

A Study on Comparing the Objective Model in Curriculum

Planning between Taiwan and America

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Abstract

In this continuously innovative century, school education plays a much more important role than ever before (Lai & Lin, 2004). To survive in the fast changing business environment, each school must be able to cultivate well-prepared students who can meet the intensive global competition. Therefore, curriculum planning has become an unexpendable and important issue for school administrative to note. The educational leaders, no matter in America or Taiwan, have noticed this phenomena and also try their best to plan proper curriculum in response to the impact of increasing competition and pervasive influence of technology. However, two different yet somewhat similar curriculum planning models have been developed in these two countries, America and Taiwan, respectively—Objective Model and Ban Chiao Model. The purpose of this study is to compare these two models so as to provide school administrative some suggestions in their curriculum planning. And from the research findings, it is discovered that these two models are similar in concept but different in implementing details.

Keywords: Curriculum Planning, Objective Model, Ban Chiao Model

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In the new knowledge-based economy, the intensive global competition and fast-changing business environment had profoundly affected the nature of work. Under such situation, schools needed to play a significant role in developing the skill and knowledge bases that would create a workforce in response to the demand of the workplace (Callan, 2003). With the new knowledge-based focus in this century, the emerging new economy has had tremendous impact on education, including curricula, the educational process, learning outcomes and instructional practices (Sigala & Baum, 2003; Lai & Lin, 2004). Among the educational impact the ones on curricula are the most important. Educators decide what kinds of abilities students will need in order to plan appropriate curricula. Since the 19th century, many scholars in both America and Taiwan have proposed different curriculum models to meet the needs of society (Huang & Yang, 2004). However, there is no consensus regarding what kind of model is the best for America or Taiwan. Based on this research background, we reviewed relevant literature and selected two curriculum planning models, most often used in America and Taiwan respectively. Then, we discuss and compare the two models deeply in hopes that a conclusion can be made that will provide a direction for educators to refer to.

Objective Model: Curriculum Planning Model in America

Bobbitt's Contribution

First of all, Bobbitt was one of those who addressed the concept of object mode. As early as 1918, F. Bobbitt addressed the concept of developing curriculum based on objective. He thought that the human being's life was the implementation of every specific activity. For example, we wash our hands before doing eating since we would like to keep out health. In addition, if the object of education is to prepare individual for their future careers, then the specific activities and curriculum plan should help develop skills and knowledge that will enable students to successfully enter the job market. Bobbitt used an activity analysis method to divide human being's life as falling under ten activities (1924) :

1. Language activity.
2. Health activity.
3. National activity.
4. Social activity.
5. Mental health activity.
6. Leisure activity.
7. Religious activity.
8. Relatives activity.
9. Occupational activity.
10. Non-occupational practical activity.

And the explanation of these activities is the connotation of educational object (Kliebard, 1968); other relative curriculum design and development has spread out from this model.

Charters Contribution

Responding to Bobbitt rationale, in 1924, Charters began to use a job analysis method to establish curriculum. His model has four main steps. The first is to decide educational ideal, the next step is to ensure the goal has been established. After that, these activities need to be analyzed carefully. The fourth step is to develop job units based on those analyzed activities, ensures that the curriculum moves in the direction of the objective of education (Charters, 1924).

Tyler's Contribution

About a quarter century after Bobbitt's and Charter's work, Tyler published a book titled *Basic Theory of Basic principle of curriculum & instruction* in 1949. In it he defined school as an institution that provides students with objectives, and education as an activity that includes contemplation. In his book, Tyler pointed out four questions to use as the basic theory of curriculum design and teaching as follows (1949):

1. What is the object of education?
2. What teaching experience that we have to provide in order to achieve educational object?
3. How to effectively organize the educational experience?
4. How can we know whether these objects have achieved? (How to evaluate?)

