Evaluation of Integrated Planning Systems in
Southern California Community Colleges

by

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San Diego State University

In partial fulfillment of the requirements for the degree

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Evaluation of Integrated Planning Systems in

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ABSTRACT

This study contained a survey of current methods used for planning, budgeting, resource allocation, and program evaluation in the California community colleges, and it included an in-depth analysis of planning practices in the San Diego and Imperial Valley region. Statewide results indicate a significant difference between current practice and perceived importance of the application of college planning processes, utilization of institutional priorities, methods of financial resource allocation, budgeting, and integration of planning and budgeting with program review. Integration and simplification of planning processes has unfortunately only happened in California in response to mandates and urgency created by external accrediting agencies.

Recent funding shortfalls have emphasized the need to implement more efficient planning and budgeting methods. Colleges indicate that zero-base and performance funding may play a role in future budget models. The majority of San Diego and Imperial Counties community colleges are still developing and implementing integrated planning processes that utilize outcome assessment, too recently to have demonstrated increased institutional effectiveness. Results also show that colleges have integrated planning, budgeting, and program review processes in response to their accreditation cycles. The reluctance of shared governance groups to embrace outcome measurement has slowed the implementation of integrated planning and continuous quality improvement measures within California community colleges. Useful integrated planning models exist within California, with institutions adopting best practices that meet specific needs, based upon college and district size.

California community colleges in the twenty-first century serve an increasing
number and diversity of students with fewer state financial resources. Limitations in both state and federal funding for these institutions require new models of planning and resource allocation. The diverse mission of community colleges has become more difficult to support as funding has become scarce. Identification and implementation of effective planning models may assist colleges to maintain high quality educational programs in this challenging financial environment. Efficient planning and budgeting methods described in this study will be essential to maintain open access and financial equity for students served by the California Community Colleges.
TABLE OF CONTENTS

ABSTRACT .................................................................................................................. iv

LIST OF TABLES .......................................................................................................... ix

LISTS OF FIGURES ..................................................................................................... x

ACKNOWLEDGMENTS ............................................................................................ xi

CHAPTER 1—INTRODUCTION ................................................................................ 1

  Background to the Problem ................................................................. 3
  Local Setting ....................................................................................... 7
  Problem Statement .......................................................................... 14
  Research Questions .......................................................................... 15
  Purpose of the Study .......................................................................... 16
  Definition of Terms ........................................................................... 17
  Significance of the Study ................................................................. 21
  Delimitations/Limitations .............................................................. 23
  Organization of the Study .............................................................. 24

CHAPTER 2—LITERATURE REVIEW ..................................................................... 25

  Characteristics of a Strategic Plan ................................................... 26
    Budgets and Planning ................................................................. 28
    The Balanced Scorecard and Strategic Planning ......................... 29
  Planning in Higher Education ......................................................... 30
    Academic Planning ................................................................. 32
    Educational Planning Themes ................................................... 33
    Resource Allocation within Planning Models ......................... 34
    Academic Planning and Continuous Quality Improvement ....... 35
    Planned Outcomes and Institutional Effectiveness ..................... 36
  Planning Practices Improvements .................................................. 39
    Appreciative Inquiry in Higher Education ................................... 40
    The Balanced Scorecard in Higher Education .............................. 41
  Planning Practices Limitations ......................................................... 42
    Community College Funding Models ......................................... 43
    California Community College Funding .................................... 44
  Effectiveness of Strategic Planning ............................................... 45
    Integrated Planning in California Community Colleges ............. 48
    Conclusions ................................................................................ 52

CHAPTER 3—METHODOLOGY ............................................................................... 56

  Research Design ................................................................................... 57
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Questions</td>
<td>59</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>60</td>
</tr>
<tr>
<td>Study Sample</td>
<td>60</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>61</td>
</tr>
<tr>
<td>Data Collection</td>
<td>66</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>69</td>
</tr>
<tr>
<td>Methodological Limitations</td>
<td>72</td>
</tr>
<tr>
<td>Summary</td>
<td>73</td>
</tr>
<tr>
<td>CHAPTER 4—RESULTS</td>
<td>75</td>
</tr>
<tr>
<td>State-Wide Survey Results</td>
<td>75</td>
</tr>
<tr>
<td>Current Planning Practices Compared to Importance of Practices</td>
<td>77</td>
</tr>
<tr>
<td>Current and Preferred Use of Budgetary Practices</td>
<td>91</td>
</tr>
<tr>
<td>Interview Results</td>
<td>95</td>
</tr>
<tr>
<td>Integration of Planning and Budget Development</td>
<td>97</td>
</tr>
<tr>
<td>Factors Impacting Institutional Priority Development</td>
<td>99</td>
</tr>
<tr>
<td>Planning Processes Impacting Development of Institutional Priorities</td>
<td>100</td>
</tr>
<tr>
<td>Data Sources for Developing Institutional Priorities</td>
<td>102</td>
</tr>
<tr>
<td>Regional Planning Models</td>
<td>104</td>
</tr>
<tr>
<td>Triangulation of Results</td>
<td>107</td>
</tr>
<tr>
<td>Integrated Planning</td>
<td>108</td>
</tr>
<tr>
<td>Financial Resource Allocation</td>
<td>109</td>
</tr>
<tr>
<td>Integrated Planning Models</td>
<td>111</td>
</tr>
<tr>
<td>A Grounded Theory for Integrated Planning</td>
<td>115</td>
</tr>
<tr>
<td>CHAPTER 5—SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>118</td>
</tr>
<tr>
<td>Summary</td>
<td>118</td>
</tr>
<tr>
<td>Significant Findings</td>
<td>125</td>
</tr>
<tr>
<td>Phase I</td>
<td>125</td>
</tr>
<tr>
<td>Phase II</td>
<td>128</td>
</tr>
<tr>
<td>Other Significant Findings</td>
<td>130</td>
</tr>
<tr>
<td>Conclusions</td>
<td>138</td>
</tr>
<tr>
<td>Recommendations</td>
<td>144</td>
</tr>
<tr>
<td>Recommendations for Practice</td>
<td>145</td>
</tr>
<tr>
<td>Recommendations for Further Study</td>
<td>149</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>151</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>A. Survey Instrument</td>
<td>163</td>
</tr>
<tr>
<td>B. Interview Instrument</td>
<td>170</td>
</tr>
</tbody>
</table>
C. Document Analysis Instrument ................................................................. 175
D. Survey Recruitment Letter ........................................................................... 177
E. Interview Recruitment Letter ....................................................................... 179
F. Consent Form ............................................................................................... 181
G. Repeated Measures Analysis of Variance – Survey Questions 1-14............ 184
H. Gap Analysis of Estimated Marginal Means – Survey Questions 1-15....... 188
I. Repeated Measures Analysis of Variance – Survey Question 15 ............... 199
J. Document Analysis Summary ..................................................................... 201
LIST OF TABLES

Table 1. San Diego County Population Statistics ........................................................... 8
Table 2. Imperial County Population Statistics ............................................................... 9
Table 3. Numbers of Students Attending San Diego and Imperial Counties Community Colleges ................................................................. 10
Table 4. Cultural Diversity for San Diego and Imperial Counties Community Colleges .................................................................................. 12
Table 5. Age Diversity for San Diego and Imperial Counties Community Colleges .................................................................................. 13
Table 6. Job Categories of Respondents ........................................................................ 76
Table 7. Summary of Participant Responses to the Survey ........................................... 78
Table 8. Paired Samples t Test Results for Questions 1 to 14 ....................................... 83
Table 9. Summary of Participant Responses to Question 15 – Budget Practices .......... 92
Table 10. Paired Samples t Test Results for Question 15 – Budget Practices ............... 93
Table 11. Professional Background of Interview Subjects ............................................ 96
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Survey Scale and Sample Response</td>
<td>62</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Elements Impacting the Integration of Institutional Planning and Budget Development</td>
<td>98</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Conceptual Diagram of Forces Impacting the Development of Institutional Priorities</td>
<td>99</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Planning Processes that Impact Development of Institutional Priorities</td>
<td>101</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Data Utilized to Develop Institutional Priorities</td>
<td>102</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Non-Integrated Planning Models Currently Used by San Diego and Imperial Counties Colleges</td>
<td>104</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Ideal Integrated Planning Model Identified by San Diego and Imperial Counties Colleges</td>
<td>105</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Gap Analysis of Integrated Planning Survey of California Community Colleges</td>
<td>108</td>
</tr>
<tr>
<td>Figure 9</td>
<td>An Ideal Cycle Demonstrating the Integration of Planning, Budgeting, and Program Evaluation Processes</td>
<td>113</td>
</tr>
<tr>
<td>Figure 10</td>
<td>Factors Influencing Change in Institutional Planning Processes</td>
<td>116</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

My vision has always been focused on the future, partly due to my interest in science fiction. Isaac Asimov once stated that “It is change, continuing change, inevitable change that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.” As a futurist, Asimov captured the essence of planning…. and the reason I chose this topic for my dissertation research.

My journey through this doctoral dissertation was an excellent professional experience thanks to the people I worked with, who became friends, colleagues, and mentors. First, I would like to recognize the contributions of my dissertation committee. I would like to thank Dr. William Piland, my committee chair, for his leadership and support throughout my studies and for his expert guidance in helping me craft my dissertation. Dr. Fred MacFarlane inspired me to join this doctoral program and to look for new ways to view our system of education. James Austin has mentored me in college finance and budget processes for many years, in addition to providing expert advice and support during my dissertation research. I truly appreciate his guidance.

The faculty and staff of San Diego State University created a unique learning environment when they developed this program in educational leadership. The cohort model, combined with relevant course subjects, projects, and blended learning methods helped us develop practical knowledge that could be applied in our colleges each semester. Our cohort members grew not only as a learning community, but as a family of professionals that learned to depend upon each other as a team. This experience was
memorable both to me and my fellow cohort members. I wish to thank my cohort for their
guidance and support throughout this program, including the dissertation process.

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CHAPTER 1—INTRODUCTION TO THE STUDY

Introduction

The community colleges in California serve the largest population of students with the broadest mission in higher education. Conversely, California community colleges have traditionally received significantly less funding per student than the California State University and University of California systems. In 2006-07, California allocated $5,708 for each of its approximately 2.6 million community college students, compared to $11,972 for each California State University student and $18,749 for each University of California student (Community College League of California, 2008). The California community college system supports transfer education, each year offering high quality educational experiences to students pursuing the first two years of their undergraduate education. The community colleges support career and technical education, offering students opportunities to earn professional certificates and associate degrees that qualify them to work productively in many private and public sector jobs. Many students entering into the community college system lack basic education and study skills and therefore require additional support through developmental education programs and services to reach their academic goals. These same colleges also provide for the continuing education needs of citizens in their surrounding communities, delivering opportunities for life-long learning.

The diversity of the community college mission provides many challenges for program and curricular development, limited primarily by available financial resources. Community colleges in the twenty first century will be serving a larger, more diverse clientele with even scarcer financial state resources. Effective planning, review processes,
budgeting and resource allocation will become keys to the success of community colleges as they attempt to serve a larger population of students with different academic needs. Identification of an optimal planning and resource allocation model may help colleges succeed with their mission, or more effectively establish educational priorities and match them to available funding streams.

Unfortunately, the literature describes the management systems in American colleges and universities as “loosely coupled, open systems with multiple and poorly defined strategic goals, unclear linkage between means and ends, political decision making processes, and relatively autonomous units or departments, having professionally staffed units that often go their own way, that often cannot or will not carry out activities suggested or even mandated by institutional leadership (Williams, 1998, p. 148).” Other experts contend that colleges and universities must adopt a comprehensive strategy that integrates institutional planning with systematic program review, while emphasizing the need for external resource development and matching institutional needs to available resources. Institutional effectiveness may be improved through data collection and analysis, matching academic planning to outcome measures that may drive a funding plan (White, 2007). Accrediting bodies currently mandate development and use of outcome measures and assessments for both student services and academic processes. Accrediting organizations have begun requesting simplification and integration of institutional planning processes.

Leaders in the community college system must find a way to develop and implement effective planning models that address the diverse needs of students and limited financial resources of the institutions and students. Community colleges require great flexibility in decision making, more participation in governance, and a broader range of
input from stakeholders to establish effective representation in planning processes. While AB 1725, enacted by the California legislature in 1986, has reinforced the need for participatory governance in the California community colleges, a balance of shared participation and shared accountability must be achieved between college faculty and administrators. Planning processes must be tied to resource development and allocation while linked to appropriate assessments to monitor institutional effectiveness. Which methods of planning and budget allocation will prove to be the best for community colleges?

This study identifies and compares various planning and budgeting models currently in use within San Diego and Imperial Counties colleges and assesses their impact on institutional effectiveness. Recommendations for each of these nine colleges in this region will be reviewed to see if the Western Association of Schools and Colleges planning and resource allocation accreditation standard has been met. The study evaluates methods of college strategic planning, and the degree of integration with other forms of institutional planning, such as academic master planning, staffing, facilities development, technology and equipment planning. The impact of internal program review and external accreditation processes on institutional goals and objectives also is investigated through document analysis. Finally, resource development and budget preparation processes are assessed to determine the degree of integration with institutional goals. The study analyzes trends in San Diego and Imperial Counties college planning.

Background to the Problem

Strategic planning, which sets the global mission and values of the college, should establish a framework within which program and operational planning can be defined.
Facilities, staffing and technology requirements are established by both academic and student services educational master plans and program review processes.

Recommendations from program review processes should be communicated to institutional planning and provide information to establish new planning priorities each cycle. Very few institutions, to date, have comprehensively integrated all aspects of institutional planning with budgeting. Williams (1998) described the effective linking of strategic planning, budgeting, and resource allocation as a “collective phenomenon,” which is not a standard of practice in the California community colleges.

Institutional planning is a complex process which requires consideration of many variables, as stated by Ruben (2004). Many authors have identified the need for specific types of data to drive institutional planning. Losak (1986) recommended the use of institutional research data to aid in strategic and program planning. Skolits and Graybeal (2007) recommended the use of institutional data derived from various college stakeholders. Aloe (2004) proposed the inclusion of assessment data in academic planning. White (2007) suggested the use of program review data to enable effective strategic planning.

Colleges vary in size, mission, and financial resources to address the needs of their student populations. Rowley and Sherman (2001) described a model for the strategic positioning of colleges and universities based upon their resource base and orientation of their educational delivery system. Educational systems in the Rowley model could be categorized across a range of “consumer orientation” through “provider orientation.” Community colleges are typically consumer oriented and have moderate resources to deliver a broad educational mission and objectives. Such colleges traditionally have
experienced fluctuations in funding tied to the economics of federal, state and local tax revenues. Katsinas and Palmer (2005) articulated the need for community colleges to develop stable funding sources outside of traditional government support. Some colleges and universities have already developed industry partnerships and alternate funding mechanisms to help stabilize variation in governmental funding, as described by Spangler (2002). Development of stable alternate funding sources may allow more uniform planning and resource allocation among community colleges.

Strategic planning models in California community colleges were assessed by Williams (1998) and revealed very little integration of institutional planning processes. Additional work by Cistone and Bashford (2002) described the necessary components to achieve meaningful institutional effectiveness planning. Briggs, Stark and Rowland-Poplawski (2003) evaluated the benefits of implementing a continuous planning cycle for academic programs. Williams (1998) and White (2007) advocated for integrated planning and budgeting models for colleges that tie educational objectives directly to available funding. Such integrated planning may improve both institutional effectiveness and stakeholder participation in institutional planning. Williams (1998) and other authors noted two barriers to stakeholder participation in institutional planning - time and adequate resources. White (2007) noted that institutions which were successful at integrating planning and budgeting processes purposefully reduced the time committed by stakeholders to participate in planning processes while establishing financial resources that could be allocated to high priority planning initiatives each year. One important question that remains unanswered is whether the integration of planning processes and resource allocation impact the operation of a community college in some quantifiable manner.
Limitations to state funding of community colleges will require new models of planning for budget and resource allocation purposes. Colleges must develop more effective systems for both strategic and institutional planning, incorporating both internal and external needs assessments. The diverse mission of the community college will become more difficult to support if resources become less available during the next decade. Therefore, new methods of planning and prioritizing goals and objectives, along with development of budgeting systems will be essential to the survival of the community college system. Identification of efficient planning models will assist in maintaining high quality educational programs at California community colleges.

Accrediting bodies, such as the Western Association of Schools and Colleges (WASC), have required that community colleges integrate institutional planning of human, physical, technology, and financial resources to improve institutional effectiveness and support achievement of their educational mission and objectives (WASC Accreditation Standard III, 2002). New accrediting standards require that human resource planning be integrated with institutional planning to hire adequate numbers of appropriately trained staff and faculty, address issues of diversity and equity, and provide professional development opportunities that improve teaching and learning at the college (WASC Accreditation Standard IIIA, 2002). This accreditation standard requires that planning for facilities and equipment be integrated with institutional planning to provide adequate resources to support the integrity and quality of a college’s educational programs, no matter the location or means of delivery (WASC Accreditation Standard IIIB, 2002). Facilities planning should be data driven and based upon utilization of educational resources. Technology planning must address the needs of teaching and learning, in
addition to college-wide communications, research, and operational systems (WASC Accreditation Standard IIIC, 2002). Finally, financial planning must integrate with and support each college’s institutional planning processes (WASC Accreditation Standard IID, 2002). Institutional planning should include a realistic assessment of existing financial resources, expenditure requirements, and partnerships. All additional resource development activities should be consistent with the mission and goals of the institution. Colleges must “assess progress toward achieving stated goals and make decisions regarding the improvement of institutional effectiveness in an ongoing and systematic cycle of evaluation, integrated planning, resource allocation, implementation and re-evaluation” (WASC Accreditation Standard IB3, 2002).

Pressures brought by limited funding and the introduction of new regional accreditation standards have forced California community colleges to reassess their planning processes. During the past ten years improvements have been made in institutional planning and resource allocation, as seen by White (2007). Complexity of community college planning processes that address multiple educational missions, along with decentralization of most planning activities throughout the college make it difficult to determine the overall effectiveness of such institutional planning processes. Accreditation review processes, however, have established evaluation standards to assess institutional compliance with integration of planning and budgeting processes. Such evaluation tools are instrumental in evaluating progress within the nine San Diego and Imperial Counties community colleges.

Local Setting

San Diego County has a population of roughly three million people (Table 1) and
has a diverse population in terms of race, gender and age. Imperial County is similar in geographic size to San Diego County, but supports only about 160,000 residents as shown in table 2. The population of Imperial County is a Hispanic majority, and has a diversity of

Table 1

*San Diego County Population Statistics*

<table>
<thead>
<tr>
<th>Diversity</th>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>166,486</td>
<td>5%</td>
</tr>
<tr>
<td>American Indian</td>
<td>15,946</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Asian</td>
<td>292,251</td>
<td>9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>906,898</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>7,042</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>13,144</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>White</td>
<td>1,597,847</td>
<td>52%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>98,655</td>
<td>3%</td>
</tr>
<tr>
<td>Totals</td>
<td>3,098,269</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note.* San Diego County is 4,261 square miles in size with a population of 3,098,269 people. 2007 data reported from the San Diego Association of Governments, 2008.

race, gender and age. Recent data indicate that 29.5 % of the people living in Imperial County are 18 years of age, or less (United States Census Bureau). These two counties support a total of nine community colleges organized into six districts. The nine San Diego
and Imperial Counties community colleges were established to meet academic and occupational training needs in their communities. Educators and business leaders participate in advisory boards to monitor job market trends and make certain that courses provide appropriate skills to match current and emerging employment opportunities.

Articulation of community college courses to four year universities allows undergraduate

### Table 2

**Imperial County Population Statistics**

<table>
<thead>
<tr>
<th>Diversity</th>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>1,675</td>
<td>1.0%</td>
</tr>
<tr>
<td>American Indian</td>
<td>779</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Asian</td>
<td>974</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>121,348</td>
<td>75.7%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>39</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>White</td>
<td>35,058</td>
<td>21.9%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>390</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>160,301</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Note.* Imperial County is 4,175 square miles in size with a population of 160,301 people. Imperial County has 47,289 people less than 18 years of age, representing 29.5% of the total population. 2006 estimated data reported from the United States Census Bureau, 2008.
students to achieve their general education requirements in smaller classes with an emphasis on accessing excellent teaching and learning opportunities. These colleges also support the lifelong learning needs of their communities.

Table 3

*Numbers of Students Attending San Diego and Imperial Counties Community Colleges*

<table>
<thead>
<tr>
<th>District</th>
<th>Full-Time Equivalent</th>
<th>Basic Skills Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Headcount</td>
<td>Credit</td>
</tr>
<tr>
<td>GCCCD</td>
<td>43,486</td>
<td>16,277</td>
</tr>
<tr>
<td>IVCCD</td>
<td>11,965</td>
<td>6,562</td>
</tr>
<tr>
<td>MiraCosta</td>
<td>21,267</td>
<td>5,264</td>
</tr>
<tr>
<td>Palomar</td>
<td>47,457</td>
<td>19,097</td>
</tr>
<tr>
<td>SDCCD</td>
<td>134,502</td>
<td>31,269</td>
</tr>
<tr>
<td>SWCCD</td>
<td>31,092</td>
<td>14,490</td>
</tr>
<tr>
<td>Totals</td>
<td>289,769</td>
<td>92,959</td>
</tr>
</tbody>
</table>

*Note.* 2006-07 data obtained from the California Community Colleges Chancellor’s Office Data Mart, 2008. Abbreviations as follows: Grossmont-Cuyamaca Community College District (GCCCD), Imperial Valley Community College District (IVCCD), San Diego Community College District (SDCCD), and Southwestern Community College District (SWCCD).
The nine colleges of San Diego and Imperial Counties serve roughly 290,000 students per year as detailed in table 3. The Grossmont-Cuyamaca Community College District utilizes two campuses, Grossmont College and Cuyamaca College in El Cajon, to serve 43,486 students each year (Table 3). Imperial Valley College serves 11,965 students in Imperial County (Table 3). MiraCosta College, in Oceanside, has three campuses that serve a total of 21,267 students each year (Table 3). Palomar College, in San Marcos, has multiple campus centers that serve a total of 47,457 students (Table 3). San Diego Community College District has several campuses, Miramar College in Mira Mesa, Mesa College in Kearney Mesa, and City College in downtown San Diego, that serve a total of 134,502 students (Table 3). Finally, Southwestern College, in Chula Vista, serves 31,092 students each year (Table 3). An analysis of enrollment in this region indicates that 76.3% of students at the nine colleges represent college credit full-time equivalent students, 11.9% represent non-credit full-time equivalent students, 5.7% represent college credit basic skills students, and 6.1% represent non-credit basic skills students (California Community Colleges Chancellor’s Office).

