experiences Be Organized for Effective Instruction?» the 1948 course outline (*Education 360*, 1948, p. 8) listed as references a 1945 article about «How To Make a Resource Unit» developed by Harold Alberty and his graduate students at the Ohio State University, and Taba's chapter for the 44th NSSE Yearbook. Finally, for the question, «How Can the Effectiveness of Learning Experiences Be Evaluated?» the 1948 course outline (p. 8) listed the overview chapter from Tyler, and Hilda Taba's chapters on «Interpretation and Uses of Evaluation Data» and «Planning and Administering the Evaluation Program» from the Smith and Tyler (1942) evaluation volume from the Eight-Year Study.

The suggested readings in Tyler's 1948 class syllabus represented an eclectic variety of perspectives about aspects of Tyler's curriculum development process. These readings were not intended to identify the intellectual sources of Tyler's curriculum development process, but instead were offered to serve as resources for his students to consult as they worked through Tyler's rationale and developed a curriculum for students in their local educational settings –which his students prepared as the central assignment for Tyler's course.

5.2. The 1947 mimeographed syllabus

According to Kolodziej (1986), who during the 1980s prepared a bibliography of Tyler's works, the mimeographed syllabus that the University of Chicago Press would later publish, Tyler initially «prepared at the request of his students in the mid-1940s» (p. viii). Tyler (1987) recalled the origins of the *Education 360* mimeographed syllabus this way:

That was the one which I made as a syllabus, and which became the book that is so widely distributed. I had no intention of publishing. In fact, I dictated it on two or three weekends and that was a syllabus to guide the course. I did not send it to the University of Chicago Press. I had it in the bookstore in mimeograph form and the University Press found so many demands for it they decided to publish it. I didn't even know it was made a book until later. Of course, I get no royalties from it (pp. 113-14).

John Goodlad recalled to Morris Funder the origins of the mimeographed syllabus this way:

His graduate assistant, Louise, who later became his wife and became one of our good friends, told me that Ralph dictated it over a series of weekends. Indeed, it was she who persuaded him to do this so he could get it out. When I took Ralph's course in winter 1948, we received each week mimeographed copies of chunks of the manuscript hot off the press. The distribution of the whole spread out over a good deal of the quarter, and that would seem to

confirm what Louise told me (personal correspondence quoted in Finder, 2004, p. 168, note 1.).

Goodlad's recollection about the date, however, seems faulty, owing to the fact that the University of Chicago library possesses a copy of the original mimeographed syllabus (Tyler, 1947), which indicates that it was «Distributed by The University of Chicago Bookstore» and is dated 1947. Using that date, by the time Tyler prepared this syllabus for his students, the University of Chicago *Announcements* indicate he had taught Education 360 15 times. It was during Tyler's service as interim dean, from 1946 to 1948, and then as dean of the Division of the Social Sciences, from 1948 to 1953, that the 1947 mimeographed syllabus was prepared and the 1950 book was published.

The 1947 mimeographed syllabus (Tyler, 1947) and the 1948 course outline (*Education 360*, 1948) exactly paralleled each other. The four fundamental questions and the procedures Tyler proposed for answering them were explicated in detail in the 1947 mimeographed syllabus. The 1947 mimeographed syllabus presented numerous examples of applications of the principles articulated and provided eight activities that would walk students through the process – and their paper for the course – and mentioned in the text about thirty publications that could inform that process. The 1947 mimeographed syllabus (Tyler, 1947) presented all of the basic principles that appeared in the University of Chicago Press version published in 1950 (Tyler, 1950a). The University of Chicago Press does not seem to have maintained complete records on *Basic Principles of Curriculum and Instruction* – at least they were not deposited in the Press's papers available in the Special Collections Research Center of the University of Chicago Library at the time of the research for the present paper. But a comparison of the 1947 mimeographed syllabus available in the university bookstore (Tyler, 1947) with the 1950 University of Chicago Press publication (Tyler, 1950a, specifically the ninth impression of the latter from 1957), indicates that the Press did not simply print the 1947 text verbatim, but that a range of revisions were made to the 1947 text before it was published in 1950 as a book.

Deletions of material from the 1947 text (Tyler, 1947) before publication in 1950 (Tyler, 1950a) ranged from cutting a character or word or a redundant sentence to clarify the text, to removing two of eight student activities suggested in the text. Otherwise, the vast majority of the material in 1947 text appears in the 1950 publication intact, including corrections that were typed onto the 1947 mimeographed copy.