Based upon those four questions, we can simply show Tyler's advocated model

as a straight line of curriculum developing model:



Figure 1. Tyler's Straight Line Model

Apparently, Tyler's model is based on the objective-oriented theory. This model takes curriculum as a means of aiming toward an educational object. Therefore, this model is also called means-objective model. This model aimed student's developing behavior as their target of teaching. Even though Tyler's straight line model has been developed explicitly, it has several criticisms as followings (Huang & Yang, 2004). In case evaluation is not ideal; this model does not have a feedback mechanism to tell people how to correct it; it seems lack a procedure between evaluation and organization, and this procedure is execution. Also, the objective under Tyler's straight line model has a behavioral orientation. Behavioral objectives have many advantages if applied to curriculum design, but they have some limitations on execution. For example, they do not apply to all subjects or the design of a subject's content.

Wheeler Contribution

Because of Tyler Model's limitations, Wheeler continued the work by developing a spherical objective model (1967). In 1967, Wheeler further modified Tyler's straight line model as spherical model (Huang & Yang, 2004). This he did because Tyler's model did not provide for feedback or help students achieve the evaluative outcome or expected objective. Wheeler's circular model has five procedures (Huang & Yang, 2004): Selecting an objective, choosing learning experience, choosing content, organizing and integrating learning experience and content, and evaluating.

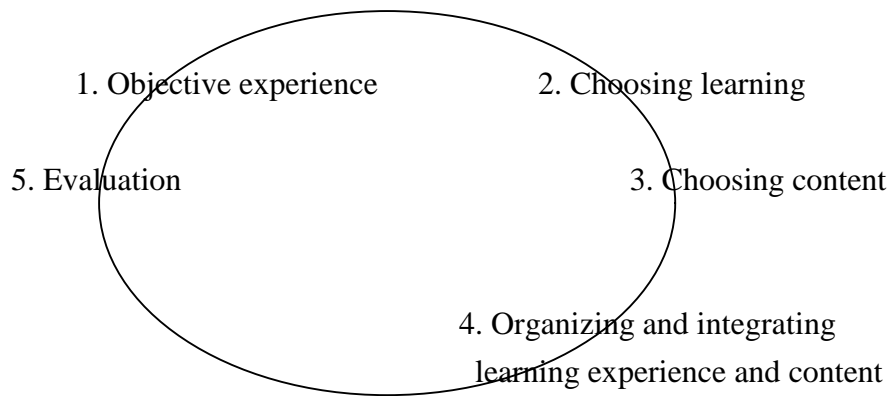


Figure 2. Wheeler's Spherical Model

As the figure above show, Wheeler's spherical model seems much more progressive than Tyler's straight line model since it has two advantages. First this model has a feedback mechanism, so it provides students with ways to measure their progress or accuracy. It also sets the school objective as a final step in as well as the first. Thus the curricular model remarks educators to refer to their objectives in their evaluative stage. In detail, Wheeler's model divides into many details as middle objectives. The aggregation of middle objectives comprises the final objective. Middle objectives can further lead to the near future objective which can be achieved within short period. Eventually, based upon near-future objectives, it also leads to the concrete objective. This model clearly calls for the setting up of objectives. Even though Wheeler's spherical objective model progressed beyond Tyler's straight line model, this model also has received some criticisms. The objective under the Wheeler model includes behavioral characteristics. Behavioral objectives have many advantages if applied to curriculum design, but they also have some limitations on execution. How can one measure a student's increased smoothness in writing, for example? Furthermore, this model seems to lack a procedure between organizing and integrating learning experience content and evaluation. According to Huang & Yang (2004), this procedure is the execution of this integrated content.

Kerr's Contribution

Kerr's model contains four elements: objective, knowledge, school learning experience, and evaluation in 1968. To Kerr, a curriculum development design should first focus on the objective to be reached. He saw this objective as meaning the students' expected behavioral changing after learning; these changes included perception, affection, and skills. Similarly, knowledge, the meaning of knowledge is to choose and organize curriculum content so as to achieve school's object.