Ethnicity of students at the nine colleges of San Diego and Imperial Counties is shown in table 4. White students represent 38.1% of the total student enrollment in community colleges in the San Diego region, compared to 35.9% state-wide (California Community Colleges Chancellor’s Office). Hispanic students represent 31.3% of local enrollments, compared to 29.3% state-wide (California Community Colleges Chancellor’s Office). Asian students account for 7.9% of local students, followed by African-American students at 6.4%, Filipino students at 4.9%, and American Indian and Pacific Islanders at 0.9% each.
Table 4

*Cultural Diversity for San Diego and Imperial Counties Community Colleges*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>GCCCD</th>
<th>IVCCD</th>
<th>Mira</th>
<th>Palomar</th>
<th>SDCCD</th>
<th>SWCCD</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>3,067</td>
<td>161</td>
<td>796</td>
<td>1,608</td>
<td>11,405</td>
<td>1,649</td>
<td>18,686</td>
</tr>
<tr>
<td>American Indian</td>
<td>475</td>
<td>43</td>
<td>157</td>
<td>604</td>
<td>1,141</td>
<td>166</td>
<td>2,586</td>
</tr>
<tr>
<td>Asian</td>
<td>2,199</td>
<td>156</td>
<td>1,209</td>
<td>2,423</td>
<td>16,176</td>
<td>868</td>
<td>23,031</td>
</tr>
<tr>
<td>Filipino</td>
<td>1,541</td>
<td>62</td>
<td>559</td>
<td>1,385</td>
<td>6,780</td>
<td>3,826</td>
<td>14,153</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7,830</td>
<td>10,256</td>
<td>5,554</td>
<td>12,876</td>
<td>36,490</td>
<td>17,698</td>
<td>90,704</td>
</tr>
<tr>
<td>Other Non-White</td>
<td>1,519</td>
<td>118</td>
<td>275</td>
<td>0</td>
<td>3,683</td>
<td>91</td>
<td>5,686</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>513</td>
<td>15</td>
<td>171</td>
<td>381</td>
<td>1,292</td>
<td>316</td>
<td>2,688</td>
</tr>
<tr>
<td>Unknown</td>
<td>4,577</td>
<td>284</td>
<td>1,466</td>
<td>4,384</td>
<td>9,562</td>
<td>1,577</td>
<td>21,850</td>
</tr>
<tr>
<td>White</td>
<td>21,765</td>
<td>870</td>
<td>11,080</td>
<td>23,996</td>
<td>47,973</td>
<td>4,901</td>
<td>110,585</td>
</tr>
</tbody>
</table>

*Note.* 2006-07 data obtained from the California Community Colleges Chancellor’s Office Data Mart, 2008. Abbreviations as follows: Grossmont-Cuyamaca Community College District (GCCCD), Imperial Valley Community College District (IVCCD), San Diego Community College District (SDCCD), and Southwestern Community College District (SWCCD).

The largest age group represented at each of the nine local colleges is 20-24 years of age, followed by students 19 years of age or younger, and then the 50 years plus category, as illustrated in table 5. These statistics are consistent with state-wide assessment
Table 5

*Age Diversity for San Diego and Imperial Counties Community Colleges*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>GCCCD</th>
<th>IVCCD</th>
<th>Mira</th>
<th>Palomar</th>
<th>SDCCD</th>
<th>SWCCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 or less</td>
<td>10,908</td>
<td>3,014</td>
<td>5,514</td>
<td>12,724</td>
<td>20,730</td>
<td>9,017</td>
</tr>
<tr>
<td>20 - 24</td>
<td>13,205</td>
<td>3,589</td>
<td>5,774</td>
<td>13,303</td>
<td>35,257</td>
<td>9,249</td>
</tr>
<tr>
<td>25 – 29</td>
<td>4,907</td>
<td>1,494</td>
<td>2,545</td>
<td>5,465</td>
<td>20,351</td>
<td>3,645</td>
</tr>
<tr>
<td>30 – 34</td>
<td>2,484</td>
<td>913</td>
<td>1,412</td>
<td>2,852</td>
<td>12,873</td>
<td>2,069</td>
</tr>
<tr>
<td>35 – 39</td>
<td>2,029</td>
<td>772</td>
<td>1,126</td>
<td>2,398</td>
<td>9,976</td>
<td>1,718</td>
</tr>
<tr>
<td>40 – 49</td>
<td>3,710</td>
<td>1,270</td>
<td>1,795</td>
<td>4,042</td>
<td>14,477</td>
<td>2,787</td>
</tr>
<tr>
<td>50 +</td>
<td>5,459</td>
<td>912</td>
<td>3,037</td>
<td>6,823</td>
<td>20,816</td>
<td>2,604</td>
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<tr>
<td>Unknown</td>
<td>784</td>
<td>1</td>
<td>64</td>
<td>50</td>
<td>22</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note.* 2006-7 data obtained from the California Community Colleges Chancellor’s Office Data Mart, 2008.

Abbreviations as follows: Grossmont-Cuyamaca Community College District (GCCCD), Imperial Valley Community College District (IVCCD), San Diego Community College District (SDCCD), and Southwestern Community College District (SWCCD).

Of California community colleges, showing that 20-24 year olds represent 27.4% of students, followed by 19 years or younger at 24.6%, and the 50 plus age category at 12.1%. This information is also consistent with the multiple missions of the community colleges.
noted above, demonstrating that colleges do indeed serve both younger and older adults.

An assessment of institutional planning was conducted by a combination of personal and telephone interviews, review of college web sites, and review of documentation from each of the six college districts. Four of the six districts utilize a decentralized approach to institutional planning, coordinating planning efforts through a college committee or counsel. Two districts indicate that they provide centralized planning under the direction of either an administrative officer or classified support person. The San Diego and Imperial Counties community colleges therefore mirror the planning organizational structures seen throughout the rest of California (Williams, 1998).

California community college planning and budgeting activities have been observed to be diverse and non-standardized.

Problem Statement

The problem under investigation in this study is to determine a standard of practice for integrated planning processes within California community colleges, focusing on the nine colleges within San Diego and Imperial Counties. Integrated planning, as defined by the Western Association of Schools and Colleges, is the integration of institutional planning for human, physical, technology, and financial resources to improve institutional effectiveness and support achievement of the college’s educational mission and vision (WASC Accreditation Standard III, 2002). Institutional effectiveness can be measured through the achievement of institutional student learning and student services outcomes, as well as certificate and degree completion and course-level student retention and success. Other aspects of institutional effectiveness include improvements in student equity that impact the success of under represented students, including students of color.
College planning results in the allocation of general and categorical funds, or other financial resources, to achieve institutional priorities. Limited state funding provides additional incentive for a community college to plan effectively. Institutional planning for facilities, staffing and equipment typically requires prioritization of financial resources. Efficient college planning should impact positively on the delivery of educational services to students. Currently, the time required to create new planning initiatives, prioritize them with competing needs, identify funding, and fully implement them prevents San Diego and Imperial Counties community colleges from responding to the emerging educational and economic development needs of the communities and students they serve. Strategic linkages between long range planning and the college planning process will improve responsiveness to community, industry, and economic needs.

Research Questions

This study seeks to answer the following research questions:

Phase I

1. To what degree are the planning, budgeting, and financial resource allocation processes integrated within California community colleges?

Phase II

2. To what degree do community colleges in San Diego and Imperial Counties allocate financial resources based upon data-informed planning processes?

3. To what degree do community college employees with planning responsibilities in San Diego and Imperial Counties believe their
institutions should allocate resources based upon an integrated planning model?

4. Is there a difference between reported degrees of practice and reported degrees of importance of integrating planning and budgeting with resource allocation?

5. Is there evidence that integration of planning and budget processes improves institutional effectiveness?

6. Do effective integrated planning models exist that could be adopted by all California community colleges?

Purpose of the Study

The purpose of this study is to identify and compare planning processes used by nine San Diego and Imperial Counties community colleges to see if these processes represent integration as defined by regional accreditation agency guidelines. The WASC requires that community colleges integrate institutional planning for human, physical, technology, and financial resources to support achievement of the college’s educational mission and vision (WASC Accreditation Standard III, 2002). The reason for conducting research in the areas of evaluation, planning, and resource allocation is to identify effective practices and study models that meet regional accreditation agency criteria for continuous improvement. A primary objective of this study is to identify and publish accepted practices in planning and budgeting to assist California community colleges in adapting to limited resources and the demands of greater accountability.
Phase one of this study surveyed all 110 California community colleges to determine the number of colleges currently utilizing integrated planning models. This project phase assessed the degree of integration for current planning, budgeting, and resource allocation processes. These general observations provided a statewide perspective to facilitate in-depth study of regional practices.

Phase two of this study utilized interviews and document analysis in colleges located in San Diego and Imperial Counties to determine if these institutions allocate financial resources based upon data-informed processes, and whether planning activities drive annual budget allocations. Interviews assessed whether college employees believe that their institutions should allocate resources based upon integrated planning models. A comparison of interview data and institutional planning documents tested for differences between reported degrees of practice and reported degrees of importance associating integrated planning and budgeting with resource allocation. Phase two of this study determined if evidence exists to infer that integration of planning and budget processes improves institutional effectiveness. In-depth study of regional planning models in colleges within San Diego and Imperial Counties may identify one or more best practices.

Definition of Terms

For the purposes of this study, the following terms are used:

**Accountability.** The condition of being liable for the performance of tasks for which one has the necessary authority and for which one accepts responsibility. The procedure for reporting up through the chain of command; the results of tasks accomplished within or by a workgroup.
**Accreditation.** A process used to ensure accountability and increase public confidence in educational institutions. An evaluation process that utilizes institutional standards to encourage colleges and universities to improve the quality of education.

**Benchmark.** A point of reference used in measuring and/or judging quality or value.

**Benchmarking.** The process of comparing an organization’s operations to some point of reference for the purpose of setting goals, evaluating performance, and making decisions about whether and how to change. There are several points of reference: internal, a comparison between departments, external, comparison to selected peers, and external, comparison to the profession at large.

**Budgeting Processes.** Formulae used to allocate financial resources for the operation and maintenance of an institution. Methods used to distribute funding supporting the facilities, staffing and equipment needs of an organization.

**Centralization.** A system in which authority for direction, control, and management has become concentrated within a few people or offices; a concentration of power within the executives of an organization, who delegate only limited-decision making authority to lower-level managers.

**Decentralization.** Delegation to middle or supervisory managers of the authority to make decisions, placing authority at the lowest managerial level and involving participatory governance with faculty, involving delegation of decision-making authority.

**Formula Budgeting.** A method of budgeting that utilizes a formula to calculate the level of funding for an institution, division, department or unit. The resulting allocation
of funds emphasizes the most mission-critical programs, while allowing for cost-effective selection of optional activities during resource allocation.

**Incremental Budgeting.** A method of budgeting that applies a fixed percentage increase, or decrease, to a department or unit’s annual base budget. Such increases or decreases may be tied to a cost of living adjustment.

**Integrated planning.** The task of developing a comprehensive strategic and operational plan, requiring access to both external and internal institutional data. This process demands effective collaboration among multiple departments within an organization.

**Institutional effectiveness.** A process of ongoing evaluation of the key mission of an institution, using assessment to evaluate the quality of outcomes in each of the services provided by the institution. Assessment tools and methods must be systematically applied, broad based, interrelated and appropriate to the institution.

**Institutional planning.** A comprehensive planning process that broadly delineates where the institution is going and provides sufficient detail to guide implementation. Sets priorities and guides important decisions that are oriented towards the future in both a multi-year and single year document.

**Mission.** A mission statement is a clear and succinct representation of an organization’s purpose. The mission incorporates socially meaningful and measurable criteria addressing concepts such as the moral/ethical position of the organization, public image, the target market, products/services, and the geographic domain and expectations of growth.
**Performance Budgeting.** A method of budgeting that utilizes cost analysis of organizational processes tied to performance indicators to provide incentives intended to increase departmental or unit productivity. This method is closely aligned with accountability and meeting predetermined targets.

**Program Budgeting.** A method of budgeting that estimates the cost of programs or categories of service within an organization which then provides program-specific funding during resource allocation.

**Program review.** A process that assesses the vitality and viability of academic and other institutional programs through a review of assessment and outcome data, providing guidance for planning decisions, and enabling an institution to determine an appropriate level of budgetary support for programs.

**Resource allocation.** A plan for using available resources to achieve future organizational goals; the process of allocating resources among various projects or business units.

**Strategic planning.** Determining the nature of the environment in which an institution operates, assessing its internal strengths and weaknesses, and developing a “vision” of its future character given these assumptions. A strategic plan is generally created for a three to five year period.

**Strategic Thinking.** An effective management practice that requires active involvement and connection to organizational activities and issues, providing a context for reflection and action, allowing creative and interactive responses to processes taking place in the present.
**Strategic vision.** A set of organizational ideals and priorities, a picture of the future and/or a sense of what makes an organization special and unique. A core set of organizational principles; a broad set of compelling criteria that will help define organizational success

**Strategic values:** Traits or qualities that are considered critical to the organization; also known as core values and/or governing values.

**Zero-Base Budgeting.** A form of budgeting whereby departments formulate budget proposals based upon identification of unit descriptions, goals, costs and benefits, as well as methods of quantitative analysis. In essence, each year the budget reverts back to zero before budget determinations are made.

**Significance of the Study**

Integration and simplification of college planning processes has been mandated by external accrediting bodies that assess the performance of community colleges. The WASC requires that California community colleges demonstrate integrated planning of all resources, linking resource allocation to institutional effectiveness, and re-evaluating planning activities and allocations based upon annual institutional outcomes. This study identified current practices that meet these requirements.

California community colleges in the twenty-first century will serve an increasing number and diversity of students with fewer state financial resources. Limitations in both state and federal funding for California community colleges will require new models of planning and resource allocation. Colleges must develop more effective systems for both strategic and institutional planning, incorporating both internal and external needs
assessments. The diverse mission of community colleges will become more difficult to support as resources become scarce during the next decade. Identification of efficient planning models will assist colleges in maintaining high quality educational programs.

Efficient planning and budgeting methods are essential to maintain open access and financial equity to the students served by California community colleges. Establishing a best practice for institutional planning would help prepare California community colleges to address resource allocation in future difficult budget years.

This study surveyed current methods used for planning, budgeting and resource allocation in the California community colleges, as well as performed in-depth analysis of planning practices in the San Diego and Imperial Counties region. The results of this study are important to college administrators seeking information on best practices in planning and resource allocation. This information is particularly important for colleges attempting to meet more rigorous regional accreditation standards.

Many authors have written about the need for improved planning processes in community colleges during the past ten years. Dr. James Edward Williams of La Verne University studied and reported on planning, budgeting and resource allocation in California community colleges in 1999. More recently, Dr. Eileen Knight White of Andrews University performed a case study comparison of two California community colleges planning systems in 2007. This later study assessed the degree of program assessment used to adjust planning and resource allocation in the community college environment. The current research is used to provide comparative data to these two prior benchmark studies, showing the degree of progress towards development of integrated
planning methods, and the use of program review as a method of evaluating the impact of planning on institutional effectiveness.

Delimitations and Limitations to the Study

One hundred and ten California community colleges were selected for phase one of this study. Studying all California community colleges creates a limitation for the depth of information to be obtained. Phase one established only general baseline data consisting of numeric scores and opinions of survey participants. The diversity of planning structures and methods within the California community colleges may affect access to information.

Phase two of this study is confined to the nine college campuses within the six college districts of San Diego and Imperial Counties. Surveys and interviews of employees responsible for college planning provide in-depth information related to planning processes at each college. Survey participants may have significantly varied interests and perspectives in college or district planning processes, and outcomes. Therefore, an additional limitation of this study will be potential bias of survey participants which may be significant in a small sample.

Planning processes may be centralized or decentralized within an institution or college district. Processes and decisions may be coordinated through one person or a committee structure. The organizational structure within an institution creates a limitation to the availability of information related to planning processes, budget development and resource allocation. Further, this study only addressed institutional planning, as experienced within college-wide committees or counsels. Neither phase one or two of the study assessed planning performed at the department level. Phase two, however, provided
more detailed information and perspective on institutional planning and budgeting, as well as resource allocation for a limited number of colleges.

Organization of the Study

Chapter I has introduced the research topic and presented a case for researching current models for integration of planning and budgeting in the California community colleges. A review of literature relevant to the research questions is addressed in Chapter II. Chapter III presents the design of this study, sample and population, instrumentation, data collection, and data analysis procedures. Data analyses and a discussion of study findings are presented in Chapter IV. Chapter V presents a summary of findings, conclusions, and implications for future research, as well as recommendations for action.
CHAPTER 2—LITERATURE REVIEW

Introduction

This chapter contains a review of literature pertaining to planning and resource allocation in both business and education. Organized to first describe the characteristics of planning and strategic thinking as developed for business and industry, literature describing the development of educational planning processes then is discussed and contrasted with standard business practices of the past and present. Current methods of educational planning and resource allocation are presented, followed by recent process improvements that are specific to California community colleges. The final portion of this literature review addresses limitations found in educational planning and resource allocation, describing policies, procedures and system-wide problems that prevent effective implementation of change within the community college system.

Strategic planning is the focal point for discussion within this chapter, as it has a long and much-debated history. Many authors embrace strategic planning as a necessary tool to drive business, industry and education. Other experts claim that strategic planning is a dead or dying process that has little value in modern culture. This chapter evaluates the opinions of various authors and develops a consensus of current practice in the science and art of planning. This chapter also presents a wide variety of planning methods, showcasing different degrees of educational planning including budgeting, strategic visioning, academic planning, development and assessment of performance measures, and institutional outcomes. Finally, the literature reviewed in this chapter serves as an indicator of standard practices in educational planning and resource allocation, as well as the degree of integration of these discrete functions.
Characteristics of a Strategic Plan

Educational planning is a concept that evolved from strategic planning as originally developed by business and industry in 1965. Mintzberg (1994) reviewed the history of strategic planning and offered that “planning is a formalized procedure to produce an articulated result, in the form of an integrated system of decisions” (p. 12). Dooris, Kelley, and Trainer (2004, p. 5) described strategic planning as “our ability to think with intention.” Mintzberg also described planning as a necessary process to consider the future implications of business decisions, as well as create a formal basis for decision making. He further stated that planning can be used “to motivate, to encourage participation, and to facilitate consensus” (p. 20).

Mintzberg (1994) defined strategy as a plan, a pattern, or “consistency in behavior over time” (p. 23). He also stated that “Strategy formation is a planning process, designed or supported by planners…” (p. 32). Business and industry utilize these processes, as defined above, to position companies to take advantage of future needs by providing appropriate goods or services. Planning therefore requires access to information relevant to the planning process, scanning the opinions and needs of existing and potential customers. Mintzberg also described the process of planning as a means of controlling the actions of managers and employees to perform specific tasks that are consistent with the company’s mission and vision within its business plan. Many strategic plans are designed to last up to ten years and have long-term implications for the businesses they serve.

One problem with developing long-term strategic business plans that commit an organization to a specific pattern of resource allocation and product development is that changes in the economy, society, or culture may not be anticipated. Such changes can
create crisis conditions for companies that do not maintain flexibility and adaptability in their planning processes. Even modern public and non-profit organizations must “think, act, and learn strategically as never before (Bryson, 2004, p. 1). Mintzberg (2007) pointed out that “planning does not mean just thinking ahead about single decisions; it presumably implies some kind of attempt to interrelate different decisions” (p. 176). Some authors suggest that strategic thinking within an organization is more critical than strategic planning (Mintzberg, 2007; Bryson, 2004). Strategic thinking is described as:

…conceptual thinking, about the organization as a whole about its basic missions: new ways to conceive them, elaborate them, extend them. Strategic thinking is to operational thinking what the first derivative in calculus is to the given formula, a step up, if you like, from the basic relationship. (Mintzberg, 2007, p 178)

Mintzberg further stated that planning may impede strategic thinking and prevent companies from implementing appropriate strategic change when necessary.

More traditional views of strategic planning present a formalized process where companies define a mission and organizational vision that provides “a clear and succinct description of what the organization should look like…” (Bryson, 2004, p. 224). This formalized process has agreed upon components. The overall process should include the following steps:

1. Initiate and agree on a strategic planning process.
2. Identify organizational mandates.
3. Clarify organizational mission and values.
4. Assess the external and internal environments to identify strengths, weaknesses, opportunities, and threats.
5. Identify the strategic issues facing the organization.
6. Formulate strategies to manage the issues.
7. Review and adopt the strategies or strategic plan.
8. Establish an effective organizational vision.
9. Develop an effective implementation process.
10. Reassess the strategies and the strategic planning process. (Bryson, 2004, p. 32)

Additionally, an organizational vision should include components of the institution’s mission, philosophy and core values, strategies, performance criteria, rules, and ethical standards. The planning process should allow for establishment of goals such as increasing the company’s value, identification of methods for introducing strategic change, troubleshooting problems resulting from change, development of summative evaluations for the process, retention of important features of strategies and plans, and adjustment and implementation of adjusted planning measures during successive cycles.