Material that did not appear in the 1947 mimeographed syllabus (Tyler, 1947) but that did appear in the 1950 publication (Tyler, 1950a) also ranged from single words and punctuation to a number of complete paragraphs. The most substantive additions were as follows: first, in a new introduction (Tyler, 1950a, p. 1), a section heading and two paragraphs describing «the purpose of this course» and a section heading and a new paragraph on «the purpose of this syllabus» (the four «fundamental questions» remained verbatim); second, at the end of the chapter on evaluation three new paragraphs on the uses of evaluation (Tyler, 1950a, pp. 80-81); and third and most substantively, the six paragraphs that comprise the whole of the short last chapter about «how a school or college staff may work on curriculum building» (Tyler, 1950a, pp. 82-83).

Despite the numerous deletions, revisions, and additions made to the 1947 mimeographed syllabus (Tyler, 1947) before it was published as a book in 1950 (Tyler, 1950a), the overall approach to curriculum development that Tyler described was not altered in any significant way from the early document to the latter. All of these changes had the effect of enhancing the explication of Tyler's rationale for curriculum development. The paucity of archival materials pertaining to the publication of *Basic Principles of Curriculum and Instruction* makes it impossible to determine who, exactly, made these changes. But while changes that amounted to editing could well have been made by a secretary or a staffer at the Press, it is difficult to imagine that the total of four pages of additional material added to the introduction, to the fourth chapter, and to create the fifth chapter had such a source; these passages seem too substantive and are too consistent with Tyler's «voice» to have come from anyone other than Tyler--which of course contradicts Tyler's recollection of the origins of the book.

In any event, it is clear that Tyler intended the 1947 mimeographed syllabus to serve as a study guide for his course. It offered not only an explication of his process for developing curriculum and instruction, but also eight activities designed to walk students through the specific tasks of that process. Significantly, the absence of the later-added fifth chapter on «How A School or College May Work on Curriculum Building» (Tyler, 1950a, pp. 82-83) from the 1947 mimeographed syllabus (Tyler, 1947) indicates, again, that Tyler prepared the syllabus not as a manual for school-wide curriculum building, but as a study guide that walked his students individually through his process to develop curriculum and instruction for the particular students that Tyler's students taught in their particular educational settings.

In summary, then, the two unpublished syllabi pertaining to Education 360 examined here together supported a practice-oriented course in curriculum development. The 1948 course outline (*Education 360*, 1948) provided Tyler's students in Education 360 a structure for developing a program of curriculum and instruction for particular students in a particular educational setting, drawing appropriately from a list of 66 references, culminating in a paper organized around Tyler's four questions. The 1947 mimeographed syllabus (Tyler, 1947) served as a study guide for students to consult as a complement to Tyler's class lectures. Education 360 introduced students to a practical process for developing curriculum and instruction in local educational institutions. Interestingly, during the mid-twentieth century, and indeed for almost all of its existence from the 1890s until it was closed in 1997, the department of education at the University of Chicago held research as its top priority, usually at the neglect of training teachers and serving school practitioners (White, 1977; Clifford & Guthrie, 1988; Dzuback, 1991). With its focus on practical curriculum development, Tyler's course was exceptional in that institutional and academic context, but not in the context of Tyler's lifework, as discussed above.

5.3. *Education 360 recollected*

John Goodlad (1995), a graduate student of Tyler's during the mid-1940s at the University of Chicago, indicated that Education 360 comprised «one of the nine basic areas on which we would be examined in the qualifying examinations for the

Ph.D.» (p. 76). And despite Tyler's stated position that the student learned from what he or she did, not from what the teacher did, and unlike his seminars, Goodlad (1995) reported that Tyler struck a «lecturing stance in [the course] "Basic Principles of Curriculum and Instruction"» (p. 76). Goodlad recalled that even when Tyler distributed newly mimeographed sections of the syllabus that would be available in the bookstore, at the next session «Tyler presented it in lecture format, with little time for or encouragement of questions» (p. 76).

