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ABSTRACT

The Model Schedule for a Capital Improvement Program described in this paper encourages school leaders to consider a more holistic view of the planning process. It is intended to assist those responsible for educational facility planning, who must assure that all important and relevant tasks are accomplished in a timely manner. The model's six phases are: (1) assessment of current facilities, programs, and community beliefs; (2) preliminary planning for facility master plan development; (3) implementing the facility master plan; (4) marketing the master plan; (5) implementation of projects in the master plan; and (6) post-occupancy evaluation. Each phase includes a list of tasks and responsible persons, and an estimated time frame. (EV)

A Model Schedule for a Capital Improvement Program

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A MODEL SCHEDULE FOR A CAPITAL IMPROVEMENT PROGRAM

by **Arnold D. Oates, Ph.D.** and **A. Lee Burch, Ph.D., AIA, NCARB**

Introduction

Planning for the expenditure of education funds, whether for instructional programs or capital improvement, is taken for granted by educators today. Prior to the 20th Century, however, school facilities were considered of little importance other than as protection from the environment, and planning or thought was rarely given to the impact of structures on educational programs or the process of learning. Only in the 1920s did educators begin to investigate the possibility of "a relationship between learning and the design of instructional spaces within a school building" (Castaldi, 1994, p.17). Studies conducted in the 1920s and 1930s led educators to conclude that the design of school facilities can limit or enhance the quality and quantity of educational activities and programs, and educational facility planning had its beginning (Castaldi, 1994).

In the 1930s and 1940s more attention and planning was given to constructing buildings to accommodate desired educational activities and programs, rather than fitting educational programs into a building once it was constructed, a common practice in prior years. Much of the early facility planning efforts, however, included input from a limited number of individuals, usually central office administrators, some of whom sought advice from architects or the National Council on Schoolhouse Construction. (This national organization, originally created in 1922 to serve as a clearinghouse of information, evolved into the Council of Educational Facility Planners, International.) In the 1930s, the Council moved beyond simply disseminating information to providing facility planning guides, promoting "basic principles of sound educational facility planning"... and encouraging "innovation and creativity in the planning of educational facilities." The Council expanded the focus on planning safe and functional educational buildings to include in the late 1940s "the school site as an integral part of the planning" (Castaldi, 1994, pp. 18-19).

From the 1950s until the present, researchers, educators, architects, facility planners and professors of educational administration have continued to study the effects of school facilities and sites on the educational process (Burch, 1994; Christopher, 1988; Lane, 1991; Weinstein; 1979). The facility planning process itself has been refined over the past four decades (Castaldi, 1955; CEFP, 1964; Conrad, 1954; Hawkins, 1976; Hawkins and Lilley, 1988; and Sumption and Landes, 1957) with recent attention given to the use of a "holistic" planning model (Oates and Burch, 1994). The holistic model includes in the decision-making process all who have a stake in the education provided children in a particular community.

Alan G. Weymouth, Architect, in a presentation "Things to Avoid When Planning a Building" at the 5th Annual National School Facilities Workshop in June, 1994, emphasized the pitfalls of planning in a vacuum. When an educational leader proposes a capital improvement program for the school district, the stakeholders have a right to expect a complete planning process. According to Oates and Burch (1994), a holistic view must include the internal and external environment, assessment of the stakeholders' needs and open communication in the development of a facilities master plan. Figure 1 illustrates the components of a holistic planning model used to develop a facilities or capital improvement program master plan.

The Scheduling Process

The Model Schedule for a Capital Improvement Program encourages school leaders to consider a more "holistic" view of the planning process. Without excellent planning and timing that is reflected in scheduling, voters may reject a bond proposal as lacking the necessary vision to meet facility needs of the district. The Model Schedule for a Capital Improvement Program, presented below in six phases, will assist those responsible for educational facility planning who must assure that all important and relevant tasks are accomplished in a timely manner.