*Budgets and Planning*

Budgets play a crucial role in the implementation of plans and strategies (Bryson, 2004). Budget planning tends to be short-term in public institutions due to the political nature of state and federal funding. Bryson (2004) reviewed several methods of enhancing public institutions’ money management, such as having the organization’s planning process precede budget preparation each year. This tactic requires that the organization’s master calendar is adjusted to reflect this change in emphasis. Another suggested practice is to build a performance budgeting system that allows governmental funded agencies to see outcomes associated with their investment. Review of prior strategic plans provides
insight into future budget development and determination of strategic direction. Short-term budgeting also may provide opportunity for small strategic successes when planning recognizes this time constraint. Bryson (2004) stated that budget planning represents control over an organization’s performance, whereas planning emphasizes strategies and programs. Mintzberg (1994) argued that a “great divide” may always exist between these two processes.

*The Balanced Scorecard and Strategic Planning*

Some management techniques can minimize the gap between budget planning and strategic planning. Kaplan and Norton (1996) described the concept of a balanced scorecard as a strategic management tool for business. This technique utilizes four principal methods to implement a strategic plan. First, the strategic vision of the company is translated into a system of measurable outcomes. Second, overarching strategic objectives are translated into departmental and personal scorecards tied to productivity and performance, which then serve to communicate strategic initiatives throughout the organization. Third, business planning links these strategic initiatives to budget development, as well as develops benchmarks and milestones to measure progress. Fourth, and finally, feedback and learning also are built into the balanced scorecard approach, so that managers can adjust the strategic plan as data are acquired, analyzed, and interpreted by the company. This feedback allows the planning process to be dynamic and adjust to changing market situations.

Businesses today utilize a number of approaches to establish short and long term planning that directs resource allocation and measures performance. Strategic planning
has evolved over the past forty years to become a flexible system of visioning, planning and metrics used to direct businesses and corporations to achieve higher levels of productivity and meet the challenges of a global economy. The use of strategic thinking and strategic change allows organizations to adapt to dynamic business environments. The use of tools such as the balanced scorecard enables companies to carefully design their strategic processes, communicate goals and objectives throughout the organization, plan resource allocation effectively, and adjust the plan’s methodology and direction according to feedback garnered during implementation. Businesses in the twenty-first century rely heavily upon data to help drive their business cycle, both during development of strategic initiatives and adjustments that occur during realization of the plan (Mintzberg, 2007).

Planning in Higher Education

Schmidtlein defined six specific forms of planning used in higher education in 1989. McPhail (2005) reviewed Schmidtlein’s categories of institutional planning as follows: Strategic planning was described as “determining the nature of the environment in which an institution operates…” (p. 158) and that strategic planning “…provides a context for a college’s vision for the market niche and an institutional mission appropriate to exploit that niche” (p. 158). This author also stated “consensus on a mission creates a set of shared values and assumptions that in turn create a context for program planning, operational planning, and budget decisions” (p. 158). McPhail defined program planning as “determining the nature of the programs needed to implement the college’s vision…” (p. 158), and this form of planning “…provides somewhat more specific guidance for budgeting than strategic planning” (p. 158). Operational planning was described as a
means of “establishing short-range objectives, determining their relative priorities, and deciding the kinds and levels of resources to be devoted to each objective” (p. 158). McPhail (2005) also commented on the nature of operational planning by observing that unfortunately “organizational units nearly always view planning as a way to enlarge their budgets” (p. 159). The author also noted these units “…create laundry or wish lists of new items to seek additional resources” (p. 159) but institutional planners must reconcile “financially unrealistic unit requests with district-wide priorities.” McPhail (2005) also defined issue-specific planning as “determining the policies and actions required to resolve issues affecting a specific campus function…” (p. 158). Budget planning was described as “determining the goods and services needed to implement desired programs, estimating their costs, determining potential sources of revenue, and reconciling competing claims for resources, given assumptions about revenue limitations” (p. 158) McPhail categorized facility planning as “determining the character of physical facilities needed to effectively implement an institution’s programs” (p.158).

Similar observations made by Dooris et al. (2004, p.5) concluded that strategic planning in higher education “includes hiring better faculty, recruiting stronger students, upgrading facilities, strengthening academic programs and student services, and acquiring the resources needed to accomplish these things.” These authors pointed out that planning originally focused on space planning and the development of campus facilities during the 1950’s, but evolved by the 1980’s to support “advancement of the academic enterprise” (p. 7). Many similarities exist between higher education and the business world. Some view the current time as a period of extreme change in post-secondary institutions:

Just like business, higher education in the twenty-first century is facing numerous
factors that are influencing, for better or worse, organizational effectiveness. These include globalization, changing demographics, mass customization, and often, flattened financial resources. In addition, colleges and universities need to examine every possible solution to combat the encroachment on their territories by the hungry corporate providers that have entered the educational marketplace in recent years. Colleges and universities will need to reach beyond their own horizons when contemplating the best ways to educate the tech-savvy Generation Y, or Millennial, students. (Thor, 2006, p. 10)

Thinking strategically will be encouraged, as government agencies and the public demand accountability and change within higher education. Traditional methods of teaching, learning, and management of resources must change to better meet the needs of local communities.

_Academic Planning_

Colleges and universities serve the needs of students by offering academic programs and courses. “The academic plan defines the curriculum of a campus and its potential impact on a variety of learning communities within it…” (Rowley & Sherman, 2004, p. 4). Academic planning is generally guided by faculty in the environments of curriculum and academic program review committees. Institutions have other planning activities that include planning for facilities, technology, and staffing, as well as operational planning for the campus budget, in addition to a comprehensive strategic plan. Periodically, these same institutions also must create a self-study document to submit to their respective accrediting agencies for planning and review processes. Organizations
may plan in each of these areas independently, while other institutions have integrated their planning into a single comprehensive process (Mintzberg, Ahlstrand & Lampel, 1998; Kelley & Kaufman, 2007; White, 2007). “The integrated components of strategic management form the essential ingredients for institutional prosperity and success” (Taylor & Machado, 2006, p. 139) Accrediting agencies now mandate that post-secondary education institutions align their planning processes to optimize limited financial resources and integrate institutional assessment to demonstrate effective use of funding (Western Association of Schools and Colleges – Accrediting Commission for Community and Junior Colleges, 2007).

**Educational Planning Themes**

Several educational planning themes were described by Dooris et al. (2004). The authors first described “A rational-deductive, formulaic approach to strategic planning…” “…tempered with a cultural-environmental-political perspective” (p. 7). Bryson (2004) utilized this theme to describe public and non-profit organizations as politically rational and described how planning “provides a way of blending substantive rationality and political intelligence” in these institutions (p. 20). Dooris et al. also stated that “strategic planning is now increasingly about learning and creativity, with the recognition that college and university leaders need to challenge assumptions and consider radically changing existing structures and processes” (p. 8). Finally, they observed that “there is a new and powerful emphasis on moving from formulation to implementation, from plan to practice” (p. 8) in higher education planning.
Rowley, Lujan, and Dolence, 1997 noted that “the massive changes that are occurring in the world around us are intruding into the academic realm as well” (p. 4). Politicians, governmental leaders, and the public have begun to question traditional academic practices and “whether or not we are properly preparing students for the world they are about to enter” (p. 5). While “significant environmental forces” (Rowley & Sherman, 2001, p. 9) attempt to reshape academia, the reality is that colleges and universities do not easily embrace change, nor do they change quickly. Traditional models for post-secondary education include the research university, the liberal arts college, and comprehensive university. Today such institutions are slowly adopting new patterns of academic programming to match the needs of their service communities, making and implementing strategic choices, focusing on resource acquisition and allocation, while finding strategic niches and developing strategic advantages (Rowley & Sherman, 2001).

Resource Allocation within Planning Models

Barr (2002) described planning models for resource allocation utilized in higher education by defining categories and methods of budget development. Incremental budgeting assumes that needs and costs vary little from year to year. This style of budgeting does not analyze spending patterns or needs, but minimizes conflicts within the institution by treating all academic units in the same way. Increases to incremental budgets take the form of percentage adjustments to specific line items within the base budget. Redistribution is a budgeting method that allows a manager to shift funding between line items within an academic unit’s budget, or between academic units. Zero-based budgeting requires budget managers to justify each line item and invokes a review of all institutional
expenditures. This type of budgeting is powerful, but must be linked with institutional strategic planning to provide benefits. “Planning, programming and budgeting systems models (PPBS)” (p. 40) are designed around intensive planning activities and require analysis of costs and benefits. This technique endeavors to seek the most cost effective method to achieve institutional and program outcomes. Formula budgeting links each full-time student to a dollar value and is designed to bring objectivity and equity to state funding of public higher education. Cost centered budget management requires each part of an organization to generate adequate revenues to meet expenses. Responsibility centered budgeting decentralizes decision making, while holding unit managers accountable for deficits and excess income. This last form of budgeting “provides incentives and greater flexibility to meet changing priorities” (pp. 41-42). Several of the budget methodologies described above represent strategic budgeting as defined by Quillian (2004). Modern college budget development requires that multiple methods of resource allocation are blended to produce useful procedures (Barr, 2002). Institutions have been shown to utilize planning and budgeting methods to improve student learning outcomes and increase institutional effectiveness (Shulock & Harrison, 1998).

**Academic Planning and Continuous Quality Improvement**

Researchers have described continuous academic planning processes that apply the principles of continuous quality improvement (CQI) in higher education (Briggs, Stark & Rowland-Poplawski, 2003). CQI evolved from the total quality management (TQM) era of business management, but was adapted to educational institutions to reshape administrative and curricular systems in an era of cost containment. Briggs, et al., noted
that many departments within colleges and universities commonly utilized specific cycles to review and renew courses and programs. Curriculum committees perform periodic reviews of official course outlines to ensure updated teaching and learning methodologies, resources, and alignment to other institutions. Academic and student services program reviews have been mechanisms within the community college system used to gather performance data, review progress, and recommend changes. Colleges and universities have also designed student learning outcomes at the course, program, and institutional level that are utilized to assess progress towards strategic goals.

The accountability movement in higher education has begun to change the fabric of higher education by utilizing student learning outcomes and student service outcomes to guide academic programs, making courses more student centered (Aloi, 2004). Outcomes are now utilized to drive the strategic planning process and resource allocation (Losak, 1986; Shulock & Harrison, 1998; Williams, 1998; Cistone & Bashford, 2002; Skolits & Graybeal, 2007) within post-secondary education. Shulock and Harrison (1998), McGuiness (2001), Cistone and Bashford (2002) and White (2007) all support integration of planning functions in higher education to include program review and other measures of institutional performance which then can drive budget development and resource allocation.

Planned Outcomes and Institutional Effectiveness

Measurement of institutional effectiveness has been described as the “integration of assessment of student learning outcomes, review of programs, and assessment of other performance indicators” (Sheldon, Golub, Langevin, St. Ours & Swartzlanger, 2008, p. 17).
The authors also stated that “we define institutional effectiveness as a process by which the institution gathers and analyzes evidence of congruence between its stated mission, purposes, and objectives and the actual outcomes of its programs and activities” (p.17).

Some institutions have chosen to financially reward academic programs that meet their stated outcomes. Performance funding is a form of resource allocation that rewards goal attainment within some post-secondary institutions, but only accounts for roughly 10% of budgets in those colleges and universities (Cistone & Bashford, 2002; Jaquette, 2006).

A variety of models exist that incorporate outcome and effectiveness data with integrated planning, budget development, and resource allocation. Such planning systems are as diverse as the institutions that develop them (Tucker, 2000; McGuinness, 2001; Wayne Community College, 2001; Cook, 2002; Isaac, 2002; Johnson, 2002). The Minnesota state colleges and universities recently adopted a strategic plan which exemplifies integration of short and long-term strategic planning with accountability measures, which then drives this educational system’s budget development (Minnesota State Colleges and Universities, 2006). Institutional planners at Rochester Community and Technical College in Minnesota recommend that successful planning teams also should have representation that reflects the governance systems used at each institution (Ammentorp & Warner, 2004).

Colleges commonly utilize simple statistics to describe institutional effectiveness such as graduation rates, course completion, retention versus withdrawal, and grades. Unfortunately, these measures do not describe the intangible qualities of an institution that create academic excellence. The American Association of Community Colleges (1994) and League for Innovation in the Community College developed and promoted the use of
13 core indicators as foci for the assessment of institutional effectiveness. A manual for institutional effectiveness used by Wayne Community College (2001) identifies six outcome measures utilized to determine performance funding at this institution, some of which are objective and quantifiable in nature while others are more subjective and qualitative. Juhnke (2006) reviewed the accomplishments of the National Community College Benchmark Project (NCCBP) where eleven colleges met to discuss and agree upon standards that could be used in the evaluation of institutional effectiveness, including the use of student learning outcomes. Manning and Bostian (2006) described the use of institutional effectiveness data to guide changes in academic planning, impacting student withdrawal rates at Central Piedmont Community College. Alfred, Shults, and Seybert (2007) also described core indicators of institutional effectiveness as “…a solid base of information [that] is one of the most important ways to ensure vitality in uncertain times” (p. 45).

Colleges and universities have documented benefits as they incorporate learning outcomes and other effectiveness measures into institutional strategic thinking, planning, and resource allocation. “Establishing or expanding campus strategic planning, assessment, and evaluation capacity remains a fundamental focus for enhancing institutional effectiveness” (Skolits & Graybeal, 2007, p. 302). Dooris et al. (2004) commented on the importance of merging accreditation preparation with planning, institutional and program assessment, as well as individual initiatives for campus improvement. These authors also described the need for linking strategic planning and budget development. “…Assessment methods and resulting data should also be incorporated systematically into the budgeting process” (Cistone & Bashford, 2002, p. 21).
Integrating the multitude of plans that exists on any college campus is a challenging task. Considering the volume of information required for institutional assessments such as student learning outcomes and the program review process, managing data obviously becomes a limiting factor in academic planning and review processes. The broad scope of institutional planning which includes academic programs, facilities, technology, resources, operating and capital budgets requires careful attention to data collection and analysis.

…Institutional data have been unified and integrated across a number of different systems: the student information system, the financial system, the human resources system, the course management system, and a variety of systems that represent various vertical lines of service at the institutional and departmental levels.”

(Graves, 2005, p. 80)

Therefore, institutional research and information technology (IT) departments must play a key role in planning and budgeting each year to meet the modern challenges of data management. “…It is critical for an institution’s strategic plan to be supported and made successful by a strong IT strategic plan” (Edge, 2004, p. 40). Strategic planning is a time consuming process for faculty and staff (Brewer, 2003) and can be streamlined through ready access to institutional effectiveness indicators and outcome data.

Planning Practices Improvements

Implementing integrated institutional planning requires leaders who utilize principles founded in organizational change. During the past ten years practices have been identified to facilitate change in large organizations. Bolman and Deal (2003) recommend that managers observe the structural, human resources, political and symbolic frames
within an organization, and identify the culture of their organizations, before attempting to introduce change. Kouzes and Posner (2007) recommend that leaders envision the future and create a sense of urgency in their organizations to create an impetus for change. They also recommend enlisting others in creating organizational change, then search for opportunities, experiment, and foster collaboration to assist the implementation of change while celebrating small victories along the path of implementation, realizing that setbacks will occur during large-scale change. Moving post-secondary education towards acceptance of accountability measures and strategic thinking requires such tools to be successful (Dooris et al., 2004).

Appreciative Inquiry in Higher Education

Successful implementation of new planning processes in higher education may depend upon methods to enhance both design and initiation of the planning process (Whitney & Trosten-Bloom, 2003). Appreciative inquiry (AI) “has been described in a myriad of ways: as a radically affirmative approach to change that completely lets go of problem-based management and in so doing vitally transforms strategic planning, survey methods, culture change, merger integration methods…” (Cooperrider & Whitney, 2005, p. 7.). The AI cycle begins with the selection of an affirmative action choice, then proceeds through a process of discovery, followed by dreaming, then design, and finally establishing a focus on destiny through “strengthening the affirmative capability of the whole system” (p. 16). This process:
…involves a cross section of people from throughout the organization… Grows out of preliminary interviews into the organization at its best… Challenges people to reframe deficit issues into affirmative topics for inquiry. (p. 17)

Hammond (1998) wrote that “the tangible result of Appreciative Inquiry is a series of positive statements phrased as if they were already happening” (p. 31). Such an approach to facilitating change generates buy-in from participants and lays the groundwork for success rather than failure. Colleges that have utilized Appreciative Inquiry comment on the benefits of a strategic planning process driven by the positive accomplishments of an institution (Heelan & Transue, 2005; Spence, 2007). Other authors counter the assumptions of Appreciative Inquiry by stating that as part of the academic world strategic processes that experience “dissent and conflict are creative, healthy, and real. The absence of conflict is reductionist, illusory and suspect” (Cutright, 1999, p. 132).

*The Balanced Scorecard in Higher Education*

Stewart and Carpenter-Hubin (2000) adapted the work of Kaplan and Norton (1996) by proposing the use of the balanced scorecard for assessment of strategic outcomes in higher education. The authors stated that the balanced scorecard approach allows faculty and staff to operationalize strategic planning and visualize short and long term outcomes defined by the institution during their planning process. The use of a scorecard allows the strategic plan to evolve from a dust-covered book sitting unused on a manager’s bookshelf to a dynamic tool or living document that is frequently referred to as data become available for review at the institution. Knoess (2005) identified a gap that occurs in higher education between the development of strategies and the creation of a strategic plan. The author
proposed the use of a balanced scorecard to narrow this gap and continuously adapt the plan to meet the strategic intent of the college or university.

Planning Practices Limitations

California community colleges continue to have resource allocation problems due to their diverse mission and inadequate state funding. Limited financial resources have forced community colleges to become more efficient with planning and resource allocation. Funding for community colleges in California has been linked with the K-12 public school system. In 1979, Proposition 13 reduced property tax funding to k-14 by over one billion dollars per year (McFadden & Rhoads, 2004). Funding for California’s public education system fell from 9th in the nation to 44th within five years after passage of Proposition 13. To compensate for the negative financial impact of Proposition 13 and AB 8, California citizens approved Proposition 98 in 1988 to establish an acceptable minimum for school funding and provide financial stability for school budgets (McFadden & Rhoads, 2004). Unfortunately, California community colleges have not fared well under Proposition 98 during the past ten years, as the legislature has suspended a portion of the bill that guarantees community colleges a percentage of all state receipts (Murphy, 2004). California community colleges have grown only 4% in funding per full-time equivalent student (FTES) during the period of 1971 to 2001, compared to 24% growth for the California State Universities, and 23% for the University of California during this same time according to Murphy (2004). The author also noted that community colleges in California receive approximately 44% less per FTES than the K-12 public schools, and also rank 45th out of forty-nine states in community college funding per FTES. Although
California’s community colleges provide open access, they do not have the same financial resources as other institutions to support their diverse mission and student population.

**Community College Funding Models**

Community colleges typically are funded through one of four general models (Henry, 2000). First, a state may create a negotiated budget each year with community colleges based upon available funding and outcome expectations. Second, states may utilize a unit rate formula that allocates funding based upon the number of FTES or the square footage of existing or planned facilities. Third, states may allocate funds through a minimum foundation plan that provides a fixed amount of funding to institutions based upon state and local taxes plus a differential amount based upon enrollments and additional tax revenue. Last, states may use a cost-based funding model, where colleges are funded through analysis of specific operation program objectives and costs.

Wellman (2003) reviewed the standard method of budgeting developed for colleges and universities based upon the average cost per FTES and teaching space allocated by square foot for instructional activities, which serves as a foundation for establishing educational program costs. Henry (2000) reviewed a fifth theoretical funding model that addressed efficiency and equity in community colleges determined through an analysis of economic resources, along with identification of who should receive such resources, and agreement upon what the local economy should be producing and for whom. This model also considered the distribution of financial burden to support community colleges, including students, federal, state and local governments, and other interested parties. Dowd and Grant (2006) researched locally funded community colleges in 35 states and
reported a mean funding of $5,000 per FTES with an average variance of $1,000 per student. They reported that the potential for financial inequity exists for community colleges that primarily rely upon local funding, as economic performance in any region determines tax revenues available to fund these institutions (Dowd & Grant, 2006).

*California Community College Funding*

California community colleges utilized program-based funding (Murphy, 2004) up until 2006, when SB 361 changed the state funding model to a minimum foundation plan that provides each college with a foundation grant, plus additional revenue based upon enrollment (Community College League of California, 2003). The majority of funding for the colleges comes from the state’s general fund and local property taxes, with approximately 4% coming from federal resources, and only 3% from enrollment fees (Murphy, 2004). An important component of SB 361 was the introduction of equalization of funding between each of the 109 community college campuses, paralleling the introduction of horizontal equity in the K-12 system. SB 361 also funds a new category of non-credit classes for career development and college preparation of students. Even with enhancements in state funding, California community colleges still receive less per student than most other community college systems in the United States, creating a severe resource limitation and impacting their educational mission. As a result, integrated institutional planning becomes more critical to the allocation of scarce resources.

The funding mechanism established by SB 361 brings all California community colleges to at least the 90th percentile of funding, when comparing the previously highest and lowest funded districts. This increase in funding for lower paid districts has provided
the opportunity for strategic growth in personnel expenses, capital equipment, facilities, or special projects. White (2007) suggested that community colleges should set aside between one and three percent of their annual budgets to encourage and support innovation through continuous improvement projects. Providing a guaranteed financial resource is one method colleges can utilize to ensure successful implementation of integrated strategic planning and resource allocation (White, 2007). The revised funding mechanism for California colleges provides an opportunity for these institutions to create integrated planning systems.