Speaking for his fellow students in the course, Goodlad (1995) suggested that Tyler's rationale «did not connect with our practical experience as educators. For nearly all of us, the curriculum we had followed in our own teaching, mostly in elementary and secondary schools, was a given» (pp. 76-77). Goodlad continued, «Going to learners, subject matter, and society for our objectives, for example, had not been an option» (p. 77). Goodlad recollected that students greeted the rationale in different ways: «We argued about parts of the rationale; some virtually memorized it; some translated it into a kind of formula. We did not talk much informally about applications; one of our brightest angrily rejected it as impractical» (p. 77). Somewhat ironically, then, though the focus on practice in Education 360 was out of step with the research focus of the department of education at the University of Chicago, Tyler's students tended to see the course as theoretical and impractical, since from their view it was out of step with their professional experiences in schools where curricula typically were handed down to teachers to implement with fidelity.

5.4. *The latter years of Education 360*

By the time the University of Chicago Press published *Basic Principles of Curriculum and Instruction* as a small book in January of 1950, Tyler had taught Education 360 twenty-three times (*Announcements*, 1938-39 through 1949-50). From Winter quarter 1950 through the 1953-54 academic year Tyler taught the course with the assistance of Mary McCord, an Instructor in Education in the department, who became Tyler's third wife. Tyler retired from the University of Chicago in October 1953, but remained in Chicago for a year while he organized the Center for Advanced Study in the Behavioral Sciences in California, which opened in the fall of 1954 (Lackey & Rowls, 1989, pp. 19-20). During the 1954-55 and 1955-56 academic years, McCord was the sole instructor for Education 360.

Beginning in the 1956 summer quarter, John Goodlad was the instructor for Education 360; in summer 1957 Kenneth Rehage (who taught in the Lab School and then in the education department from 1940 to 1975), began teaching it as well. Goodlad and Rehage alternated teaching Education 360, with an occasional section taught by Maurice L. Hartung (a faculty member in the department of education from 1938 to 1968, who also taught part time in the Lab School, and who specialized in mathematics education) through the 1960-61 academic year when, in a curriculum reorganization that seemed influenced by the establishment of the new School of Education and the initiation of the M.A.T. program, the course number changed from 360 to 305 (*Announcements*, 1950-51 through 1960-61). Education 305 continued to be taught during the 1960s by Rehage and Hartung--and later by Phillip Jackson--and eventually its name changed to Principles of Curriculum I.

Tyler's (1947; *Education 360*, 1948) syllabi for Education 360 offered students a practical process for tackling what Tyler saw as the basic problems in the development of curriculum and instruction. Their purpose was not to articulate the genesis and evolution of Tyler's thinking about curriculum, instruction, and evaluation, as Tyler himself later indicated (Tyler, Schubert & Schubert, 1986, p. 109), but to support Tyler's teaching of Education 360 Basic Principles of Curriculum and Instruction.

6. Notable aspects of Tyler's rationale

Having established the origins of Tyler's rationale, its history as a course, and its manifestation in several syllabi, it seems reasonable to suggest that Tyler's rationale is best understood in the context of education scholarship and practice in the US during the mid-twentieth century, the time during which it emerged. From this perspective, five aspects of Tyler's rationale, which have been largely overlooked by many curriculum scholars, seem particularly notable for that time, and even subsequently. These aspects include the rationale's embrace of three curriculum sources, its conception of education essentially as experience, its approach to assessment as evaluation rather than as measurement, its approach to curriculum development as a problem-solving process, and its commitment to teacher participation in the development of curriculum and instruction.

6.1. Three sources

Tyler's (1949) embrace of the student, subject matter, and society as three imperative sources for the curriculum was not unprecedented, but it was unusual, if not extraordinary at the time. To begin with, at mid-century in the US earlier debates over whether the curriculum should be subject-centered (e.g. the Committee of Ten [NEA, 1893]), child-centered (e.g., Kilpatrick, 1925), or society-centered, (e.g., the activity analysis of Bobbitt [1918] and Charters [1923]) were not forgotten--despite efforts such as those by Dewey (1916), the Commission on the Reorganization of Secondary Education (1918), and the National Society for the Study of Education's Committee on Curriculum-Making (Whipple, 1926) to advocate consideration of all three sources. Moreover, during the 1930s and 1940s when Tyler formulated his rationale, advocacy for any one of these sources at the expense of the others remained a frequent and vigorous pastime of partisan educators.