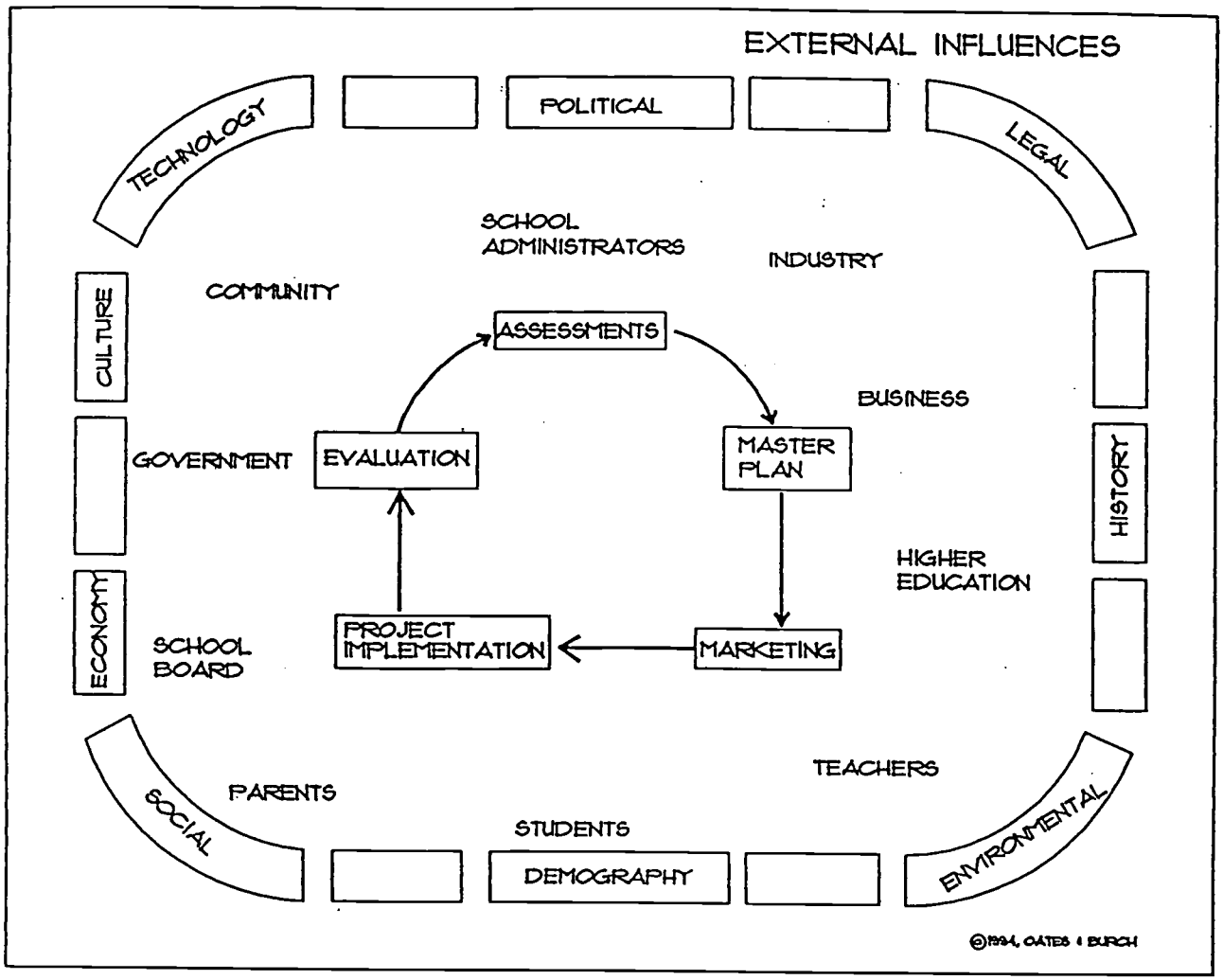

Figure 1.

COMPONENTS OF A HOLISTIC PLANNING MODEL FOR EDUCATIONAL FACILITY PLANNING

PHASE I ASSESSMENT OF CURRENT FACILITIES, PROGRAMS AND COMMUNITY BELIEFS

Time need to complete: 4 months

TASK	RESPONSIBLE PERSON/ORGANIZATION
1.0 Assess existing facilities based on data from an appraisal of facilities conducted by an educational facility planner (or appropriately trained district personnel) using CEFPI's *Guide fo School Facility Appraisal.*	Superintendent
1.1 Conduct the facility appraisal and determine the options or alternatives the district may have in developing the facility master plan.	Educational Facility Planner, Architect, or other designated trained staff
1.2 Present findings and recommendations to the Board of Education.	Superintendent and Facility Planner
1.3 Direct staff to conduct a program assessment and survey of community beliefs about education	Superintendent
1.4 Consider and approve the proposed planning process for implementing a capital improvement program to serve as a master facility plan for the district.	Board of Education