Effectiveness of Strategic Planning

Studies of the effectiveness of strategic planning initiatives have revealed that in institutions that experience difficulties instituting a new planning process these institutions usually have adequate planning methodologies, but the implementation of the planning process frequently experiences problems. Dooris et al. (2004) described strategic planning implementation issues grouped in three areas: “(1) technical, (2) conflicting roles and responsibilities, and (3) communication” (p. 83). The authors stated the importance of providing adequate data warehousing and analysis capabilities, as well as relevant accounting practices before attempting changes in strategic planning, specifically to prevent technical problems. They also documented the need for appropriate policies and procedures to support planning processes and head off problems with conflicting roles and responsibilities among faculty and staff. Finally, they noted the need for frequent and effective communication preceding and during changes to planning methods. As planning is a continuous cycle, communication becomes a critical component of the entire
mechanism of the process, especially analysis of the outcomes for planning initiatives. Welsh, Nunez, and Petrosko (2006) noted that even at institutions utilizing effective planning processes, faculty may not be aware that formalized planning takes place, nor are they aware of the methodology.

Strategic planning in higher education frequently encounters major obstacles, including past practices in community colleges, as well as out-dated policy. Dooris et al. (2004) reviewed specific budget and planning practices and noted that colleges do not typically depreciate the value of capital equipment and facilities due to inadequate funding. Business and industry utilize depreciation and lifecycles as standard practice to replace outdated equipment and buildings. Funding for colleges and universities is typically based upon the number of FTES generated each semester (Rowley et al., 1997), as measured at a pre-determined census day. Community colleges may benefit from instituting changes to state funding models to emphasize equity, achievement of basic skills, and other outcomes that are associated with the mission of community colleges (Shulock & Harrison, 1998; Jaquette, 2006; Henry, 2000). Liefner (2003) stated that “Higher education may utilize performance-based funding to help to adjust the organizational structures of [colleges and] universities more quickly to emerging needs and opportunities” (p. 486). Although different with respect to qualitative outcomes and performance measures, post-secondary education would benefit from implementing successful business and information technology practices (Thor, 2006).

Strategic planning is recognized as an important tool to meet the dynamic environment of reduced revenues and increased demands for accountability in higher education (Welsh, Nunez & Petrosko, 2005). To be successful, however, integrated
planning processes must have the support of faculty, staff, and administrators. Gaff (2007) discussed the implications of shared governance in colleges and universities with regard to the outcomes of collaborative processes. He described the disconnect between authority and accountability in higher education in the current model of college governance. Without creative leadership to forge guidelines and parameters for collaborative decision making, many institutions waste countless hours arguing rather than agreeing on strategic issues (Ecung, 2007). Gaff (2007) proposed improvements to the shared governance model, including streamline committees structures within colleges and universities, “develop constructive working relationships with administrators” (p. 6), and “name the work that faculty do, recognize and reward it” (p. 6). He further stated that higher education has outgrown shared governance as it was originally crafted, and new models for managing post-secondary education must be developed.

Institutional change facilitated by strategic thinking and planning can be limited by many factors in colleges and universities. Hanna (2003) identified eleven challenges in higher education including:

- Remove boundaries, establish interdisciplinary programs, support entrepreneurial efforts, personalize student services functions, support lifelong learning, recruit technically prepared faculty, create strategic alliances, integrate learning technologies into the strategic planning process, measure program quality, achieve institutional advantage, and transform bureaucracy, culture and assumptions. (pp. 26-34)

The author proposed making progress within academia on these eleven challenges through the use of positive change models, such as Appreciative Inquiry.
Among other factors limiting institutional change may be the driving and restraining forces identified in group interactions by Regalado Rodriguez (2001). These forces have been referred to as “push-pull” with two primary properties, “legitimizing” and “status-quoing.” These properties may be present in individuals participating in change processes, creating “a dynamic equilibrium that results in periodic immobility” (p. iii). This effect is seen frequently in shared governance environments. Walters and McKay (2005) emphasized the need for institutional strategic planning to impact student retention rates in two year colleges, but also listed shared governance, collective bargaining, and decentralized decision making as potential barriers to the successful development of a strategic process. The dynamics of academia which allow creativity unfortunately also provide barriers to change.

Integrated Planning in California Community Colleges

The first framework for an integrated planning process was proposed by Below, Morrisey, and Acomb in 1987. Meisinger (1990) described integrated planning as the establishment of institutional goals and prioritized objectives, linked to an implementation framework which estimates the cost of such a plan, an allocation of necessary resources, and a method of assessing the success in achieving these goals and objectives. Schmidtlein (1989) stated that “within the field of public administration, the belief that budgets should be derived from well-conceived plans appears to be an unquestioned article of faith. Like the search for the Holy Grail, theorists and practitioners for many years have maintained a quest for the secret to a successful linkage” (p. 9). Schmidtlein also observed “some theorists have claimed success, but like the claims for cold hydrogen fusion, the results of
their formulations have been inconclusive and controversial” (p. 9). Recently however, colleges outside of California have documented successful implementation of integrated planning processes with budgeting and resource allocation (McPhail, 2005).

Williams (1998) surveyed 107 California community colleges and concluded that executive employees believed that their institutions were engaged in effective long term planning activities. These same college administrators, however, rated their college’s financial resource allocation as only average. The employee groups surveyed indicated that little or no linkage existed between planning, financial resource allocation, and budgeting, but did state that such linkage should exist. Williams (1998) therefore concluded that poor integration of planning and budgeting existed within the California community colleges during the 1990’s. Further, Williams proposed that a new paradigm was needed to allow community college leaders and other local champions the opportunity to demonstrate enhanced organizational effectiveness through integration of strategic planning, budgeting, and resource allocation. He also observed that effective linking of these components could be different at each college campus, and that no single model for integrated planning and budgeting might be possible. Williams stated that the work of campus leaders, facilitators, and campus-based teams at each campus could result in the integration of planning processes, as a collective phenomenon.

Williams (1998) recommended that accreditation standards for the California community colleges be revised to require demonstration of linkage between financial resource allocation and strategic planning. He further recommended that the State Chancellor’s Office support executive training to facilitate design and implementation of integrated planning methodologies to establish linkage between long-term planning and
resource allocation. He indicated that the college administration, along with other champions should provide leadership in strategic planning and resource allocation to ensure institutional effectiveness.

Sharing a common vision of planning and budgeting proved to be an issue in Williams 1998 survey of the California community colleges. A comparison of the opinions of chief financial officers (CFO) and chief executive officers (CEO) revealed a significant disparity in the importance and current practice of planning and budgeting processes. The CEO’s consistently had higher positive perceptions of William’s survey themes of mission setting, planning, priority setting, resource allocation, budgeting, and evaluation, than did the CFO’s. Williams (1998) also observed that college planning and budget committees were typically limited to “rubber stamp” activities. As these college committees represent one of the largest shared governance structures on a college campus, they should have their responsibilities “…expanded to include decision making regarding the linkage of resource allocation decisions to the college’s vision, strategic plan, and implementation programs” (p. 145).

More recently, White in 2007 studied two California community colleges that demonstrated significant integration of planning, program evaluation, and budgeting, Santa Barbara City College and MiraCosta College. White discovered two major themes in her research with colleges that had successfully implemented integrated planning and budgeting, namely leadership and institutional culture. The “…skillful leadership of a designated champion is vital to managing change and continuous improvement, such as the integration of management processes of an organization” (p. 219). White also observed that “leadership style is individualized, but to be successful it needs to be an appropriate fit
for the organization and its culture” (p.219). The visioning provided by college leaders also was noted to be critical to implementing change and reaching institutional goals.

White further observed that “stable yet adaptable leadership is indispensable in achieving the necessary institutional culture that becomes the incubator for institutional effectiveness” (p.220). Both college cultures studied in this research reflected “cooperation, collaboration, student success, and doing the right thing” (p.221). They also had a similarity in shared governance, whereby each college had a “balanced distribution of power, flexibility with a culture open to change, data-rich accountability, and effective methods of communication” (p. 221). White (2007) noted that her research validated existing literature indicating that integration of planning, program review, and budgeting was both possible and beneficial. She emphasized the relationship between successful integration and a positive institutional culture of collegiality and trust, and the positive impact of this culture on institutional effectiveness.

White (2007) developed a conceptual model for integration of planning, program review, and budgeting that was influenced by stable and positive leadership, open communication, shared governance, flexibility, and accountability. This model also represented a planning process that was objective and data-informed, with individual processes that linked to each other through common outcomes. White’s model also established “a cultural context that provides a holistic view of the college for improved decision making” (p. 222). Other observations judged to be critical to the success of integrated planning at these two colleges included “participation in the decision-making process through leadership, shared governance, openness to change, and access to and the use of data, demonstrating power with, not power over” (p. 223).
White (2007) noted the importance of selecting faculty and staff to serve on a college integration implementation team, stating that individuals “should include balanced representation of functions and diversity of thought” (p. 224). To be successful, White also recommended that institutions should build adequate financial resources to support integration of planning functions by setting aside one to three percent of their annual budgets to fund “innovation and continuous improvement projects” (p.225). Unlike Williams in 1998, White noted that California community colleges have developed successful and functional integrated planning processes in her case study research of 2007.

Conclusions

The literature on strategic planning demonstrates a long history of formalized planning processes, both in business and education. Most authors agree that strategic planning and strategic thinking are required in modern higher education due to declining financial resources and increasing demands for accountability. Coulter (2007) made an important observation for community college leaders when he stated that they must think about higher education much like their fore-fathers and take the “long look.” “…We are spending too much time on tomorrow and not enough time on the future” (p. 6). Other authors have agreed that the ideal outcome of the strategic process is planning, not the plan (Cutright, 1999). Organizations such as the Research & Planning Group for California Community Colleges (RP Group, 2005) have produced external scans that show similar results to those stated by other authors in this review, detailing the need for accountability to the communities that are served by colleges, as well as local industry, and university partners. The need for integrated planning is evident in many aspects of community
college funding and institutional reporting to accreditation agencies, the state, and federal
governments.

Academia is slow to change, recognizing value in creating learning outcomes and
assessment measures only when state regulation or accrediting agencies create urgency. The organizational dynamics of community colleges require careful and deliberate leadership through the change process. Shared governance, collective bargaining, and distributed decision-making require college leaders to utilize Bolman and Deal’s (2003) institutional frames of reference to facilitate change. Even with well-designed procedures, communication of change throughout the institution has been documented as the most critical problem in achieving success during implementation of new planning processes (Dooris et al., 2004). The use of balanced scorecards may help operationalize planning processes, help with institutional awareness, and make strategic planning documents useful and used by college decision makers (Stewart & Carpenter-Hubin, 2000).

Studies have shown that there is a gap between the strategic initiatives created by colleges and the strategic plan that documents the colleges’ process (Dooris et al., 2004). This observation has a direct implication on current research, as this potential gap can be addressed with a comparison of planning documents from different colleges and with interviews recorded from planners at each institution. A second finding in the literature review was the diversity of planning methodology. Standards do not exist, as yet, within community colleges, but trends are emerging. Many colleges are moving toward a systematic integration of all forms of campus-based planning to simplify workloads and provide consistent reporting to outside agencies. A significant number of authors also reported that planning should drive both budget development and resource allocation.
Mintzberg has created thought provoking analysis and metaphor for the strategic planning process (Mintzberg, 1994; Mintzberg, 2007; Mintzberg et al., 1998) over time. He and other authors emphasized that strategic thinking within organizations is more important than the creation of a plan. The primary reason for this observation would be that as the institution’s environment changes, so must the strategic goals of the college or university. Strategic thinking positions leaders to take advantage of new opportunities created by change. Although post-secondary education may not fit a business model, aspects of integrated planning and resource allocation can help benefit academic planning and the ability for institutions to realize competitive niches.

Globalization will continue to change the face of education, potentially bringing more students to community colleges through various points of access. Information technologies will not only be important to facilitate delivery of course content to students, but will be a key component in managing the incredible volume of information to be tracked as a result of implementing outcome measurement, institutional effectiveness reporting, and integrated planning and budgeting processes. Institutional research and information technology departments will need to assist colleges with design, collection, and analysis of data structures used in these processes. According to McPhail (2005), “if vision is the vehicle that drives all college operations, then technology is the engine. To be at the forefront of the information revolution, colleges must integrate technology into all that they do, including budget management” (p. 176).

Institutional planning is a mature science at many colleges and universities, however, other institutions are just beginning to adopt the necessary processes. There is still opportunity to study, document, and recommend acceptable practices to community
colleges. Also, electronic tools that could simply these processes are in their infancy and will continue to develop as colleges demand higher levels of performance from their information technology and research departments. Government and accrediting agencies have created urgency in post-secondary education to simplify and integrate planning processes, but this evolutionary change is still in progress in California community colleges. Whereas Williams in 1998 found little evidence of integration of planning and budgeting, White in 2007 studied two California community colleges that had successfully integrated planning, program review, and budget development. White’s key findings were that leadership and college culture dramatically influence an institution’s success or failure in integrating planning, review, and budget processes. Stable college leadership that provides a clear vision of improved institutional effectiveness, combined with a college culture of shared governance and participatory decision making provides the foundation for successful college-wide change in planning processes (White, 2007).
CHAPTER 3—METHODOLOGY

Introduction

The purpose of this study was to identify effective planning practices that integrate strategic and operational planning with budget development and resource allocation within the California community colleges. This study utilized mixed methods to establish a grounded theory, or theories, combining both quantitative and qualitative methods to identify the “what,” as well as “how” and “why” of college planning and budgeting methods currently in use. Multiple sources of evidence described for this study allowed the researcher to base his findings on “converging lines of inquiry” (Yin, 1994).

Research utilizing quantitative methodology has traditionally been associated with objectivity, and this study identified “what” methods of planning and budgeting are currently in use in the California community colleges. Qualitative methods applied to case study research help identify the reasons “why” and “how” processes take place (Charmaz, 2006; Merriam, 1998; Corbin & Strauss, 1998; Yin, 1994). To achieve significance, qualitative research builds upon rich descriptions of events originating from “…flexible guidelines for collecting and analyzing data [used] to construct theories ‘grounded’ in the data themselves” (Charmaz, 2006, p. 2). The combination of quantitative and qualitative methods provides a powerful research technique, allowing for triangulation of data and extraction of common themes (Cresswell, 1998; Yin, 1994).

This chapter addresses the specific research methods used to accomplish this study. The following sections describe the categories of research utilized, research design, variables, quantitative and qualitative procedures, population and sample, instrumentation, data collection, and statistical methods and non-statistical procedures used to investigate
the research questions identified for this study. The research methods described in this chapter represent modified replications of two previous dissertation studies.

Dr. James Williams of the University of La Verne utilized quantitative methods to survey 107 California community colleges in 1998 to determine “the existence and scope of planning systems,” “the extent to which financial resources are allocated within institutions on the basis of a formal allocation model,” “the extent to which planning, budgeting, and financial resource allocation processes are integrated,” and “the level of discrepancy between reported practices and the perceived need for integration of planning and financial resource allocation…” (Williams, 1998, pp. 66-67). His research methodology was both descriptive and ex post facto. The current study in phase I utilized a survey instrument based upon that of Dr. Williams’ to measure similar principles.

Dr. Eileen White of Andrews University utilized qualitative methods to conduct a case study comparison of two California community colleges in 2007. Her research emphasized identification of integrated planning processes that could be adapted at other colleges. This doctoral study allowed the researcher to “investigate and develop an understanding of the processes that promote institutional effectiveness” (White, 2007, p. 31). The current study utilized a portion of Dr. White’s qualitative inquiry method to help answer the questions, how and why do integrated planning processes work.

Research Design

This study assessed planning and budgeting techniques within California community colleges using descriptive methodology. Descriptive research requires the collection of data to answer questions related to the study topic. Surveys were distributed
to all 110 California community colleges for comparative analysis of planning and resource allocation methods. Employees who have primary responsibility for planning were surveyed to determine the degree of planning and budget integration, including resource allocation, in the California community colleges. Quantitative research techniques represented the research design for the first phase of this study.

Construct validity was enhanced by basing this phase of research on a proven survey instrument utilized in two prior studies, indicating that variables measured were consistent, with comparable outcomes. The chain of evidence for comparing these data reaches back to 1998 with the original research conducted by Williams.

This study utilized qualitative research methods to identify and compare planning and resource allocation processes used by nine San Diego and Imperial Counties community colleges. Standardized interviews with persons responsible for planning were conducted to determine if these processes are consistent with college policy and represent integration as defined by regional accreditation agency guidelines. The interview process was conducted to assess resource allocation within community colleges and the relationship between campus-based planning and budget development. Phase II of this study was conducted using case study comparisons of planning and budgeting within the nine community colleges in San Diego and Imperial Counties to provide in-depth analysis of planning and budgeting processes and practices.

The case study methodology was selected to investigate and develop a deeper understanding of planning processes and cultures within the San Diego and Imperial Counties community colleges. Such a research design enables the researcher to develop a comprehensive view of processes based upon patterns and themes that emerge from these
case studies. “Case study is a particularly suitable design if you are interested in processes” (Merriam, 1998, p. 33). Qualitative research utilizing a case study comparison of planning and resource allocation also may be able to inform other educational leaders of practices consistent with accreditation guidelines best suited to an era of limited financial resources.

Research Questions

This study seeks to answer the following research questions:

Phase I

1. To what degree are the planning, budgeting, and financial resource allocation processes integrated within California community colleges?

Phase II

2. To what degree do community colleges in San Diego and Imperial Counties allocate financial resources based upon data-informed planning processes?

3. To what degree do community college employees with planning responsibilities in San Diego and Imperial Counties believe their institutions should allocate resources based upon an integrated planning model?

4. Is there a difference between reported degrees of practice and reported degrees of importance of integrating planning and budgeting with resource allocation?

5. Is there evidence that integration of planning and budget processes improves institutional effectiveness?
6. Do effective integrated planning models exist that could be adopted by all California community colleges?

Pilot Study

This research model was piloted at American River College in Sacramento, California, during July and August 2009 to determine the sensitivity and specificity of survey and interview questions and judge their validity as research instruments. Survey and interviews questions were reviewed by employees responsible for planning at the college. Their recommendations were utilized to focus and re-design the study’s research instruments, as explained in the instrumentation section of this chapter.

Sample

California supports 110 community colleges, which are organized into 72 districts to serve 2.6 million students. Some of these districts consist of a single college, while others support multiple colleges within a geographic region. College employees were surveyed at each of the 110 California community colleges. People selected for this study consisted of employees responsible for planning at each college. Survey participants were referred by each California community college’s president. Each college president received an electronic letter requesting their college’s participation, asking that he or she identify one administrator or staff member employed in either institutional planning and research, or other campus functions who is primarily responsible for directing institutional planning. To facilitate participation in this state-wide survey, reminders were sent through email list serves to campus business officers, vice presidents of instruction, as well as
members of the Research and Planning Group for California Community Colleges (RP Group). Reminders were sent to this population at two week intervals to enhance the rate of return on surveys from representatives at each campus.

Standardized interviews (Merriam, 1998) were conducted with employees responsible for institutional planning at each of the nine community colleges in San Diego and Imperial Counties. The researcher communicated with each college president to request the institution’s participation in this second phase of the study. The college president then identified an administrator or classified employee primarily responsible for planning at the respective campus who participated in a one hour interview. Information describing the study, including an overview of the project and its research questions, was sent to each college’s designated respondent, along with a participation consent form. An appointment then was scheduled with each consenting employee to conduct the interview.

Instrumentation

This study utilized three data collection instruments (Appendices A-C). First, a survey was developed based upon the work of Dr. Roland Kerby Smith (1995) and his study of “Financial Resource Allocation in Texas Community Colleges.” Dr. Kirby’s original work was replicated by Dr. James Edward Williams (1998) when he assessed “Linking Strategic Planning, Budgeting, and Financial Resource Allocation in California Community Colleges.” These two previous studies utilized survey instruments that included management themes addressing planning and resource allocation within community colleges. Survey elements were selected, modified, or deleted from the original work developed by Dr. Smith (1995). Thirty-one of the original thirty-four
elements were used in Dr. Williams 1998 study. The current study utilizes fifteen survey elements from these authors, assessing strategic planning, institutional priorities, financial resource allocation, budgeting methods, and process evaluation.

The survey instrument seen in Appendix A was designed to sample the respondent’s opinion on two scales. The first scale determines the respondents’ view of their colleges’ current practice for each of the categories listed above. The second scale measures the respondent’s opinion of what the college’s practice should be, as pertains to institutional planning, budgeting, and resource allocation. A comparison of current practice to importance provides a gap analysis that can identify differences in practice and professional need. Figure 1 below shows the rating scale and survey structure.

| Rating Scale: | SD = Strongly disagree | D = Disagree | U = Undecided or unable to respond | A = Agree | SA = Strongly agree |

Example: The institutional planning process provides/should provide a mechanism for student discussion in the development of institutional goals.

| Current practice (“provides”) | SD | D | U | A | SA |
| Importance (“should provide”) | SD | D | U | A | SA |

*Figure 1. Survey scale and sample response.*
background information, including the number of years experience in facilitating institutional planning, job title, and college size were collected with each survey.

The original survey instrument, designed by Smith (1995) was formulated such that questions avoided threatening or embarrassing the respondents, as well as avoided leading the respondents or creating predictable results (Isaac & Michael, 1995). This questionnaire was pilot tested with twelve community colleges and the Texas Higher Education Coordination Board. The pilot test provided Dr. Smith with useful feedback that allowed redesign of the instrument to improve its clarity, content, consistency, concreteness, and reliability, while minimizing bias. Dr. Williams utilized an expert panel to validate his revised instrument and further modified items in his questionnaire.