According to Kerr's model, the three elements needed to establish curriculum knowledge are unity, repetition, and order. In this context, unity means to establish a connection with the field of knowledge. Repetition means the repeating of certain curriculum elements while order means every continuous experience must be established on prior experience. Combined these three elements become the leading principle for organizing effective curriculum. The third element in Kerr's model, learning experience, means the interactive effect between the learners and various environmental elements. It includes social opportunities from the school's arrangement, the influence of the school community's character, and relationships between teachers and students. Evaluation as the final element represents making sure to what degree the objective has been achieved. The standard of evaluation contains objective feasibility, content and method's suitability, students' needs and achievement, as well as the efficiency of teachers' preparation. Many standard evaluations just need to be modified a little bit for use in collecting information. In addition to objective examinations and paper commentary for evaluation, Kerr includes attitudinal scale, interview, aptitude test, multiple evaluations, investigated skills and group observations as ways to measure progress.

Taba's Contribution

In addition to the work of Tyler, Wheeler, and Kerr in curriculum development, in 1962, H. Taba added by pointing out seven steps of curriculum design and development. Those seven steps are diagnosing needs, drafting objective, choosing content, organizing content, choosing learning experience, organizing learning experience, and deciding the target and means of evaluation.

As the seven steps above show, this model is somewhat similar to Tyler's model; however, it further divides into two parts—content and learning experience.

Ban Chiao Model: Curriculum Planning Model in Taiwan

Taiwan's Ministry of Education established the Teachers' Community of Research and Study in Ban Chiao, Taipei County, on May 10, 1956, in order to enhance the quality of national teachers (Huang, 2000). The Ministry of Education invited educator Kao Tzu to act as the first supervisor to reinforce educational research study. She was given the permission to increase the lab for educational research and arrange for researchers. At the same time, she accepted the challenge of

training the person who would become president or supervisor of all elementary schools (Owe, 1998). In 1972, Mrs. Kao took the authorization from the Ministry of Education to develop the program of elementary school curriculum design research. Then it has become the Ban Chiao model of everybody knows in Taiwan today (Huang, 2000).

For a clear understanding of the Ban Chiao Model, it can be extrapolated it from four aspects (Huang, 2000; Owe, 1998):

Editorial basis:

To look at the Ban Chiao Model from an editorial basis, means to use the experimental research to develop curriculum design. Realizing the importance of social education, the Ministry of Education designated the Teachers' Community of Research and Study to carry out the various developmental experiments regarding the subject of society curriculum in schools.

Subject composition:

For example, the Ministry of Education announced that the basis of social subject matter is social science, and then combined the seven subjects, including anthropology, sociology, psychology, political science, economic, history, and geography, as a foundation to develop the curriculum.

Total Objective:

The goal of the Ban Chiao Model of curriculum development is to develop the basic knowledge of good living attitudes, behaviors, and habits in children. Therefore, they will be able to adjust themselves and to adapt their living conditions in the future. Encouraging students to practice morals and ethics in order to be good students and to be good citizens as they are growing up is part of the overall objective put forth by the Ban Chiao Model. These aspects of the Ban Chiao Model have guided most curricula put together in Taiwan.

Interrelated Procedure of Objective Model

Using figure to directly talk about the interrelated procedure of the objective model as follows:

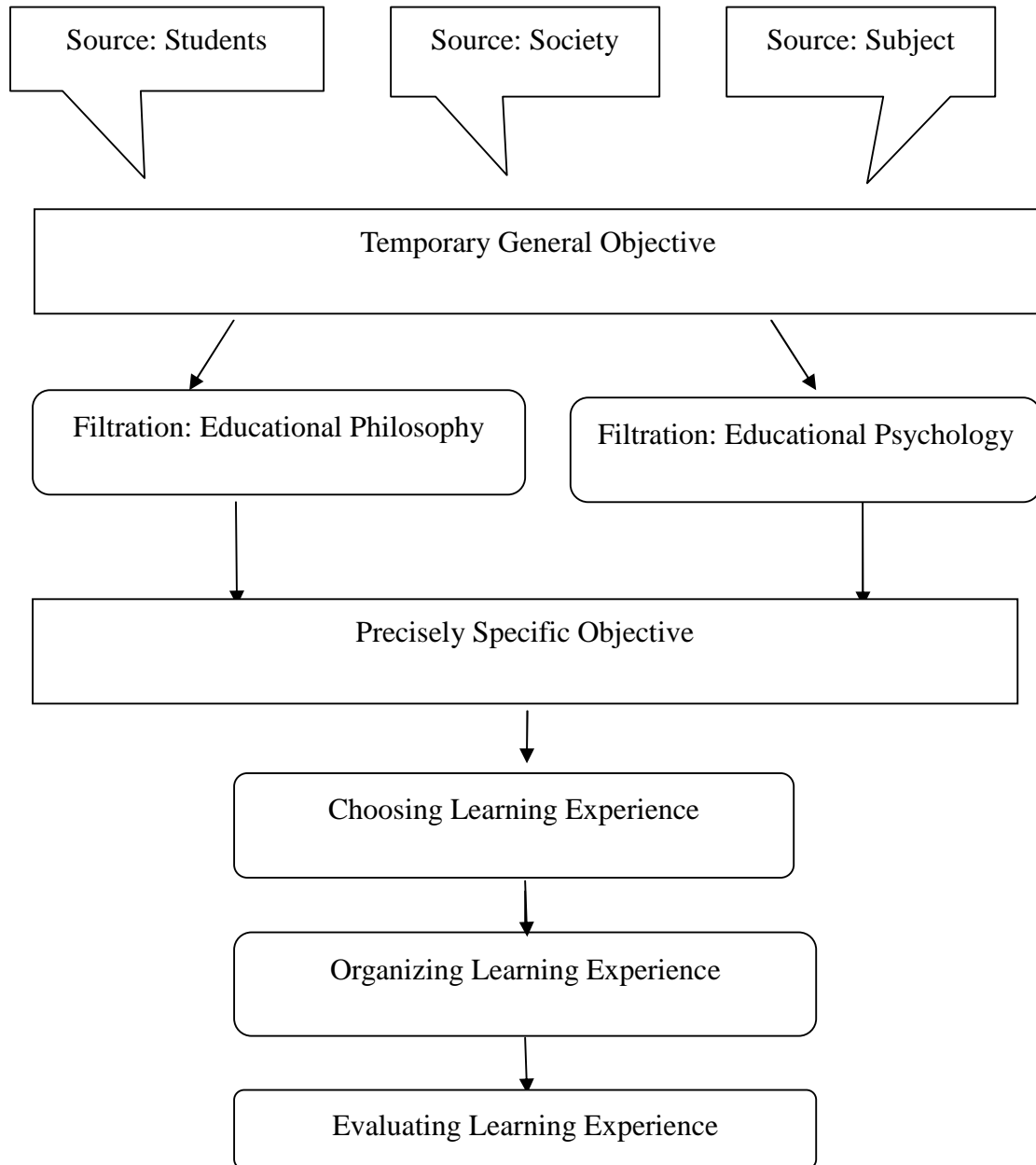


Figure 3. Interrelated Procedure of Objective Model.

Something we need to notice about is that the concrete objective under objective

model does not always include the specific learning achievement, but it should definitely contain the two elements of students' behavior and students' content.

The Pros and Cons of Objective Model

Advantages

First, this model aimed at developing students' behavior as the target goal of teaching. This shows that the planning done takes into consideration long-term view of outcome for the students. Second, it has the function of carefully managing objectives. Therefore, it is easy to observe the outcomes of attained objectives. In addition, it is easy to find the suitability of subject's content, activity, and teaching methods based on the objective evaluation. Combined, many of the function in further analysis of the model are useful for the integrity of the curriculum, and for forecasting final results. Finally, the steps in the Objective model's application are precise and logical, and thus, easily followed.