The Depression and then war revitalized the argument for society as a principal source for the curriculum. Social reconstructionists like George Counts (1932/1978) and Charles Beard (1932) called for educating students to function as activists who would pursue a vision of a democratic collectivism to replace failed individualistic capitalism. As the United States became involved in World War II new demands were placed on schools to serve the war effort in numerous ways, many of which involved preparing students for particular wartime roles. The Depression also led educators to focus anew on the needs of youth, with numerous studies arguing, for example, that the personal-social needs of adolescents should form the basis of the school curriculum.

At the same time, the primacy of subject matter was touted again: Essentialists such as William Bagley (1938) and Isaac Kandell (1938) reasserted the importance of essential academic subject matter; perennialists such as Robert Maynard Hutchins (1936) and Mortimer Adler professed the paramount supremacy of the eternal truths deposited in the Great Books – Adler (1940), in a defense of Hutchins’s educational theory against Dewey’s criticisms, went so far as to suggest the United States had «more to fear from our [positivist] professors than from Hitler» (p. 103) and that the positivist «professors and their culture» should be «liquidated» (p. 102) – and academic specialists, such as the historian Alan Nevins (1942), launched high-profile attacks on the failure of schools to teach students basic subject knowledge. These were not merely academic debates; many were waged publically in the popular press. There can be little doubt that Tyler was aware of these debates. In the midst of these controversies, however, in *Education 360* and in his rationale Tyler advocated a synthesis of the three sources. For the time, this was as remarkable as it was progressive.

6.2. *Education as experience*

Second, in his rationale Tyler conceived of education as experience. As Tyler (1949) put it, «essentially, learning takes place through the experiences which the learner has; that is, through the reactions he makes to the environment in which he is placed. Hence, the means of education are educational experiences that are had by the learner» (p. 63). And, «the term “learning experience” refers to the interaction between the learner and the external conditions in the environment to which he can react. Learning takes place through the active behavior of the student; it is what he does that he learns, not what the teacher does» (p. 63, emphasis in original).

Tyler concluded, «The essential means of education are the experiences provided, not the things to which the student is exposed» (p. 64). Tyler’s approach to education as experience was influenced by Dewey (Tyler, 1987, p. 146) and placed his rationale in the mainstream of curriculum development theorists such as, for example, Bobbitt (1918, p. 42, 1924, p. 44), Taba (1932, pp. 243-44), Caswell and Campbell (1935, p. 69) before him, and Smith, Stanley, and Shores (1950, p. 4), Stratemeyer et al. (1957, p. 9), and Gwynn (1960, p. 245) after him, all of whom conceived of curriculum not as a product, such as a curriculum guide, but as the experience students have in educational settings.

6.3. *Assessment via evaluation*

Third, as noted above, Tyler in effect singlehandedly invented evaluation as an alternative to measurement when it came to assessing student learning (Echols, 1973; Madaus & Stufflebeam, 1989). All of the features of evaluation that Tyler had established in his work at Ohio State and in the Eight-Year Study – its curriculum orientation, its local focus, its behavioral basis, its use of multiple sources of evidence about student learning – are neatly synopsized in the evaluation chapter of *Basic Principles of Curriculum and Instruction* (Tyler, 1950a). This is a unique contribution of the Tyler rationale that is often lost in the frequent and conventional critiques of Tyler’s work.

6.4. Curriculum development as problem-solving

Fourth, it was in his discussion of the uses of the results of evaluation that Tyler (1949) indicated that he approached the development of curriculum and instruction essentially as a problem-solving process:

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 program to be continuously improved over the years (p. 123).

This is the aspect of Tyler's rationale that is probably the most overlooked (for an exception, see Tanner & Tanner, 1980). But it is effectively how his rationale was applied in the Eight-Year Study and in the two Southern cooperative educational experiments during the late 1930s and the early 1940s (Brown & Robinson, 1946; Southern Association, 1946). It is also one of the aspects of the Tyler rationale that reflect key elements of Dewey's (1916, pp. 176-77) theory of education and of essential tenets of American philosophical pragmatism (Childs, 1956).