The pilot study described earlier allowed the current survey instrument and interview questions to be evaluated for clarity, reliability, and potential bias. A researcher at American River College reviewed the survey and interview questions for acquiescence bias, dependence, susceptibility to self-presentational bias, and overall structure. Comments from the researcher at American River College were considered in the editing and final structuring of the survey instrument. Wording of the questions was reviewed and judged to be consistent with the work of Williams (1998). The scoring system for each survey question was reversed from “strongly agree” through “strongly disagree” to “strongly disagree” through “strongly agree” to reduce acquiescent bias. The survey questions were also randomized for internet delivery. A question addressing budgeting processes was altered to allow respondents to select “all [answers] that apply,” from a previous version where only one budgeting method could be selected. A review of the current survey instrument shows that it was based upon two prior surveys and the
established practices of Drs. Williams and Smith, utilized over a ten year period, and has proven content, clarity, and reliability, with minimal bias. The current study’s revised survey instrument is contained in Appendix A.

The second data collection instrument used in this study (Appendix B) was an interview protocol which assisted in constructing qualitative case studies at each of the nine community colleges located in San Diego and Imperial Counties. Interview questions were adapted from Dr. Eileen K. White (2007) who studied “Institutional effectiveness: The Integration of Program Review, Strategic Planning, and Budgeting Processes in Two California Community Colleges.” Appreciative inquiry was incorporated into her study protocol of two California community colleges. Her qualitative study utilized a combination of interview questions and visual diagramming as a technique to help identify integration of planning models. The current study adapted this technique to utilize participant pattern recognition of standardized diagrams of planning models.

This study utilized nine open-ended interview questions (Appendix B), including a pattern recognition exercise that asked each participant to identify a Venn diagram that best describes the way in which the campus conducts institutional planning, resource allocation, and program assessment. The interview instrument has been modeled after existing work (White, 2007) and therefore enhanced reliability and minimized bias. Six of White’s original questions were modified slightly, while two new questions were created specifically to address integration of planning and budgeting, linkage of annual college planning priorities to budget development, identification of data to inform planning and budgeting, and the impact of planning processes on institutional effectiveness. This instrument also was piloted at American River College and found to be appropriate by a
staff researcher and found to be likely to provide a rich data set from which to extract effective practices. Questions four and five were re-worded to better emphasize the use of program review and institutional effectiveness data in integrated planning. Interview questions were peer reviewed by program faculty and researchers at San Diego State University, Department of Administration, Rehabilitation, and Postsecondary Education prior to implementation as a field research instrument. This process resulted in the consolidation of two interview questions, and elimination of three questions, reducing the instrument from twelve questions to nine.

Document analysis was performed on available on-line planning documents, accreditation self-study reports, and Accrediting Commission for Community and Junior Colleges/Western Association of Schools and Colleges (ACCJC/WASC) report elements that pertain to integrated planning at each of the nine target campuses (Appendix C) as another form of qualitative research and data collection. Documents reviewed followed the process described by Taylor and Bogdan, 1998, where official records and public documents were used to provide “insight into the perspectives, assumptions, concerns, and activities of those who produced them” (p. 129). These documents also were used to determine if the colleges have documented “satisfactory performance of the organization’s responsibilities” (p. 129). As documented in Charmaz (2006), extant texts can be useful in finding “sharp differences between organizational reports and the field observations that you made” (p. 38). As another important research technique, document analysis also helped triangulate results obtained from other research tools, including quantitative and qualitative methods.
The document analysis tool (Appendix C) provided consistent data collection at each of the nine San Diego and Imperial Counties colleges by defining the specific documents to be assessed and the evaluation criteria. This instrument provided a reflective coding matrix (Scott, 2004; Scott & Howell, 2008) to assess qualitative themes from the target documents. College mission and values, goals, and vision statements were first analyzed for evidence of integrated planning and budgeting, followed by the strategic and institutional plans, as defined by McPhail (2004). Additional documents analyzed included accreditation self-study reports, accreditation team reports and agency findings, mid-term reports, as well as program review documents, and institutional effectiveness reports. Each document was assessed for ACCJC/WASC Standard III language that indicates the presence or absence of integrated planning and budgeting processes. Documents were classified as meeting criteria for planning integration, “Yes,” lacking criteria for planning integration, “No,” or presenting an indication of some degree of planning integration, “Partial.” Comments were recorded for each document to help develop a context for the document analysis and to provide additional data from which themes were constructed.

Data Collection

Case study research may utilize three categories of data: interviews, documents, and observations (Merriam, 1998; Yin, 1994). Six major sources of evidence have been described for these three categories, including documentation, archival records, physical artifacts, interviews, direct observations, and participant observations (Yin, 1994). The
present study utilized standardized interviews, document analysis of archival records, and a quantitative survey to assess integrated planning at California community colleges.

The quantitative research method for this study collected information through a state-wide survey of community college planners. An electronic letter was distributed to presidents at each of the 110 California community colleges, providing background for this research project and inviting participation. The letter (Appendix D) requested that each president designate an appropriate administrator or classified staff member to participate in the state-wide survey. The designated administrator or classified employee either directed campus planning activities, or was substantially involved in campus planning activities. A standardized consent form was provided to each participant. The survey instrument was made available on-line via Survey Monkey to one designated college employee at each college. Data were gathered using this on-line instrument for a total of six weeks.

Electronic letters also were mailed to college presidents in San Diego and Imperial Counties inviting them to designate an employee responsible for planning to participate in face-to-face interviews (Appendix E). Informed consent was accomplished prior to the interview by sending an electronic copy of a research summary, including research questions to each prospective participant. Consent forms (Appendix F) were provided to each participant at each interview. Interviews took place at eight San Diego and Imperial Counties colleges, in a location designated by the interviewee at each campus. One interview took place by telephone as one subject was not available for a face-to-face interview. Each interview lasted one hour and addressed the person charged with institutional planning responsibilities, or designee, at each campus. The researcher conducted each interview, recording all responses on an Olympus DM-1 digital recording
device. Each interview then was transcribed later from the digital recording by the researcher and labeled with the date and time obtained. All transcripts were coded for confidentiality and kept in the researcher’s home office in a locked filing cabinet. Interviews were scheduled to accommodate the availability of each interview subject within a seven week period.

All qualitative data collected followed the recommendations and guidelines set forth by Taylor and Bogdan (1998). The authors detailed the need for appropriate use of spoken language, as well as detailed observations of non-verbal communication. Taylor and Bogdan recommend using focused recall to document what the observer sees, hears, feels, smells, and thinks about to help describe settings and activities. People should also be carefully described, characterizing clothing, demeanor, and general appearance. Interview techniques were formulated based upon criteria established by Charmaz (2006), and Taylor and Bogdan (1998). Charmaz recommended the use of intensive interview techniques that can elicit each participant’s interpretation of his or her personal experiences. A procedure of asking questions that requires detailed explanations, and allows the participants to express their thoughts, feelings, and actions was applied. At the same time, a record of people’s gestures, tone of voice, and speed of response was created. Observer remarks, actions and reactions also were documented. Notes were made regarding unfamiliar terminology and conversations, and analyzed after the fact. Portions of the interview were utilized to help triangulate trends seen in the literature with actual practice as described by interview participants. A researcher can utilize multiple sources of data to reinforce research findings through convergence of information (Yin, 1994).
Data Analysis

Survey data were accumulated and assessed for simple descriptive statistics, utilizing question category mean and standard deviation. Additional descriptive statistics also were provided for interview participant data, including college size, participant job title, and experience with facilitating planning activities (in years). Descriptive statistics were used to compare “current practice” to “importance” for each survey question, including the percentage of response categories, mean (x) and standard deviation (SD). Additionally, mean values for “current practice” and “importance” were compared using paired-samples t tests, and repeated measures analysis of variance (ANOVA), utilizing the respondent’s job category as an independent variable, and years of experience, number of students, and district size as co-variants to assess difference in these two responses. Significance was tested at the .05 level.

Phase II of this research study utilized grounded theory as described by Glaser and Strauss (1967), and Charmaz (2006). The constructionist approach to qualitative research used in this study allowed collection of interview data, creation of a cross-section of shared experience among institutional planners, which was then compared against ACCJC/WASC accreditation standard III. WASC requires that colleges create an environment in which “the institution assesses progress toward achieving its stated goals and makes decisions regarding the improvement of institutional effectiveness in an ongoing and systematic cycle of evaluation, integrated planning, resource allocation, implementation, and re-evaluation (Introduction to Accreditation Standards, 2008, p. 3). Interview themes were assessed to see if progress had been made towards integration of planning and budgeting at colleges in the San Diego and Imperial Counties.
Grounded theory research, as described by Corbin and Strauss (1990), interrelates data collection and analysis. Concepts become the basic unit of analysis, while categories of data are developed and related to each other. Sampling in grounded theory addresses “incidents, events, and happenings…” (p. 8). Similarly, analysis in grounded theory utilizes constant comparisons of one incident against all others to develop lists of similarities and differences. Process analysis allows the observer to break the “phenomenon down into stages, phases, or steps” (p.10).

To analyze interview data, Charmaz (2006) recommended coding transcripts using three strategies. Coding can be broken down into initial, focused, and axial stages. Charmaz further stated that “Coding is the pivotal link between collecting data and developing an emergent theory to explain these data” (p. 46). According to Charmaz (2006), one should keep initial coding “… short, simple, active, and analytic” (p.50), meaning that initial coding is performed word-by-word, line-by-line, and incident-by-incident. Next, Charmaz (2006) recommended that focused coding be performed to synthesize initial codes into larger categories and subcategories. Finally, axial coding creates linkages between categories to identify coherent concepts (Charmaz, 2006; Strauss & Corbin, 1998). The application of constant comparison between survey responses, document analysis, and interview concepts leads to the development of themes and subthemes. Charmaz (2006) recommended that researchers “compare data with data to find similarities and differences” (p.54). During this process, analytic memos relating observations, impressions, and guesses of the researcher were written from each transcript and later utilized in an analysis of the data. Transcripts from interviews initially were coded using Atlas.ti software, then analyzed for common categories and themes addressing
planning and resource allocation methodologies, as described above.

Document analysis was conducted on on-line planning documents available at each college web site. On-line ACCJC/WASC self-study documents also were searched for content related to integrated planning, resource allocation, and budgeting. On-line ACCJC/WASC reports were assessed for statements related to San Diego and Imperial Counties colleges addressing integrated planning, resource allocation, and budgeting. Qualitative methods described above were utilized to code document review findings, developing themes that were compared to interviews and other quantitative data. The document analysis tool forms a reflective coding matrix (Scott, 2004; Scott & Howell, 2008) to facilitate coding of data, as well as identification of categories and subcategories of planning documents. Once compiled, triangulation of research results was attempted with other qualitative results and quantitative survey data.

External validity was assessed in this study by performing both cross-case comparisons and within-case examinations. “By comparing the roles, contributions, power positions, and interests of different key actors across cases, students can develop greater skill in learning how to assess and take into account the personal factor” (Patton, 2005, p.92). Comparing study results to existing practice, as documented in the literature, including observations from accrediting bodies and peer-reviewed articles provided a frame of reference for analysis and conclusions drawn from this research. Triangulation is commonly used to increase internal validity and trustworthiness of research data (Merriam, 1998; Yin 1994). Analyzing survey data, interview results, and documentation obtained from each college’s planning process in San Diego and Imperial Counties therefore established a high degree of internal validity for this study.
Methodological Limitations

The primary methodology of this study has been limited to an in-depth study of only nine community colleges, so generalizing data from the San Diego and Imperial Counties region to a state-wide experience may be inappropriate. However, the quantitative survey provides some system-wide information that may enhance the inferences drawn from the nine college case studies. Another limitation is that surveys never receive 100% participation, offering the potential limitation that the larger quantitative assessment may not provide an adequate statistical sample.

The qualitative research performed in this study may have had a component of observer bias, as every researcher brings certain viewpoints to analysis of field observations and comments made during interviews. Utilization of proper research methodology should have minimized observer bias through the development of common themes and overlapping experiences. However, observer bias may still have been present.

As a case study comparison, the qualitative research for this study suffered from a small sample size, as mentioned above, but the results can be generalized from experiences previously cited in the literature, with a historical perspective of ten years of research in California. This study also expressed the opinions of employees involved in institutional planning who may have been reluctant to admit that the college planning systems that they utilized do not meet current accreditation guidelines. Data available from the accrediting commission helped validate and generalize these observations, by providing a context for the number of colleges on warning, probation, and receiving significant findings. This type of study did not lend itself to quantitative statistical analysis, as the majority of data
was gathered through inquiry and therefore represents the experiences of people who had a personal investment in their planning processes.

Summary

This study utilized three methodologies to study integrated planning in California community colleges. First, an electronic survey instrument was made available to college employees who have participated in institutional planning at all 110 community colleges. This survey primarily assessed the degree of integration of planning, budget development and/or resource development, as well as program outcome assessment. Second, in-depth interviews were held with employees responsible for planning at nine San Diego and Imperial Counties community colleges to determine specific models of planning and test the degree of compliance with accrediting commission guidelines. Additionally, document analysis of planning documentation for each college, ACCJC/WASC self-study reports and visiting team reports was performed. Comparison of the quantitative and qualitative research phases allowed the researcher to test the degree of consistency between documented procedure and actual practice in institutional planning. This study also builds on the work of previous authors, enabling data to be trended longitudinally to assess change in planning systems over time.

Triangulation of accepted practices found in the literature with actual practice in the field may help identify planning models that will assist California community colleges meet the challenges of insufficient financial resources, now and in the future. Accrediting commission guidelines dictate that planning, resource allocation, and program evaluation must be integrated to meet current accreditation standards. This study investigated through
both quantitative and qualitative methods successful processes that will assist colleges in meeting this challenge.
CHAPTER 4—RESULTS

This chapter discusses the findings of a state-wide survey on planning, one-to-one interviews with college personnel primarily responsible for planning, and an analysis of available planning documents from San Diego and Imperial Counties community colleges. Quantitative results from the state-wide survey are presented first, then qualitative analysis of interviews and documents are provided in the second half of this chapter. The survey, interview, and document analysis instruments are shown in appendix A, B and C, respectively.

State-Wide Survey Results

An electronic survey of 110 California community colleges was conducted to assess the degree of integration of institutional planning, budgeting and resource allocation. Sixty-two respondents (56.4%) answered the survey items and provided their job title at each college or district office, the number of years spent working with institutional planning, the size of their college (full-time equivalent students), and the number of colleges within their district. Each participant provided their opinion on fifteen multiple choice questions. Answers were ranked from “strongly disagree” to “strongly agree” using a five point Likert scale. Results from each survey question were analyzed using the Statistical Package for the Social Sciences (SPSS, version 17.0, Nie, Bent, & Hull, 1970). Mean values for “current practice” and “importance” were compared using paired-samples t tests, and repeated measures analysis of variance (ANOVA), utilizing the respondent’s job category as an independent variable, and years of experience, number of students, and district size as co-variants to assess difference in these two responses. Significance was
tested at the .05 level. Post hoc testing was not performed on positive findings, as only two conditions were analyzed as a “gap” in current practice versus desired practice.

Respondents were placed in one of six job categories, including college president or superintendent, vice-president of business or administrative services, vice-president of instruction or academic affairs, student services administrator, research and planning administrator, or other, as shown in table 6, below. The category titled “other” represented district administrators, academic senate presidents, and administrators who did not indicate a department or division within the college or district.

Table 6

*Job Categories of Respondents*

<table>
<thead>
<tr>
<th>Position</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and Planning Administrator</td>
<td>22</td>
<td>35.5</td>
</tr>
<tr>
<td>College President or Superintendent</td>
<td>18</td>
<td>29.0</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>11.3</td>
</tr>
<tr>
<td>Vice-President of Business or Administrative Services</td>
<td>6</td>
<td>9.7</td>
</tr>
<tr>
<td>Vice-President of Instruction or Academic Affairs</td>
<td>6</td>
<td>9.7</td>
</tr>
<tr>
<td>Student Services Administrator</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>62</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Responses for time spent facilitating institutional planning ranged from 1 to 22 years, with a mean time of 4.2 years (sd = 8.0 years). Eighteen out of sixty two respondents indicated having 1 year of experience facilitating planning, representing 29.0%. Answers
were grouped into three categories for time spent planning, with “1” equal to five years or less (46 respondents, 74.2%), “2” equal to six to nine years (12 respondents, 19.3%), and “3” equal to ten or more years (4 respondents, 6.5%).

Twenty eight respondents (45.2%) indicated they worked within a single college district, while thirty four (54.8%) indicated they worked within a multi-college district. Five colleges (8.1%) had enrollments less than 3,000 FTES, twenty three (37.1%) had enrollments between 3,000 and 10,000 FTES, and thirty four (54.8%) had enrollments greater than 10,000 FTES. It is important to note that the variables job title, time spent facilitating planning, and college size were not normally distributed, but survey responses represented a 56.4% sample of the 110 California community colleges. Participant responses for questions one through fourteen appear in table 7, below.

Current Planning Practices Compared to Importance of Practices

Responses to question one, “The college planning process precedes/should precede development of the annual budget” indicated that 83.9% of participants agreed or strongly agreed that this statement represented current practice at their college, while 9.7% disagreed or strongly disagreed. Ninety-eight point four percent of participants agreed or strongly agreed with the importance of this statement, while 1.6% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.08 (sd = 1.00), and the mean importance rating was 4.74 (sd = 0.54). A significant difference between current practice and importance was found (t(61) = -5.540, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance,
<table>
<thead>
<tr>
<th>Question</th>
<th>SDC</th>
<th>DC</th>
<th>UC</th>
<th>AC</th>
<th>SAC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College Planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The college planning process precedes/should precede development of</td>
<td>3.2</td>
<td>6.5</td>
<td>6.5</td>
<td>46.8</td>
<td>37.1</td>
</tr>
<tr>
<td>the annual budget.</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
<td>21.0</td>
<td>77.4</td>
</tr>
<tr>
<td>2. The college planning committee includes/should include representatives</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
<td>21.0</td>
<td>77.4</td>
</tr>
<tr>
<td>of all constituency groups.</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>8.1</td>
<td>91.9</td>
</tr>
<tr>
<td>3. The institutional plan is/should be an integration of college</td>
<td>3.2</td>
<td>9.7</td>
<td>6.5</td>
<td>43.5</td>
<td>37.1</td>
</tr>
<tr>
<td>planning processes, budgeting, and resource allocation, linked to</td>
<td>0.0</td>
<td>0.0</td>
<td>6.5</td>
<td>16.1</td>
<td>77.4</td>
</tr>
<tr>
<td>institutional effectiveness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The institutional plan is/should be used in all the college’s</td>
<td>4.8</td>
<td>16.1</td>
<td>6.5</td>
<td>46.8</td>
<td>25.8</td>
</tr>
<tr>
<td>decision processes.</td>
<td>1.6</td>
<td>6.5</td>
<td>4.8</td>
<td>27.4</td>
<td>59.7</td>
</tr>
</tbody>
</table>
Table 7 (Continued).

Summary of Participant Responses to the Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Priorities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Annual institutional priorities are/should be derived from the strategic plan.</td>
<td>Current practice</td>
<td>0.0</td>
<td>6.5</td>
<td>6.5</td>
<td>54.8</td>
</tr>
<tr>
<td></td>
<td>Importance</td>
<td>0.0</td>
<td>1.6</td>
<td>1.6</td>
<td>27.4</td>
</tr>
<tr>
<td>6. Identification of institutional priorities is/should be the result of collaboration between college constituencies.</td>
<td>Current practice</td>
<td>1.6</td>
<td>3.2</td>
<td>3.2</td>
<td>54.8</td>
</tr>
<tr>
<td></td>
<td>Importance</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
<td>27.4</td>
</tr>
</tbody>
</table>
Table 7 (Continued).

*Summary of Participant Responses to the Survey*

<table>
<thead>
<tr>
<th>Question</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial Resource Allocation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Financial resources are/should be allocated based upon institutional priorities.</td>
<td>0.0</td>
<td>3.2</td>
<td>11.3</td>
<td>50.0</td>
<td>35.5</td>
</tr>
<tr>
<td>8. The college’s financial resource allocation process is/should be the result of collaboration between college constituency groups.</td>
<td>0.0</td>
<td>8.1</td>
<td>6.5</td>
<td>53.2</td>
<td>32.3</td>
</tr>
<tr>
<td>9. Program review is/should be part of the institution’s process for allocating financial resources to academic, student services, and support programs.</td>
<td>3.2</td>
<td>16.1</td>
<td>4.8</td>
<td>46.8</td>
<td>29.0</td>
</tr>
</tbody>
</table>
Table 7 (Continued).