Disadvantages

Besides advantages, some of the weaknesses must also be addressed. For instance, the objective under Tyler's straight line model has a behavioral orientation. Behavioral objectives have many advantages if applied to curriculum design, but they have some limitations on execution. For example, they do not apply to all subjects or the design of a subject's content. Furthermore, in general, it is too narrow because it judges the outcomes as successful or not based only whether objective has been achieved or not. Another weakness or disadvantage to some of the Objective Model lies in the limitations of choices of objectives. There are often limited to some behaviors which can be easily quantified, but excludes some objectives that cannot be quantified. For example, some objectives such as increasing respect for others in children cannot be objectively quantified. This means that much of what makes people moral or ethical cannot be included in measurable objectives.

The Pros and Cons of Ban Chiao Model

Advantages

Much like the Objective Model used in the United States, the Ban Chiao Model used in Taiwan presents both advantages and disadvantages. Since this model was

purposefully composed by teachers in the anticipation of helping elementary school teachers, its contents and materials show the conceptualization, spirituality, flexibility, and diversity needed in elementary schools.

Disadvantages

The goal of Ban Chiao Model is to help children to develop good attitudes, behaviors, and habits in their lives to carry into the future as the basis for adapting to current society, carrying out good national morals and ethics, becoming the active life-long learners, and being good citizens in their future.

As these objectives show, the ideal of this curriculum is somewhat unrealistic and idealistic. Therefore, it easily becomes vacuous and difficult to implement. It cannot show its own unique character since it is somewhat similar to other models. Since the Ban Chiao model puts its highest emphasis on the basis of social science, it should define its educational goals based on the fundamentals of social science. However, this objective is out of line with the view of social science; therefore, it lacks content objective and process objective, which will produce many problems.

Conclusion and Suggestion

Developing curriculum materials creates an opportunity for teachers to learn within their daily routine, as they effectively integrate content standards with curriculum and instruction or develop strategies for standards-based, integrated instruction. Good educational programmes have a well-planned curriculum. At the curriculum-planning meeting, everyone agreed that each faculty member had something important to contribute (Schank, 2002).

Curriculum development has been in existence since the mid-1800s when William Harvey Wells divided all students in the city of Chicago into grades and established a distinct course of study for each subject at each grade level (Tyack, 1974). In 1982, the National Education Association's Committee of Ten was charged with developing a plan for standardizing the high school curriculum. The plan was to prepare secondary school adolescents for the entrance requirements of college by using subject differentiation at public schools (Kliebard, 1995). This central, discipline-oriented, college preparation curriculum survives to this day, as does the idea that curriculum planning is, for the most part, subject naming, specifying content, and ordering the treatment (Walker & Soltis, 1986).

Since the 1920s, curriculum development was driven by the technical-scientific

approach. Influential models developed by Tyler(1950) and Taba (1962) directed curriculum developers and teachers in their planning process for years. The designers of these traditional models listed similar steps in curriculum construction: (1) define the goals, purposes, or objectives, (2) define experiences or activities related to the goals, (3) organize the experiences and activities, and (4) evaluate the goals.

In 1998, Wiggins and Mc Tighe presented a similar model but changed the order of the steps familiar to the previously mentioned curriculum developers. Wiggins and Mc Tighe include these steps: (1) identify the desired results, (2) determine the acceptable evidence, (3) plan learning experiences and instruction. They expect that by using their approach in designing curriculum, educators would use more standard-based teaching as opposed to activity-based instruction. The latter is mostly hands-on without minds-on. Wiggins and Mc Tighe also expect educators would use more standards-based teaching as opposed to coverage-oriented instruction, where the teacher merely checks off topics that were covered and moves on (Wiggins & McTighe, 1998).

Generally speaking, both models presented are objective models of curriculum design no matter whether used in Taiwan or American. Both models always follow the procedure of analyzing needs, deciding objective, choosing content, organizing materials, experiencing, and evaluating to develop a curriculum that combines teaching and learning. Basically, the objective models that America and Taiwan have adopted are almost similar in concept; however, they differ in as in the details of execution.

Therefore, the author concludes that the biggest problem in the objective model is that the choice of objective usually finds limits in some behaviors that just can be quantified. If this weakness can be overcome, the objective model will provides good guiding principles for directing curriculum design.

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