6.5. Teacher participation

Finally, the call for teacher participation in curriculum development, implied in Tyler's expectations for his students in *Education 360* and expressly stated in the short fifth chapter in the published book, also often is lost in critiques of the rationale. As Tyler (1949) put it, «If a school-wide program of curriculum reconstruction is undertaken, it is necessary that there be widespread faculty participation» (p. 126). And subsequently, in an article that could be considered an expanded iteration of that brief fifth chapter, Tyler (1953) elaborated his recommendations for teacher participation in curriculum development. Among other things, Tyler (1953) argued,

The fundamental element of democracy in administration is the respect for human personality, that is, respect for the dignity and worth of the individual. Guided by this attitude, the democratic administrator seeks continuously to provide and maintain a situation in which the contributions of each individual are maximized and respected (pp. 204-05).

In practice, this required «that a good staff organization provides both formal and informal channels by which suggestions from any teacher will quickly be communicated to any or all parts of the staff to which they are relevant» (p. 206). Tyler's commitment to teacher participation in curriculum development was tied to his conception of curriculum development as a problem-solving process, and is not far from Dewey's (1911/1937) similar application of democracy to school administration.

Sometimes it is claimed that Tyler's rationale has been widely influential in practical curriculum work in schools and other agencies. Schubert, Schubert, Thomas,

and Carroll (2002), for example, asserted, «The format of numerous curriculum guides, teachers' editions of schoolbooks, lesson plan books, evaluation instruments by accrediting agencies, course syllabi, and many curriculum books that appeared in the next 30 years are organized around Tyler's four topics» (p. 98). Slattery (2006) declared, «Ever since Tyler categorized these four principles of the curriculum, most school districts and educators – whether consciously or unconsciously – have aligned their thinking about schooling experiences with this rationale» (Slattery, 2006, p. 52). These claims are problematic for at least two reasons. First, these claims are left unsubstantiated with any kind of verifiable evidence indicating that these four topics are so widely manifest in curriculum materials. Second, it has been demonstrated that Tyler was not the first to identify those four topics as considerations when developing educational experiences (Schubert, 1986, p. 172; Tanner & Tanner, 1995, p. 230). Indeed, the four topics are manifest in Caswell and Campbell's (1935, 1937) approach to curriculum development, among others that preceded and also followed Tyler. Since those widely recognized topics can be tied to other curriculum theorists as well as to Tyler, it is difficult to pinpoint Tyler as the only or even major influence. Moreover, is the presence in curriculum materials of the four topics Tyler discussed sufficient evidence for claiming fidelity to the Tyler rationale? Given the five notable features of Tyler's rationale identified above, would they not have to be present, as well, to indicate fidelity to Tyler's rationale? Tyler's rationale comprised much more than the topics in the four fundamental questions.

7. Conclusion

Tyler's rationale emerged during the 1920s and 1930s from his service work with school teachers and university faculty, his efforts to clarify educational purposes, his development of test construction techniques, and his invention of educational evaluation as an alternative to educational measurement. Tyler's rationale for developing curriculum and instruction responded to definitive historical developments in US education during the first half of the twentieth century, including the growth of school enrollment, the emergence of curriculum development as a specialized professional role, the development of educational assessment, and the expansion of teacher training. Tyler designed the course Education 360 to engage his students in a process for developing curriculum and instruction for particular students in particular educational settings; the syllabus he prepared for his students was to be consulted as a study guide. The 1947 mimeographed syllabus and the 1948 course outline confirm and highlight what is also apparent in the published version of *Basic Principles of Curriculum and Instruction*, namely that Tyler's focus in all three of these texts was on engaging his students in his process of solving the problems of curriculum development.

Understood in the historical context in which it was developed, Tyler's rationale is notable for its embrace of three curriculum sources, its conception of education essentially as experience, its approach to assessment as evaluation rather than as measurement, its approach to curriculum development as a problem-solving process, and its commitment to teacher participation in the development of curriculum and instruction. These aspects have been largely overlooked in representations of Tyler's rationale as a linear production

model of curriculum development². Such representations can be achieved, however, only by ignoring the texts and historical contexts of Ralph Tyler's course, Education 360: Basic Principles of Curriculum and Instruction. As a localized, participatory, problem-solving process, the Tyler rationale seems less like a production model of curriculum development than as a manifestation of American pragmatism in education.

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² This characterization probably applies more appropriately to the course that W. W. Charters taught during the summer of 1948 at the University of Chicago: «Education 360x: Curriculum Engineering» (*Announcements*, 1948-49, p. 30).

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