*Summary of Participant Responses to the Survey*

<table>
<thead>
<tr>
<th>Question</th>
<th>Current practice</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College Budgeting Processes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The budgeting process provides/should provide the college with a useful annual financial plan.</td>
<td>Current practice</td>
<td>0.0</td>
<td>9.7</td>
<td>11.3</td>
<td>51.6</td>
<td>27.4</td>
</tr>
<tr>
<td></td>
<td>Importance</td>
<td>0.0</td>
<td>0.0</td>
<td>1.6</td>
<td>33.9</td>
<td>64.5</td>
</tr>
<tr>
<td>11. College expenditures are/should be assessed periodically to determine support for institutional priorities.</td>
<td>Current practice</td>
<td>0.0</td>
<td>16.1</td>
<td>16.1</td>
<td>43.5</td>
<td>24.2</td>
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<td>0.0</td>
<td>0.0</td>
<td>38.7</td>
<td>61.3</td>
</tr>
<tr>
<td>12. The budget process is/should be evaluated periodically.</td>
<td>Current practice</td>
<td>0.0</td>
<td>12.9</td>
<td>17.7</td>
<td>35.5</td>
<td>33.9</td>
</tr>
<tr>
<td></td>
<td>Importance</td>
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<td>0.0</td>
<td>0.0</td>
<td>25.8</td>
<td>74.2</td>
</tr>
<tr>
<td>13. The college’s planning process is/should be evaluated periodically.</td>
<td>Current practice</td>
<td>1.6</td>
<td>1.6</td>
<td>4.8</td>
<td>46.8</td>
<td>45.2</td>
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<td></td>
<td>Importance</td>
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<td>0.0</td>
<td>0.0</td>
<td>19.4</td>
<td>80.6</td>
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<tr>
<td>14. Institutional effectiveness requires/should require the</td>
<td>Current practice</td>
<td>3.2</td>
<td>11.3</td>
<td>8.1</td>
<td>46.8</td>
<td>30.6</td>
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<tr>
<td></td>
<td>Importance</td>
<td>0.0</td>
<td>4.8</td>
<td>3.2</td>
<td>25.8</td>
<td>66.1</td>
</tr>
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</table>
using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 1.85, p > .05) for these factors.

Responses to question two, “The college planning committee includes/should include representatives of all constituency groups” indicated that 98.4% of participants agreed or strongly agreed that this statement represented current practice at their college, while 1.6% disagreed or strongly disagreed. One hundred percent of participants agreed or strongly agreed with the importance of this statement. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.74 (sd = 0.54), and the mean importance rating was 4.92 (sd = 0.28). A significant difference between current practice and importance was found (t(61) = -2.81, p < .01). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 1.08, p > .05) for these factors.
Responses to question three, “The institutional plan is/should be an integration of college planning processes, budgeting, and resource allocation, linked to institutional effectiveness” indicated that 80.6% of participants agreed or strongly agreed that this

Table 8

*Paired Samples t Test Results for Questions 1 to 14*

<table>
<thead>
<tr>
<th>Q</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>Mean Cur Practice</th>
<th>sd</th>
<th>Mean Importance</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>-5.54</td>
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<td>1.00</td>
<td>4.74</td>
<td>0.54</td>
</tr>
<tr>
<td>2</td>
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<td>-2.81</td>
<td>0.007</td>
<td>4.74</td>
<td>0.54</td>
<td>4.92</td>
<td>0.28</td>
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<td>3</td>
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<td>4.02</td>
<td>1.06</td>
<td>4.71</td>
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<td>4</td>
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<td>0.000</td>
<td>3.73</td>
<td>1.16</td>
<td>4.37</td>
<td>0.96</td>
</tr>
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<td>5</td>
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<td>0.000</td>
<td>4.13</td>
<td>0.80</td>
<td>4.65</td>
<td>0.60</td>
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<td>6</td>
<td>61</td>
<td>-3.85</td>
<td>0.000</td>
<td>4.23</td>
<td>0.80</td>
<td>4.58</td>
<td>0.76</td>
</tr>
<tr>
<td>7</td>
<td>61</td>
<td>-4.06</td>
<td>0.000</td>
<td>4.18</td>
<td>0.76</td>
<td>4.68</td>
<td>0.59</td>
</tr>
<tr>
<td>8</td>
<td>61</td>
<td>-2.56</td>
<td>0.013</td>
<td>4.10</td>
<td>0.84</td>
<td>4.39</td>
<td>0.78</td>
</tr>
<tr>
<td>9</td>
<td>61</td>
<td>-4.16</td>
<td>0.000</td>
<td>3.85</td>
<td>1.13</td>
<td>4.48</td>
<td>0.83</td>
</tr>
<tr>
<td>10</td>
<td>61</td>
<td>-5.76</td>
<td>0.000</td>
<td>3.97</td>
<td>0.89</td>
<td>4.63</td>
<td>0.52</td>
</tr>
<tr>
<td>11</td>
<td>61</td>
<td>-6.69</td>
<td>0.000</td>
<td>3.76</td>
<td>1.00</td>
<td>4.61</td>
<td>0.49</td>
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<tr>
<td>12</td>
<td>61</td>
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<td>0.000</td>
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<td>0.44</td>
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<td>13</td>
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<td>0.79</td>
<td>4.81</td>
<td>0.40</td>
</tr>
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<td>14</td>
<td>61</td>
<td>-4.54</td>
<td>0.000</td>
<td>3.90</td>
<td>1.07</td>
<td>4.53</td>
<td>0.78</td>
</tr>
</tbody>
</table>
statement represented current practice at their college, while 12.9% disagreed or strongly disagreed. Ninety-three point five percent of participants agreed or strongly agreed with the importance of this statement, while 0.0% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.02 (sd = 1.06), and the mean importance rating was 4.71 (sd = 0.58). A significant difference between current practice and importance was found (t(61) = -4.86, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). A significant result was found (F(1,53) = 4.06, p < .05) for these factors. Homogeneity of variance was acceptable (Levene’s test of equality of error variances) for current practice (p = 0.06) and importance (p = 0.08). All administrators selected higher scores for importance compared to current practice. Vice-presidents of administration, administrators of research and planning, and student services personnel had the greatest increase in scores from current practice to importance (Appendix H, Figure F3).

Responses to question four, “The institutional plan is/should be used in all the college’s decision-making processes” indicated that 72.6% of participants agreed or strongly agreed that this statement represented current practice at their college, while 21.0% disagreed or strongly disagreed. Eighty-seven point one percent of participants agreed or strongly agreed with the importance of this statement, while 8.1% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating
was 3.73 (sd = 1.16), and the mean importance rating was 4.37 (sd = 0.96). A significant difference between current practice and importance was found (t(61) = -4.09, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). A significant result was found (F(1,53) = 5.62, p < .05) for these factors. Homogeneity of variance was acceptable (Levene’s test of equality of error variances) for current practice (p = 0.05) and importance (p = 0.76). All administrators selected higher scores for importance compared to current practice. Presidents and vice-presidents of administration had a smaller increase in scores (current practice to importance) than other groups (Appendix H, Figure F4).

Responses to question five, “Annual institutional priorities are/should be derived from the strategic plan” indicated that 87.1% of participants agreed or strongly agreed that this statement represented current practice at their college, while 6.5% disagreed or strongly disagreed. Ninety-six point eight percent of participants agreed or strongly agreed with the importance of this statement, while 1.6% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.13 (sd = 0.80), and the mean importance rating was 4.65 (sd = 0.60). A significant difference between current practice and importance was found (t(61) = -4.42, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). A significant result was found (F(1,53) = 10.27, p < .05) for these factors. Homogeneity of variance was acceptable
(Levene’s test of equality of error variances) for current practice ($p = 0.61$) and importance ($p = 0.82$). All administrators selected higher scores for importance compared to current practice. Vice-presidents of administration had the lowest scores for both categories, while vice-presidents of instruction had the highest scores (Appendix H, Figure F5).

Responses to question six, “Identification of institutional priorities is/should be the result of collaboration between college constituencies” indicated that 91.9% of participants agreed or strongly agreed that this statement represented current practice at their college, while 4.8% disagreed or strongly disagreed. Ninety-five point two percent of participants agreed or strongly agreed with the importance of this statement, while 3.2% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.23 (sd = 0.80), and the mean importance rating was 4.58 (sd = 0.76). A significant difference between current practice and importance was found ($t(61) = -3.85, p < .001$). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found ($F(1,53) = 0.40, p > .05$) for these factors.

Responses to question seven, “Financial resources are/should be allocated based upon institutional priorities” indicated that 85.5% of participants agreed or strongly agreed that this statement represented current practice at their college, while 3.2% disagreed or strongly disagreed. Ninety-six point eight percent of participants agreed or strongly agreed with the importance of this statement, while 1.6% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the
mean importance rating (Table 8). The mean current practice rating was 4.18 (sd = 0.76), and the mean importance rating was 4.68 (sd = 0.59). A significant difference between current practice and importance was found (t(61) = -4.06, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 1.88, p > .05) for these factors.

Responses to question eight, “The college’s financial resource allocation process is/should be the result of collaboration between college constituency groups” indicated that 85.5% of participants agreed or strongly agreed that this statement represented current practice at their college, while 8.1% disagreed or strongly disagreed. Ninety-one point nine percent of participants agreed or strongly agreed with the importance of this statement, while 4.8% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.10 (sd = 0.84), and the mean importance rating was 4.39 (sd = 0.78). A significant difference between current practice and importance was found (t(61) = -2.56, p < .05). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 0.09, p > .05) for these factors.

Responses to question nine, “Program review is/should be part of the institution’s process for allocating financial resources to academic, student services, and support programs” indicated that 75.8% of participants agreed or strongly agreed that this
statement represented current practice at their college, while 19.4% disagreed or strongly disagreed. Ninety-one point nine percent of participants agreed or strongly agreed with the importance of this statement, while 6.5% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 3.85 (sd = 1.13), and the mean importance rating was 4.48 (sd = 0.83). A significant difference between current practice and importance was found (t(61) = -4.16, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 1.24, p > .05) for these factors.

Responses to question ten, “The budgeting process provides/should provide the college with a useful annual financial plan.” indicated that 79.0% of participants agreed or strongly agreed that this statement represented current practice at their college, while 9.7% disagreed or strongly disagreed. Ninety-eight point four percent of participants agreed or strongly agreed with the importance of this statement, while 0.0% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 3.97 (sd = 0.89), and the mean importance rating was 4.63 (sd = 0.52). A significant difference between current practice and importance was found (t(61) = -5.76, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size,
and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 0.19, p > .05) for these factors.

Responses to question eleven, “College expenditures are/should be assessed periodically to determine support for institutional priorities” indicated that 67.7% of participants agreed or strongly agreed that this statement represented current practice at their college, while 16.1% disagreed or strongly disagreed. One hundred percent of participants agreed or strongly agreed with the importance of this statement, while 0.0% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 3.76 (sd = 1.00), and the mean importance rating was 4.61 (sd = 0.49). A significant difference between current practice and importance was found (t(61) = -6.69, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 0.51, p > .05) for these factors.

Responses to question twelve, “The budget process is/should be evaluated periodically” indicated that 69.4% of participants agreed or strongly agreed that this statement represented current practice at their college, while 12.9% disagreed or strongly disagreed. One hundred percent of participants agreed or strongly agreed with the importance of this statement, while 0.0% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 3.90 (sd = 1.02), and the mean importance rating was 4.74 (sd = 0.44). A significant difference between
current practice and importance was found ($t(61) = -6.87, p < .001$). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found ($F(1,53) = 0.01, p > .05$) for these factors.

Responses to question thirteen, “The college’s planning process is/should be evaluated periodically” indicated that 91.9% of participants agreed or strongly agreed that this statement represented current practice at their college, while 3.2% disagreed or strongly disagreed. One hundred percent of participants agreed or strongly agreed with the importance of this statement, while 0.0% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 4.32 ($sd = 0.79$), and the mean importance rating was 4.81 ($sd = 0.40$). A significant difference between current practice and importance was found ($t(61) = -4.86, p < .001$). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found ($F(1,53) = 1.28, p > .05$) for these factors.

Responses to question fourteen, “Institutional effectiveness requires/should require the periodical evaluation of planning, budgeting, and resource allocation through a program review process” indicated that 77.4% of participants agreed or strongly agreed that this statement represented current practice at their college, while 14.5% disagreed or strongly disagreed. Ninety-one point nine percent of participants agreed or strongly agreed
with the importance of this statement, while 4.8% disagreed or strongly disagreed. A paired-samples t test was calculated to compare the mean current practice rating to the mean importance rating (Table 8). The mean current practice rating was 3.90 (sd = 1.07), and the mean importance rating was 4.53 (sd = 0.78). A significant difference between current practice and importance was found (t(61) = -4.54, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and importance, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix G). No significant result was found (F(1,53) = 0.05, p > .05) for these factors.

**Current and Preferred Use of Budgetary Practices**

Question fifteen provided survey respondents the opportunity to evaluate five categories of budget methodology. The greatest positive difference between current and desired practice was seen in performance budgeting. Responses (Table 9) indicated that 16.1% of participants are using performance budgeting, while 50.0% indicated that performance budgeting should be utilized. A paired-samples t test was calculated to compare the mean current practice rating to the mean desired practice rating (Table 10). The mean current practice rating was 0.16 (sd = 0.37), and the mean desired practice rating was 0.50 (sd = 0.50). A significant difference between current practice and desired practice was found (t(61) = -4.67, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and desired practice, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix I). A significant result was found (F(1,53) =
8.50, p < .05) for these factors, with all administrative groups selecting a higher score for desired practice, while student services personnel scoring lowest for both current and

Table 9

*Summary of Participant Responses to Question 15 - Budget Practices*

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Current Practice (%)</th>
<th>Desired Practice (%)</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance budgeting</td>
<td>16.1</td>
<td>50.0</td>
<td>33.9</td>
</tr>
<tr>
<td>Zero-based budgeting</td>
<td>22.6</td>
<td>33.9</td>
<td>11.3</td>
</tr>
<tr>
<td>Program budgeting</td>
<td>58.1</td>
<td>50.0</td>
<td>-8.1</td>
</tr>
<tr>
<td>Formula budgeting</td>
<td>41.9</td>
<td>17.7</td>
<td>-24.2</td>
</tr>
<tr>
<td>Incremental budgeting</td>
<td>48.4</td>
<td>6.5</td>
<td>-41.9</td>
</tr>
</tbody>
</table>

desired practice (Appendix H, Figures F15 through F19). Homogeneity of variance (Levene’s test of equality of error variances) was acceptable for current practice (p = 0.54) but questionable for desired practice (p = 0.00).

The second largest positive difference between current and desired practice was seen with zero-base budgeting. Responses (Table 9) indicated that 22.6% of participants are using zero-base budgeting at their college, while 33.9% indicated that zero-base budgeting should be utilized. A paired-samples t test was calculated to compare the mean current practice rating to the mean desired practice rating (Table 10). The mean current
practice rating was 0.23 (sd = 0.42), and the mean desired practice rating was 0.34 (sd = 0.48). No significant difference between current practice and desired practice was found.

Table 10

*Paired Samples t Test Results for Question 15 - Budget Practices*

<table>
<thead>
<tr>
<th>Method</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>Mean Current</th>
<th>sd</th>
<th>Mean Desired</th>
<th>sd</th>
</tr>
</thead>
<tbody>
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<td>Performance</td>
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<td>-4.67</td>
<td>0.000</td>
<td>0.16</td>
<td>0.37</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Zero-Base</td>
<td>61</td>
<td>-1.54</td>
<td>0.128</td>
<td>0.23</td>
<td>0.42</td>
<td>0.34</td>
<td>0.48</td>
</tr>
<tr>
<td>Program</td>
<td>61</td>
<td>0.87</td>
<td>0.388</td>
<td>0.58</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Formula</td>
<td>61</td>
<td>3.22</td>
<td>0.002</td>
<td>0.42</td>
<td>0.50</td>
<td>0.18</td>
<td>0.39</td>
</tr>
<tr>
<td>Incremental</td>
<td>61</td>
<td>6.24</td>
<td>0.000</td>
<td>0.48</td>
<td>0.50</td>
<td>0.06</td>
<td>0.25</td>
</tr>
</tbody>
</table>

(t(61) = -1.54, p > 0.05). A repeated-measures ANOVA was calculated comparing ratings for current practice and desired practice, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix I). No significant result was found (F(1,53) = 1.43, p > .05) for these factors.

A negative difference was observed between current and desired use of program budgeting. Responses (Table 9) indicated that 58.1% of participants are using program budgeting at their college, while 50.0% indicated that program budgeting should be utilized. A paired-samples t test was calculated to compare the mean current practice
rating to the mean desired practice rating (Table 10). The mean current practice rating was 
0.58 (sd = 0.50), and the mean desired practice rating was 0.50 (sd = 0.50). No significant 
difference between current practice and desired practice was found (t(61) = 0.87, p > .05).
A repeated-measures ANOVA was calculated comparing ratings for current practice and 
desired practice, using job category as the independent variable and years facilitating 
planning, district size, and number of full-time students as co-variants (Appendix I). No 
significant result was found (F(1,53) = 0.43, p > .05) for these factors.

A large negative difference was seen between current and desired use of formula 
budgeting. Responses (Table 9) indicated that 41.9% of participants are using formula 
budgeting at their college, while only 17.7% indicated that formula budgeting should be 
utilized. A paired-samples t test was calculated to compare the mean current practice 
rating to the mean desired practice rating (Table 10). The mean current practice rating was 
0.42 (sd = 0.50), and the mean desired practice rating was 0.18 (sd = 0.39). A significant 
difference between current practice and desired practice was found (t(61) = 3.22, p < .05).
A repeated-measures ANOVA was calculated comparing ratings for current practice and 
desired practice, using job category as the independent variable and years facilitating 
planning, district size, and number of full-time students as co-variants (Appendix I). No 
significant result was found (F(1,53) = 0.010, p > .05) for these factors.

The largest negative difference was observed between current and desired use of 
incremental budgeting. Responses (Table 9) indicated that 48.4% of participants are using 
incremental budgeting at their college, while only 6.5% indicated incremental budgeting 
should be utilized. A paired-samples t test was calculated to compare the mean current 
practice rating to the mean desired practice rating (Table 10). The mean current practice
rating was 0.48 (sd = 0.50), and the mean desired practice rating was 0.06 (sd = 0.25). A significant difference between current practice and desired practice was found (t(61) = 6.24, p < .001). A repeated-measures ANOVA was calculated comparing ratings for current practice and desired practice, using job category as the independent variable and years facilitating planning, district size, and number of full-time students as co-variants (Appendix I). No significant result was found (F(1,53) = 1.67, p > .05) for these factors.

Interview Results

Nine interviews were conducted in San Diego and Imperial Counties with community college employees principally responsible for planning. Eleven employees participated in these interviews with a total of 96 years of experience in institutional planning. Experience ranged from 1 to 21 years for facilitation of college planning, with an average of 8.7 years in this cohort, compared to an average of 4.2 years in the phase I survey of all 110 California community colleges. The professional backgrounds of the interview subjects were diverse, as seen in table 11 below. Chief financial officers represented 27.2% of personnel interviewed, while chief instructional officers responsible for academic planning represented 18.2%. Directors of institutional research made up 18.2% of the study population. One participant from institutional advancement, program evaluation, the academic senate, and a classified employee also were interviewed for phase II of this research.

Interviews were scheduled with one person identified by each college’s president as the employee principally responsible for planning at each campus. Two campuses provided two interview subjects, as these personnel shared responsibility or the history of
planning at these campuses. Interviews were conducted in person, except for one subject who was only available by telephone. Each interview was digitally recorded and transcribed by a typist, then checked for accuracy and edited by the researcher. Transcripts

Table 11

*Professional Background of Interview Subjects*

<table>
<thead>
<tr>
<th>Area</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>3</td>
<td>27.2%</td>
</tr>
<tr>
<td>Academic Planning</td>
<td>2</td>
<td>18.2%</td>
</tr>
<tr>
<td>Institutional Research</td>
<td>2</td>
<td>18.2%</td>
</tr>
<tr>
<td>Advancement Officer</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td>Academic Senate</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td>Classified Employee</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11</td>
<td>100.0%</td>
</tr>
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</table>

next were analyzed using ATLAS-ti, version 6.0, a software program designed to facilitate analysis of textual and other forms of qualitative data (Muhr & Friese, 2004). The researcher utilized ATLAS ti to create codes and observe themes among the nine interview transcripts and document analysis results (Appendix J) acquired from each campus’ website, using information available on-line that described campus planning and budgeting activities. The researcher next organized codes, quotations, and analytic memos into families and clustered data to reveal themes which then were developed further into
theoretical concepts. Quantitative and qualitative data then were triangulated to reveal overlapping data, themes, and concepts to produce a grounded theory.

Integration of Planning and Budget Development

Figure 2 reviews the elements of planning models identified by interview subjects that impact integrating the college’s planning process with budget development. Interview subjects commented on the need to develop a “culture of planning” for budget development, within the broader college culture, compared with the current political nature of shared governance and collective bargaining and their impact on resource allocation. “The process is not [currently] driven by a formula… its lots of negotiations… and trying to decide how best to use the dollar…” Colleges with integrated planning systems commented on the benefit of having organizational strategies that emphasized transparent budget processes and utilized data-informed processes. Developing a data-informed decision making organization first required an organizational strategy to establish a culture of inquiry, access to data, and an understanding of how to utilize quantitative and qualitative information.

Two subjects (22%) stated that their colleges had successfully integrated planning with budget development, while seven colleges (78%) said that they did not currently have fully integrated processes but were developing them. Four subjects (44%) stated that their institutions had recently received or anticipated accreditation commission findings that created urgency to modify their planning processes and integrate planning with budget development. …”The accreditation came… we found out that there were some disconnects in the way we were doing business.” Document analysis (Appendix J)
revealed that 56% of San Diego and Imperial Counties colleges studied are on warning, probation, or have recently been on warning, or have had significant accreditation findings related to either integrated planning or outcome measurement (ACCJC/WASC, 2010).

Another participant commented that even though the college’s planning and budget development processes were integrated, she doubted that faculty and staff were aware of the current system or could articulate the model to visiting accreditation team members. This college identified the lack of communication of planning processes to campus constituencies as a potential accreditation problem. “We do it well, what we don’t do is communicate it to the rank and file members of the campus.”

Asked if their colleges’ budget development processes supported annual institutional planning priorities, six colleges (67%) indicated that budget development
supported annual priorities, while two (22%) indicated it did not. One interview subject did not definitively answer this question. Three college representatives provided strong conceptual evidence that budgets support college priorities, with the remainder offered varying degrees of evidence in support of this position. Three colleges explicitly stated that only discretionary funding was used to support integrated planning activities and institutional priorities, while three others merely implied that only discretionary funding was applied to priorities.