PHASE II PRELIMINARY PLANNING FOR FACILITY MASTER PLAN DEVELOPMENT

Time need to complete: 3 months

TASK	RESPONSIBLE PERSON/ORGANIZATION
2.0 Appoint (on superintendent's recommendation a Facility Task Force of community stakeholders to study the facilities assessment report, options and recommendations.	Superintendent Board of Education
2.1 Provide an orientation session for the Facility Task Force including a tour of all district facilities and a review of the assessment report.	Superintendent Educational Facility Planner
2.2 Confirm community beliefs with consensus-building activities and establish a "belief" system, guiding principles, and planning assumptions to support the facilities needed to provide efficient and effective schools for the district.	Facility Task Force
2.3 Analyze the options to determine which option or alternative will best meet the needs of the district based on the previously determined beliefs, guiding principles and planning assumptions	Facility Task Force
2.4 Prepare a list of recommendations and submit a "draft" of task force findings and recommendations to the Board of Education	Superintendent Facility Task Force
2.5 Adopt the task force "draft report and/or direct the task force to revise the facilities master plan.	Board of Education and Administration

PHASE III IMPLEMENTING FACILITY MASTER PLAN

Time need to complete: 3 months

TASK	RESPONSIBLE PERSON/ORGANIZATION
3.0 Complete the search process for an architect and financial advisor and make a recommendation to the Board of Education	Superintendent
3.1 Provide architect an overview of the planning process and the recommendations of the task force.	Superintendent, staff and task force representatives
3.2 Meet and confer with designated persons or team to develop educational programs and design specifications for use in implementing the proposed facilities improvement program.	Architect
3.3 Develop a projected cost estimate by project for the proposed facilities improvement program.	Architect

PHASE IV MARKETING THE MASTER PLAN

Time need to complete: 4 months

TASK	RESPONSIBLE PERSON/ORGANIZATION
4.0 Appoint a Steering Committee of stakeholders (including some individuals from the Facility Task Force) to plan and implement a school bond election to finance the facilities improvement program.	Board of Education Superintendent

4.1 Establish the organizational structure needed to plan, finance, promote and pass the school bond program to implement the proposed facilities program.	Steering Committee
4.2 Develop and present to the Board of Education a time schedule that includes the activities preceding the school bond election and a recommended date for the election.	Steering Committee
4.3 Call the bond election after conferring with the financial advisor and bond attorney.	Board of Education

PHASE V IMPLEMENTATION OF PROJECTS IN MASTER PLAN

Time need to complete: 16 - 45 months

TASK	RESPONSIBLE PERSON/ORGANIZATION
5.0 Conduct school bond election.	Superintendent Board of Education
5.1 Submit time schedule for all projects to Board of Education.	Superintendent Architect
5.2 Sell bonds.	Board of Education
5.3 Initiate projects on approved time and priority schedule with plans and specifications, design and project construction.	Superintendent and Board of Education

5.4 Implement steps in construction of each project: (6 - 9 months)	
Prepare schematic design and cost estimate.	Architect
Design and develop drawings.	Architect
Prepare and approve construction documents.	Architect
Bid project and examine bids.	Superintendent and Architect
Award contract(s).	Board of Education
Construction of project with appropriate supervision.	Contractor and Architect
Accept completed project.	Board of Education

PHASE VI POST OCCUPANCY EVALUATION

Time need to complete: 3 months

TASK	RESPONSIBLE PERSON/ORGANIZATION
6.1 Conduct post occupancy evaluations.	Superintendent or Educational Facility Planner
6.2 Prepare and submit report to Board of Education.	Superintendent or Educational Facility Planner

TIME ELEMENTS FOR PHASES 1 THROUGH V

	Construction Time Estimates	Total Time to Implement (includes planning)
Elementary School Project	14 - 18 months	32 - 36 months
Middle School Project	18 - 24 months	36 - 42 months
High School Project	24 - 36 months	42 - 54 months

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