Factors Impacting Institutional Priority Development

Figure 3 shows the relationship described by interview subjects for existing college budget development processes and the development of institutional priorities. Multiple subjects commented on the high percentage of financial resource allocated to support

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**Figure 3.** Conceptual diagram of forces impacting the development of institutional priorities.
personnel expenses at their campuses. Data shared by participants indicated that 85 to 95% of college budgets were committed to salaries and benefits with very little funding left to cover other college expenses, including discretionary spending. One subject commented on the nature of budgeting in colleges and universities by stating that “I have a personal viewpoint that budgeting is an art. …You can use formulas to drive, in general, how to allocate things, but when it gets down to the college’s process you have negotiations taking place.” Several interview subjects observed a common problem resulting from budgets being rolled from one year to the next with little opportunity to reallocate financial resources across their campuses. Other respondents commented that a critical feature of integrating budget development with support for institutional priorities was effective communication among all college constituencies, sometimes focused in an annual college leadership retreat, where the college mission and values were revisited and institutional priorities established for the next budget cycle.

**Individual Planning Processes Impacting Development of Institutional Priorities**

A number of planning processes were identified during interviews that potentially impact development of institutional priorities. Figure 4 shows eight categories of planning influencing a college’s budget and institutional priorities. Academic and facilities master planning were noted as critical in guiding development of institutional priorities, along with strategic and annual institutional planning, tied to program review processes. Several colleges mentioned the need for improved enrollment management planning and schedule development processes that linked with strategic staffing plans. Evidence of movement
toward integrated planning was the statement, “…one of the objectives of the planning councils …will be to identify a method by which they evaluate whether or not the results of program review and the [college] priorities have been used in their budget development

Figure 4. Planning processes that impact development of institutional priorities.

processes.” Several participants commented on the need for institutions to look more broadly than just applying discretionary funds to fund institutional priorities, integrating staffing needs with other plans to address the larger needs of the institution. Interview subjects suggested that community colleges could benefit by applying modern business practices such as “total cost of ownership” to capital purchases and building projects. Limitations in state funding were observed to change planning priorities, including emphasizing the need for institutions to set aside funding for facilities repair and meeting financial emergencies.
Data Sources for Developing Institutional Priorities

Figure 5 illustrates eight categories of data applied to development of college priorities, as identified by study participants. Participants all noted enrollment, productivity, and outcome assessment data are utilized in the development of institutional priorities. Institutions were observed to utilize student record systems to characterize student demographics and course enrollment to guide schedule development. “We look at enrollment trends, headcount trends and grade distributions along with demographic data in terms of “who are we serving?”’ Program review processes, in part, utilize productivity, efficiency, and outcome data to guide development of future college priorities. Academic program review data were commonly mentioned by participants, such as “…we use weekly student contact hours (WSCH), section counts, WSCH to full-time equivalent faculty (FTEF) productivity counts.... We also use full to part-time ratios, and then… and
we do use outcome measures… Success, retention, degrees and certificates…” One subject commented on institutional outcome measures by stating “we use our accountability reporting for community colleges (ARCC) data, our accountability data… we’ve integrated that into our institutional effectiveness reporting.” External data also were noted as being important, such as the comment “…additionally, we have some great advisory committees for our career and technical programs so we have an “in” with the community to say “what are the needs?” “Where should we be focusing our efforts?” One college representative stated that quantitative and qualitative data were utilized to impact selection of institutional priorities. “So… both internal and external… we do some self-evaluation…. “How are we doing?” We’re putting into our planning [process] some customer service kind of satisfaction surveys… like the kind of stuff when you get your oil changed… to provide more immediate feedback to folks… but can then be rolled up with planning priorities.” Smaller colleges emphasized different requirements than larger institutions, such as the need for accurate hourly instructor cost accounting and trend analysis for supply budgets to guide institutional planning and priority development.

None of the subjects interviewed indicated that their colleges’ planning systems had impacted institutional effectiveness. Participants stated that integration efforts were either still in progress or had been implemented too recently to have significant impact on institutional effectiveness indicators. Two subjects reported that implementing a data-informed resource allocation process and having a planning process dialog with campus constituents would be enough to meet accreditation standards. “…even talking about it, and having… some schematic, allows for a comfort level that there is a process of how decisions are made, especially with allocation of resources… this allows for a dialog
and that’s the key rule of accreditation.” One interview subject reported that the college was still in need of direction, because “everyone is all over the place” instead of focusing on customers’ needs and resource development. Another subject noted the importance of being able to demonstrate improved institutional effectiveness to qualify for federal funding initiatives and possibly future state performance funding. Several participants indicated that their colleges were well positioned to document changes in institutional effectiveness, as they had an established history of applied research tracking academic and student services outcomes.

**Regional Planning Models**

Interview results indicated a variety of planning systems utilized among the nine colleges of San Diego and Imperial Counties as shown by the selection of graphic models during the interviews that judged the degree of integration of planning, budgeting, and program evaluation. Figure 6 shows the choices made by study participants for each of the

![Diagram of planning models]

Model #2: 22.2% of colleges     Model #3: 33.3% of colleges     Model #4: 22.2% of colleges

*Figure 6.* Non-integrated planning models currently used by San Diego and Imperial Counties colleges.
colleges. The institutions studied indicated that they lacked integration of program review processes, institutional planning, or budget development. One subject described the college process as a combination of models two and three, shown above. Another subject stated the college moved in a linear fashion through phases of planning, starting with model one, which described unit planning taking place in isolation, separating the functions of institutional planning, budget development, and program evaluation. The college progressed through each of the models shown in figure 6, until the close of the academic year, when campus leadership integrated the following year’s institutional plan, as shown in figure 7. All subjects agreed that their institution’s goal was to achieve the degree of integration shown in figure 7.

When asked if public documentation was consistent with existing planning processes, only two interview subjects (22%) responded “yes.” Six interview subjects (67%) responded “no” which was consistent with earlier interview responses regarding the degree of integration of planning and budgeting. One subject did not answer the question.

![Diagram](image)

**Model #5: 22.2% of colleges**

*Figure 7.* Ideal integrated planning model identified by San Diego and Imperial Counties colleges
but offered supplemental information on budget development. San Diego and Imperial Counties colleges have altered their planning processes during the past year, and therefore many do not have public documentation of these new processes. Document analysis and interview results have shown one college is currently using a web page to communicate planning procedures, collect planning activities from departments and units, and document progress of process integration. An interview subject stated that public documents exaggerate the degree of process integration, as the planning process is “linear,” not integrated. Another participant offered that “our public image is better than we [actually] are,” stating that this was probably due to the need for “positive marketing to the local community” and a political statement for accrediting agencies. One subject stated that they anticipated receiving negative accreditation findings related to this topic.

Asked if they believed that their colleges were in compliance with ACCJC/WASC accreditation standard III D, five subjects (56%) answered “no,” and four participants (44%) answered “yes.” These results are consistent with document analysis of the nine San Diego and Imperial Counties community colleges, where as stated earlier, 56% of San Diego and Imperial Counties colleges studied are currently on warning, probation, or have recently been on warning, or have had significant accreditation findings related to either integrated planning or outcome measurement (Appendix J).

Interview participants offered additional observations of planning processes, including the notion that implementing new planning processes creates system-wide change, which has a cost. “There is a cost there that will indirectly affect the performance of the college, but then that’s not addressed.” Change also impacts other forces within
colleges, “…there’s the issue of politics… politics carries a tremendous amount of influence in how decisions are arrived at.” Because of the sensitive nature of culture change within academic institutions, good communication is essential in the successful introduction of a new planning process, and developing a culture of planning, inquiry, and assessment. “One of the key pieces I think is important is… the communication piece. There’s so much more to it than just developing the process and developing the diagrams.” Another important finding was “just developing that overall culture. It really has to be kind of a culture of inquiry, a culture of assessment, something where people are thinking in terms of always constantly trying to assess how we’re doing.” One participant suggested using a formula-driven allocation model to simplify labor negotiations as part of the institution’s planning process. Another person suggested the need to reorganize and restructure California community colleges using modern business practices, retraining classified members to current college job needs. Overall, the interviews contained a diversity of thought and opinion, yet held common elements of terminology and concepts supporting the integration of planning, budgeting, and program evaluation.

Triangulation of Results

This study utilized a quantitative survey instrument, qualitative interview instrument, and a document analysis tool to assess integrated planning activities in California community colleges. Excellent agreement was observed between these three sources of research data. Survey results demonstrated significant differences between current practice and importance, while interview themes provided insight on why such gaps may exist. Analysis of accreditation findings and college planning documents
supported concepts and overarching themes seen in both qualitative interviews and the quantitative survey results.

**Integrated Planning**

Phase I of this research study asked the following question: To what degree are the planning, budgeting, and financial resource allocation processes integrated within California community colleges? Survey results, as seen in figure 8, illustrate that a significant number of California community colleges do not have an integrated

![Figure 8. Gap analysis of integrated planning survey of California Community Colleges.](image-url)
institutional plan (gap = 0.7). The results of this survey also indicate a significant number
of colleges do not assess their annual expenditures to determine if they support annual
college planning priorities (gap = 0.9). Some colleges are not utilizing planning to inform
budgeting (gap = 0.7), and college budgets do not support institutional priorities at some
colleges (gap = 0.5). These survey results are supported by interview findings that indicate
only 22% of San Diego and Imperial Counties community colleges have fully integrated
planning and budgeting processes. Accreditation documents indicate that 56% of San
Diego and Imperial Counties colleges studied are on warning, probation, or have recently
been on warning, or have had significant accreditation findings (Appendix J) due to lack of
progress towards achieving integrated planning or introduction of outcomes measurement
and assessment processes.

Financial Resource Allocation

Phase II of this research addressed five questions. First, to what degree do
community colleges allocate financial resources based upon data-informed formalized
processes? Interview data indicated 67% of San Diego and Imperial Counties colleges
utilize budget resources to support institutional priorities. This result correlated well with
survey data, which placed “financial resources are allocated based on institutional
priorities” as the fourth highest current practice among California community colleges,
scoring 4.18 on a 5 point Likert scale, and represented one of the smallest gaps (0.5)
between current practice and importance.

To what degree do executive employees believe their institutions should allocate
resources based upon an integrated planning model? Survey results show that personnel
responsible for planning place a high importance on involving campus constituencies in
the planning process (4.92), periodically evaluating both planning (4.81) and budgeting
(4.74) processes, as well as performing planning prior to budget development (4.74).
Accreditation pressures have created urgency among California community colleges to
facilitate change towards integrated planning models, but interview results suggest the
majority of San Diego and Imperial Counties colleges only allocate discretionary funds to
support annual college priorities, not the entire college budget. Zero-base (+33.9%) and
performance (+11.3%) budget methodologies were ranked as the largest positive change
from current to desired practice in the survey of California community colleges, indicating
an interest in moving away from traditional budget practices that roll resource allocations
from one year to the next. Interview results show a focus among planners to apply
data-informed strategic processes, identify college needs, and fund institutional priorities
(Figures 4 and 5).

Is there a difference between reported degrees of practice and reported degrees of
importance for integrating planning and budgeting with resource allocation? Survey
results show that California community college planners ranked integrating the
institutional plan seventh (4.02) out of fourteen current practice topics, while importance
was ranked fifth (4.71) out of fourteen topics. The gap between current practice and
importance was 0.7, third largest of fourteen comparisons. Survey results also indicated
significant differences between current practice and importance for “the institutional plan
is used in all the college’s decision-making processes” (gap = 0.6), “program review is part
of the institution’s process for allocating financial resources to academic, student services,
and support programs” (gap = 0.6), and “financial resources are allocated based upon
institutional priorities” (gap = 0.5). Interview data similarly show a large difference between San Diego and Imperial Counties colleges claiming to have fully integrated planning, budgeting, and resource allocation (22%) compared to those that have not (77%). Planning models used by these colleges reveal a diversity of methods and lack of integration (Figure 6).

Is there evidence that integration of planning and budget processes improves institutional effectiveness? All subjects interviewed agreed that no data currently exist to support or deny the benefits of integrated planning models and their impact on institutional effectiveness. Accreditation-driven change in regional planning models has been recent and not enough time has passed for collection of comparative data. Colleges revising planning methodologies have not yet completed a full evaluation cycle. Survey results indicate that San Diego and Imperial Counties colleges will acquire institutional effectiveness data within the next year that will allow analysis of this research question.

**Integrated Planning Models**

Do effective integrated planning models exist that could be adopted by all California community colleges? Several models described by interview subjects met accreditation standards and fit the academic cultures of their respective colleges. Processes described by participants were noted to be somewhat different between smaller and larger colleges based upon available financial resources and demand for services. Interview subjects mentioned colleges outside the San Diego and Imperial Counties region that had served as models for planning and budgeting. Leaders tended to select best practices that fit their colleges’ individual needs when redesigning their planning processes. Document
analysis (Appendix J) revealed that five colleges (55.6%) in the San Diego and Imperial Counties had significant documentation available on-line indicating integration of planning, budget development, resource allocation, and program review processes. One interview subject gave the following thoughts on integrating their planning processes:

“…our instructional planning council this year has the results of the program reviews to help identify and determine how they would budget and allocate instructional equipment… We are currently working on a model where our planning priorities will be coming up from the planning council through program review, and coming down from our master plan and our strategic plan, will then be considered as part of the budgeting process.” Additionally, this subject offered, “So, the idea is, in concept and theory, that priorities will be driving the budget development process. We are also looking at a way to be able to report that and show that.” Observations from each of the interview subjects were combined into a generalized model for integrated planning in California community colleges as depicted in figure 9, below.

A theoretical model for integrated planning has at least two cycles. Master planning and strategic planning activities span six to ten years, on average. Interview subjects agreed that academic and facilities master plans represent key precursors to both strategic planning and resource development. A number of institutions reported matching the college’s strategic planning cycle to the accreditation cycle. Strategic enrollment planning, combined with development of strategic staffing plans were observed by participants as essential components of college planning. These long term plans feed information to the annual planning cycle observed in figure 9, providing potential sources of institutional planning priorities and activities. Annual leadership retreats may help
focus institutional plans, providing a framework for department and unit planning.

Campus planning committees were observed to focus planning efforts by applying rubrics and criteria to prioritize and select planning activities to be funded the following year.

Figure 9. An ideal cycle demonstrating the integration of planning, budgeting, and program evaluation processes.

These activities then help drive budget development, although most colleges interviewed indicate that only discretionary funds are utilized. Once implemented, planning activities are tracked throughout the year using outcome or performance indicators. Outcomes are then reported through program review processes and may help determine continued funding of ongoing activities. Tracking key performance indicators (KPI’s) derived from annual planning activities may then facilitate evaluation of college institutional
effectiveness. Discussion of KPI’s and institutional effectiveness at leadership retreats can guide adjustments to annual planning processes for successive years.

Analysis of qualitative and quantitative research data produced five major themes. Each theme was supported by concepts developed from individual elements. Six elements that impact the development of integrated planning are described in figure 2. Accreditation was noted to be the driving force of change for California community colleges, while shared governance and collective bargaining also played roles in determining the timing and process of change. An important element in implementing integrating planning was noted to be the development of a culture of evidence that relies upon the use of objective data. Figure 3 represents a conceptual model for development of institutional priorities, showing the opposing forces of past budget practices and development of leadership initiatives that drive priority development. Additional forces are the resistance created by ongoing college costs versus the need for discretionary funds. Eight planning processes that contribute to the development of institutional priorities, as observed in participant interviews, were described in figure 4. Master plans, strategic plans, staffing and enrollment plans, in addition to institutional plans give direction to the development of institutional priorities. Other factors may influence institutional priorities, according to survey participants, including “total cost of ownership.” Figure 5 describes eight categories of data necessary for informed planning and the development of institutional priorities. These categories include enrollment data and institutional performance indicators that may be reported in balanced scorecards or dashboards. San Diego and Imperial Counties community colleges reported a diverse range of planning models
(Figure 6), but all interview participants agreed that integration of planning, budget development, and program evaluation functions (Figure 7) was the goal of the institution.

**A Grounded Theory for Integrated Planning**

Triangulation of data, combined with analysis of codes, analytic memos, themes, and concepts identified in this research resulted in the development of a grounded theory for integrated planning processes. Leadership plays a critical role in creating and communicating the need for change, but this research demonstrated the need for a broad base of leadership to guide change, including leadership among bargaining units and shared governance groups. Sustainability may be a problem for planning models driven by individual leaders, as seen in comments from interview subjects, such as “Part of it has been turnover in presidents and I think part of it has also been changes in accreditation.” Communication of college processes was seen as a large barrier to implementing integrated planning, such as the comment “most of them will tell you we don’t have a budget process. We have had forever, but not everybody knows how to access and how to get inputs into that process, but we’re trying to make that as transparent and overt as possible.” Workloads for faculty, staff, and administrators become an issue for complex planning systems that demand large time commitments. Integrated planning methods may reduce unit manager workloads and serve as an incentive for change. Financial resource limitations create pressures that drive changes in planning models, theoretically resulting in improved institutional efficiency. Some interview participants also reported that financial limitations created motivational problems for institutional planning, such as the comment “If we did planning in light of available resources it would probably be a very
demoralizing exercise.” The inertia of budgets rolling from one year to the next has become a long-term problem for resource allocation among California community colleges, in some cases prolonged by a lack of budget transparency and financial data available for college and unit planning. Figure 10 serves to summarize participant observations of specific factors that impact change in institutional planning processes. The corresponding grounded theory for this change process states that planning methods only change in California community colleges based upon accreditation agency mandates. Change occurs more slowly in California due to college cultures that have interpreted shared governance differently than in other states. Faculty offer stiff resistance to the need for changes in planning, continuous quality improvement measures, and outcome assessment.

Corollaries to this change theory exist. Facilitating change in California community college planning processes requires external agencies to offer opportunities for continuing

![Diagram](image-url)  

*Figure 10.* Factors influencing change in institutional planning processes.
education, while developing a culture of evidence among faculty, staff, and administrators. Training and technical assistance to develop and enhance institutional data collection, retrieval, and analysis mechanisms will be critical to creating a system-wide sustainable integrated planning system.
CHAPTER 5—SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

California community colleges in the twenty-first century are faced with serving an increasing number and diversity of students with critically reduced state financial resources. Limitations in both state and federal funding for California community colleges require new methods of planning and resource allocation. Colleges must develop more effective systems for both strategic and institutional planning, incorporating both critical needs and outcome assessments. The diverse mission of community colleges will become more difficult to support as financial resources continue to decline. Identification of efficient planning models will assist colleges in maintaining high quality educational programs, utilizing any available funding. Integrated planning and budgeting methods also are essential to maintain open access and financial equity to the students served by California community colleges.

Summary

Limited state funding and the introduction of new regional accreditation standards have forced colleges to reassess their planning processes. The Western Association of Schools and Colleges (WASC) currently requires that community colleges integrate institutional planning and financial resources to improve institutional effectiveness and support achievement of the college educational mission and objectives (WASC Accreditation Standard III, 2002). Accreditation standards also require that human resource planning be integrated with institutional planning to hire adequate numbers of appropriately trained staff and faculty, address issues of diversity and equity (WASC
Accreditation Standard IIIA, 2002). Planning for facilities and equipment must support the integrity and quality of a college’s educational programs (WASC Accreditation Standard IIIB, 2002). Facilities planning should be data driven and based upon utilization of educational resources, while technology planning must address the needs of teaching and learning, in addition to college-wide communications, research, and operational systems (WASC Accreditation Standard IIIC, 2002). Financial planning must integrate with and support each college’s institutional planning processes (WASC Accreditation Standard IIID, 2002).

Colleges must “assess progress toward achieving stated goals and make decisions regarding the improvement of institutional effectiveness in an ongoing and systematic cycle of evaluation, integrated planning, resource allocation, implementation and re-evaluation” (WASC Accreditation Standard IB3, 2002). Institutional effectiveness can be measured through the achievement of institutional and programmatic outcomes, certificate and degree completion, course-level student retention, and success. Other aspects of institutional effectiveness include improvements in student equity that impact the success of under-represented students, including students of color.

Problems documented in this research included a lack of compliance with the ACCJC/ WASC integrated planning requirement (Standards IB3 and IIIA-IIID). This lack of compliance has been documented as the most frequent accreditation problem among California community colleges during 2008-2009. Limited financial resources are negatively impacting delivery of educational services and programs, access, and equity within California community colleges, which creates an urgency to enhance methods of planning and resource allocation, matching them to institutional priorities. The current
study has attempted to determine a standard of practice for integrated planning processes within California community colleges, focusing on the nine colleges within San Diego and Imperial Counties.

The purpose of this study was to identify effective planning practices that integrate strategic and operational planning with budget development and resource allocation within the California community colleges. Phase one of this research surveyed 110 California community colleges to determine the number of institutions currently utilizing integrated planning models. This project’s first phase also assessed the degree of integration for planning, budgeting, and resource allocation processes. These observations provided a statewide perspective that informed an in-depth study of regional practices.

Phase two of this study utilized interviews and document analysis to determine if San Diego and Imperial Counties colleges allocated financial resources based upon data-informed processes, and whether planning activities determined annual budget allocations. Interviews assessed whether college employees believed that their institutions should allocate resources based upon integrated planning models. A comparison of interview data and institutional planning documents tested for differences between reported degrees of practice and reported degrees of importance for integrated planning and budgeting with resource allocation. Phase two of this study also determined whether evidence existed to support the premise that integration of planning and budget processes improves institutional effectiveness. Interviews assessed planning models utilized by colleges within San Diego and Imperial Counties.

California community colleges in the twenty-first century serve an increasing number and diversity of students with fewer state financial resources. Limitations in both
state and federal funding for California community colleges have required development of new models for planning and resource allocation. Colleges must create more effective systems for both strategic and institutional planning, incorporating both internal and external needs assessments. The diverse mission of community colleges has become more difficult to support as financial resources have become scarce. Identification of efficient planning models may assist colleges in maintaining high quality educational programs, serving the largest student population in the world.

A long history of literature documents the evolution of formalized planning processes, both in business and education. Most authors agree that strategic planning and strategic thinking are required in modern higher education due to declining financial resources and increasing demands for accountability. Coulter (2007) made an important observation for community college leaders when he stated “…We are spending too much time on tomorrow and not enough time on the future” (p. 6). Connecting long range and annual planning to resource allocation insures that colleges can achieve their institutional goals. The need for integrated institutional planning now is evident in many aspects of institutional accountability reporting to accreditation and state agencies, and the federal government.

Academia is slow to change, recognizing value in new processes only when state regulation or accrediting agencies create urgency. The organizational dynamics of community colleges require careful and deliberate leadership to implement process changes. Shared governance, collective bargaining, and distributed decision-making require college leaders to utilize Bolman and Deal’s (2003) multiple organizational frames of reference to facilitate changes in planning and budgeting. Even with well-designed
procedures, communication of change throughout the institution has been documented as the most critical problem in achieving success during implementation of new planning processes (Dooris et al., 2004). Balanced scorecards have been found useful during implementation of integrated planning processes, helping develop institutional awareness, and making planning documents and data useful to college decision makers (Stewart & Carpenter-Hubin, 2000).

Studies have shown a gap between the strategic initiatives created by colleges and the strategic plan that documents the colleges’ process (Dooris et al., 2004). This observation has a direct implication on current research, as this potential gap was addressed with a comparison of planning documents from different colleges and with interviews recorded from planners at each institution. Another finding in the literature was the diversity of planning methodologies. Community colleges are moving toward a systematic integration of all forms of campus-based planning to simplify employee workloads and provide consistent reporting to outside agencies. A number of authors stated that planning should drive both budget development and resource allocation.

Mintzberg has created thought provoking and comprehensive analysis for the strategic planning process (Mintzberg, 1994, 2007; Mintzberg et al., 1998) over time. He and other authors emphasized that strategic thinking within organizations is more important than the creation of a plan. As the institution’s environment changes, so must the strategic goals and plans within the college or university. Strategic thinking positions leaders to take advantage of new opportunities created by change. Although planning within colleges and universities may not fit a business model, aspects of integrated
planning and resource allocation may help these institutions to realize competitive advantages in a world-wide economy.

Information technologies will be important in managing the large volume of information resulting from the implementation of outcome measurement, institutional effectiveness reporting, and integrated planning and budgeting processes. Institutional research and information technology departments will need to assist colleges with design, collection, and analysis of data structures used in these planning and assessment processes. According to McPhail (2005), “if vision is the vehicle that drives all college operations, then technology is the engine. To be at the forefront of the information revolution, colleges must integrate technology into all that they do, including budget management” (p. 176).

Institutional planning is a mature science at many colleges and universities, however, some institutions are just beginning to adopt the necessary research and reporting processes. Electronic tools that could enhance data gathering and analysis are in their infancy and will continue to develop as colleges demand higher levels of performance from their information technology and research departments. Government and accrediting agencies have created urgency for community colleges to simplify and integrate planning processes in other states, but this change process is relatively recent in California community colleges. Whereas Williams in 1998 found evidence of little integration of planning and budgeting, White in 2007 studied two California community colleges that had successfully integrated planning, program review, and budget development. White’s key findings were that leadership and college culture dramatically influence an institution’s success or failure in integrating planning, review, and budget processes. Stable college leadership that provides a clear vision for improved institutional
effectiveness, combined with a college culture of shared governance and participatory
decision making provides the foundation for successful college-wide change in planning
processes (White, 2007).

The current study is a modified replication of research conducted by Roland Kirby
Smith, at the University of Texas at Austin in 1995, and James Edward Williams, at the
University of La Verne in 1998. Both previous studies examined the opinions of college
employees regarding the degree of current practice and importance of strategic planning,
creation of institutional priorities, budget development, resource allocation, and outcome
assessment. Williams’ research assessed the degree of linkage, and integration, of these
processes in 1998. This study updates the research of Smith and Williams, providing a
comparison of the current status of integrated planning and budgeting in California
community colleges.

This research utilized mixed methods to establish a grounded theory, combining
both quantitative and qualitative methods to identify the “what,” as well as “how” and
“why” of college planning and budgeting methods currently in use. Three methodologies
were used to study integrated planning in California community colleges. First, an
electronic survey instrument was made available to college employees who participated in
institutional planning at all 110 community colleges. This survey was primarily used to
assess the degree of integration of planning, budget development and/or resource
development, as well as program outcome assessment. Second, in-depth interviews were
held with employees responsible for planning at nine San Diego and Imperial Counties
community colleges to determine specific models of planning and test the degree of
compliance with accrediting commission guidelines. Additionally, document analysis of
planning documentation for each college, including ACCJC/WASC self-study reports and visiting team reports, was performed. Comparison of the quantitative and qualitative research phases allowed the researcher to test the degree of consistency between documented procedure and actual practice in institutional planning.

Triangulation of accepted practices found in the literature with actual practice in the field helped identify planning models that can assist California community colleges meet the challenges of insufficient financial resources. Accrediting commission guidelines dictate that planning, resource allocation, and program evaluation must be integrated to meet current accreditation standards. This study investigated and documented successful processes that will assist colleges in meeting this challenge, as shown in both quantitative and qualitative data. A rich set of qualitative information was produced through in-depth interviews addressing planning, budgeting, and resource allocation methods at the nine San Diego and Imperial Counties colleges.

**Significant Findings**

*Phase I*

Phase I of this research study asked the following question: To what degree are the planning, budgeting, and financial resource allocation processes integrated within California community colleges? Accreditation reports indicate that 56% of San Diego and Imperial Counties colleges studied are on warning, probation, or have recently been on warning, or have had significant accreditation findings due to lack of progress towards achieving integrated planning or introduction of outcomes measurement and assessment processes. State-wide survey results demonstrated a statistically significant difference
between current practice and importance of various planning items. Importance (average = 4.63) ranked higher than current practice (average = 4.07) for all fourteen survey question responses, with an average difference of 0.57. The largest gaps between practice and importance were “college expenditures are assessed periodically to determine support for institutional priorities” (gap = 0.9), and “the budget process is evaluated periodically” (gap = 0.8). These two questions also represented a 32% and 31% difference, respectively, in current practice versus importance for respondents answering “agree” and “strongly agree.” Other significant gaps included “The institutional plan is an integration of college planning process, budgeting, and resource allocation, linked to institutional effectiveness” (gap = 0.7), “the college planning process precedes development of the annual budget” (gap = 0.7) and “the budgeting process provides the college with a useful financial plan” (gap = 0.7). Overall, this study estimates 56% of community colleges in San Diego and Imperial Counties currently do not integrate planning and budgeting per accreditation guidelines, based upon estimates drawn from document analysis (Appendix J).

An analysis of budget methodology, as described in the state-wide survey results, indicates that three forms of budget preparation received significantly different rankings when comparing current practice to desired practice. Paired-sample t tests were calculated for each of five budget methodologies presented in question fifteen. Significance at the p < 0.01 level was achieved for formula, performance, and incremental budgeting. Formula (-24.2%) and incremental (-41.9%) budgeting were both rated significantly lower for desired practice compared to current practice. Performance budgeting was rated significantly higher (+33.9%) for desired practice compared to current practice. Neither zero-base (-11.3%) nor program budgeting (-8.1%) achieved significance in paired-sample
t tests. Repeated-measures ANOVA revealed that performance budgeting had a significant correlation to job category, where vice-presidents of administrative services and student services personnel perceived little difference in the ranking of current practice and desired practice, but all other respondents indicated a significantly higher ranking for desired practice compared to current practice. Repeated-measures ANOVA did not demonstrate a significant correlation between any other method of budgeting and variable, including years of experience, single college versus college in a multi-college district, or the number of full-time equivalent students at the colleges.

Descriptive statistics show that survey respondents favored performance budgeting (50.0%) and program budgeting (50.0%) as a desired practices, followed by zero-based budgeting (33.9%), while not favoring formula budgeting (17.7%) or incremental budgeting (6.5%). Performance budgeting (+33.9%) and zero-based budgeting (+11.3%) demonstrated the greatest difference between current practice and desired practice. These data combined with interview results indicate that some California community college personnel responsible for budget development are willing to utilize a combination of budgeting techniques to link budgets with planning processes. Although 50.0% of respondents selected program budgeting, 50.0% also favor introducing some form of performance budgeting. Survey and interview data show that some colleges will periodically (every 3 to 5 years) utilize zero-based budgeting to recalibrate department and unit base budgets. Interview responses revealed limited agreement on current budget methods, with 58.1% of participants selecting program budgeting. These observations further support the premise that California community colleges utilize diverse methods of planning and budgeting, as shown in figure 6.
Phase II

Phase II of this research addressed five questions. First, to what degree do community colleges allocate financial resources based upon data-informed formalized processes? Interview results indicated 67% of San Diego and Imperial Counties colleges utilize budget resources to support institutional priorities. Analysis of survey results placed “financial resources are allocated based on institutional priorities” as the fourth highest current practice among California community colleges, and represented one of the smallest gaps (0.5) between current practice and importance.

To what degree do executive employees believe their institutions should allocate resources based upon an integrated planning model? Survey results indicate that many college personnel engage in institutional planning prior to annual budget development, and periodically re-evaluate both planning and budgeting processes. However, results also indicate the majority of San Diego and Imperial Counties colleges only allocate discretionary funds to support annual college priorities, although accreditation pressures and state funding limitations have created urgency to implement broader strategies. Performance and zero-base budget methodologies were ranked as the largest positive change from current to desired practice indicating an interest in moving away from traditional budget practices that roll resource allocations from one year to the next. Zero-base budgeting allows colleges to reallocate financial resources for critical department and program needs when financial resources are limited. Performance budgeting creates incentives for faculty and staff to increase productivity and improve outcome measures as determined by key performance indicators. Interview results reveal a focus among college planners to apply data-informed strategic processes, identify college
needs, and fund institutional priorities with available resources using techniques such as zero-base and performance funding.

Is there a difference between reported degrees of practice and reported degrees of importance for integrating planning and budgeting with resource allocation? Survey results indicate that California community college planners ranked integrating the institutional plan seventh out of fourteen current practice topics, while importance was ranked fifth out of fourteen topics. The gap between current practice and importance was 0.7, third largest of fourteen comparisons. Interview data and public documents both indicate that only 44% of San Diego and Imperial Counties colleges have complied with ACCJC/WASC accreditation standard III D, compared to 56% that have not. Figure 6 reveals that 78% of these institutions currently utilize planning models that lack integration of planning, budgeting, resource allocation, and assessment of outcomes. This study therefore has identified a significant difference between current practice and importance of integrated planning among California community colleges.

Is there evidence that integration of planning and budget processes improves institutional effectiveness? All subjects interviewed agreed that no data currently exist to support or deny the benefits of integrated planning models and their impact on institutional effectiveness. Accreditation-driven change in regional planning models has been recent and therefore inadequate time has passed to allow collection of comparative data. Most interview participants indicated the need for at least one additional year to assess the impact of planning and budgeting methods on institutional effectiveness.

Do effective integrated planning models exist that could be adopted by all California community colleges? Several models described by interview subjects met
accreditation standards. Interview participants identified two college districts, Long Beach and Los Rios, as representing excellent models for planning and budgeting. College planners tended to select best practice components from other institutions when redesigning their own planning processes. Observations from each interview subject were combined into a generalized model for integrated planning in California community colleges (Figure 9).

*Other Significant Findings*

Survey participants perceived a significant difference between current practice and importance for integrated planning processes, as seen in the results of the paired samples t tests for each of the first fourteen questions. The statistical significance for difference between current practice and importance for question eight, “the college’s financial resource allocation process is the result of collaboration between college and constituency groups” was slightly lower (p < 0.05) than for the remaining thirteen questions (p < 0.01). Repeated-measures analysis of variance (ANOVA) revealed a significant difference for job category in responses to questions four and five. Question four, “the institutional plan is used in all the college’s decision making processes” was awarded lower scores for current practice and importance by both presidents and vice-presidents of administrative services. Questions five, “annual institutional priorities are derived from the strategic plan” was awarded the lowest scores by vice-presidents of administrative services. Vice-presidents of instruction awarded the highest scores to question five. Presidents and others indicated little difference between current practice and importance in responding to question five, with importance receiving lower scores than current practice.
Repeated-measures ANOVA did not reveal a significant correlation to any other variable, including years of experience, single college versus college in a multi-college district, and the number of full-time equivalent students at each college. Overall, these results indicate a uniformity of opinion regarding integrated planning, with minor differences in survey results based upon the position held by the respondent.

State-wide survey results indicated the lowest-rated current practices among California community colleges, on a five-point Likert scale, were “the institutional plan is used in all the college’s decision making processes” (3.73), “college expenditures are assessed periodically to determine support for institutional priorities” (3.76), “program review is part of the institution’s process for allocating financial resources to academic, student services, and support programs” (3.85). The highest-rated current practices were “the planning committee includes all constituencies” (4.74), “the college’s planning process is evaluated periodically” (4.32), and “the college’s financial resource allocation process is the result of collaboration between college constituency groups” (4.23). These observations indicate that shared governance processes and constituent negotiations are applied to institutional planning in California community colleges, but some institutions have not fully integrated program evaluation, or outcome assessment, into the planning and resource allocation process, and that the institutional plan still tends to “sit on the shelf” rather than drive decision making.

Survey results also indicated that the highest-rated areas for importance were “the planning committee includes all constituencies” (4.92), “the college’s planning process is evaluated periodically” (4.81), “the budget process is evaluated periodically” (4.74), and “the college planning process precedes development of the annual budget” (4.74). The
lowest-rated areas of importance were “the institutional plan is used in all the college’s decision making processes” (4.37), “the college’s financial resource allocation process is the result of collaboration between college constituency groups” (4.39), and “program review is part of the institution’s process for allocating financial resources to academic, student services, and support programs” (4.48). These findings are consistent with those noted above, emphasizing shared governance in California community colleges, but differing in the area of instituting periodical evaluation of planning and budgeting processes. The lack of priority given to use of the institutional plan in decision making, and implementation of program review processes for resource allocation is notable. However, all results stated for importance are above 4.00, indicating an overall rating between “agree” and “strongly agree.” These data indicate that college leaders support current accreditation standards related to integrated planning, budgeting, and assessment.

Interviews with personnel primarily responsible for planning provided a rich set of data which added depth and breadth to information acquired in the state-wide survey. For example, some participants observed that no matter how linear and quantitative one attempts to make the planning and resource allocation process, these processes still utilize “soft skills,” as evidenced by the statement “the process is not driven by a formula… its lots of negotiations… and trying to decide how best to use the dollar.” Colleges need to utilize effective means of communicating institutional processes, providing venues for discussion of college planning and budgeting, making these processes transparent and open to all constituencies while applying data-informed decision making. Only 22% of college personnel interviewed indicated that their processes were integrated, but the
remaining 78% stated that the colleges were currently developing accreditation-compliant planning and budgeting systems.

Accrediting agencies provide quality assurance and oversight functions to colleges by periodically assessing institutional processes. Such external evaluation provides feedback that helps align methods and outcomes between member institutions. Unfortunately, interviews and document analysis demonstrate that California community colleges have only responded to accreditation mandates for changes in planning, budgeting and assessment methods based upon the six year accreditation cycle. Fifty six percent of San Diego and Imperial Counties colleges have recently received significant findings, are on warning, or are on probation, based upon available documents. Forty four percent of interview subjects stated that they either recently received or anticipated receiving accreditation sanctions. These results indicate that accrediting agencies create urgency in member institutions and facilitate organizational change.

A critical finding in this research is that existing salaries and benefits make up 85 to 95% of operating budgets for California community colleges. Very little funding is therefore available to address additional personnel needs, equipment, supplies, or discretionary spending. Discretionary spending was noted by participants to comprise, at most, only 3 to 5% of the total college budget. Interview subjects pointed out that even with the implementation of integrated planning, a major shift in budget priorities would not be possible due to the large percentage of existing personnel-related expenses. Participants also stated that in most colleges, only discretionary spending could be allocated to institutional priorities. The current financial reality of the California community college
system negatively impacts individual colleges and their ability to adapt to changing external demands and internal institutional needs.

Interview subjects commented on the importance of looking long term, developing long range academic and facilities master plans, along with a strategic plan, to drive resource identification and development for future facilities construction and equipment purchases. Having these documents available allows colleges to take full advantage of state and federal funding for new facilities and programs, as well as pursue non-traditional sources of funding. Colleges may also adopt “total cost of ownership” practices to help institutions identify and budget for ongoing financial commitments associated with supporting new buildings and capital equipment. As California colleges create better long term plans they may be positioned to realize additional funding and address activities proposed in their annual planning and budgeting cycles.

Another important finding was colleges need a culture of inquiry to initiate and sustain an integrated institutional planning model. Interview subjects commented that in many cases adequate information was not available to inform decision making. At several colleges, systems designed to manage critical information, such as strategic enrollment, hourly instructor budgets, and other major determinants of college costs were being implemented co-incident with new planning models. Colleges and universities generate a large quantity of data each year, but indications are that much of the information is not accessible to planners, managers, and administrators. Knowledge management, or the science of integrating data and information, will be a required tool in developing a culture of inquiry in support of data-informed decision making. Campus constituencies must be
trained in the handling and use of data to inform decision making in order to successfully participate in an integrated planning process.

Organizational change, as seen with the introduction of integrated planning and budgeting processes, must have the commitment of institutional leaders to be successful (Kotter, 2007). This study has identified the need for broad-based leadership within California community colleges, originating from within shared governance and bargaining units. Individual leaders, such as presidents, may not be able to sustain an institutional process beyond their tenure at an institution without gaining buy-in and support from faculty and staff leaders, as well as unit managers. The need for effective communication among all employees requires local leadership to support a major change initiative. Employees also must see benefit in such process changes, such as a potential reduction in workload for unit managers and faculty leaders resulting from integration of planning, budgeting, and outcome assessment. Communicating the need for change is a critical component missing from some college campuses, as observed during the interview process and document analysis. Web pages are an effective means of conveying process information and collecting data, as well as informing employees and community members. Not all community colleges in San Diego and Imperial Counties fully utilized the college web page to document and inform the community of their planning processes.

This current research was based upon two previous studies, Williams (1998) and White (2007). Unlike the Williams 1998 study, current state-wide survey results do not indicate a consistent difference between opinions of executive employee groups. Williams (1998) reported that chief executive officers and chief financial officers “had significant differences of perceptions for 50% of (questions related to) integrated planning, financial
resource allocation, budgeting, and evaluation” (p. 139) compared to other executive employee groups. Current research indicates that presidents and vice-presidents of administration viewed only decision making (question 4), and institutional priorities (question 5) differently than other executive employees. Vice-presidents of administration and student services personnel also ranked performance budgeting with less importance than other executive employees (question 15). No statistical relationship was found between the number of employee years of service or size of the college surveyed, consistent with the work of Williams (1998). The current study also indicates no statistical difference in survey responses between respondents from single colleges versus multi-college districts, which is different than Williams’ findings in 1998.

State-wide survey results are similar to those of Williams (1998) in that respondents perceived that community colleges were engaged in planning, but that need for improvement also was indicated by ranking importance higher than current practice for each survey question in both studies. Williams also reported that formula budgeting was more commonly used in districts with “more than $80 million general fund revenue,” (p. 137) and “was judged a more effective financial resource allocation process for large centralized organizations” (p.138). Williams also stated that “executive employee groups supported the use of program budgeting over other models, especially the use of incremental budgeting” (p. 138). Current data suggest that executive employee groups still favor other budget models over incremental budgeting, consistent with previous work, but formula and program budgeting have fallen out of favor with personnel responsible for planning. Performance and zero-base budgeting are now ranked highest among current survey results.
White (2007) suggested that successfully integrated planning processes depend upon transparency of communication, availability of financial and planning data, and “there is a flow of information, which serves to maximize institutional effectiveness” (p. 218). These observations are consistent with interview responses regarding the need for effective communication, shared governance participation, and use of data to inform decisions. White (2007) also emphasized leadership and institutional culture as critical components in integrating planning, budgeting, and program evaluation. White (2007) detailed leadership characteristics, such as creating and managing a culture of evidence that values clarity and reinforces “cooperation, collaboration, student success, and doing the right thing” (p. 221). Current research also emphasized the need for developing local leadership among individual constituencies that support the change process, as opposed to depending on the single charismatic leader described by White. One of the two colleges studied by White in 2007 has since changed its planning processes after the retirement of a college president. Distributed leadership may make integrated planning sustainable.

The best definition of institutional planning was created by Mintzberg (1994), who stated “planning is a formalized procedure to produce an articulated result in the form of an integrated system of decisions” (p. 12). Current interview and state-wide survey results suggest that personnel responsible for planning believe that college administrators, faculty, and staff are engaged in strategic thinking and integrated decision-making. Most colleges express uniqueness in their approach to planning, as documented by interview responses describing institutional planning models (Figure 6). Participants also described continuous improvement efforts impacting the planning, budgeting and outcome assessment processes at their colleges. California community colleges have evolved significantly since the first
framework for an integrated planning process was proposed by Below, Morrisey, and Acomb in 1987.

Meisinger (1990) described integrated planning as the establishment of institutional goals and prioritized objectives, linked to an implementation framework which estimates the cost of such a plan, an allocation of necessary resources, and a method of assessing the success in achieving these goals and objectives. Schmidtlein (1989) stated that “within the field of public administration, the belief that budgets should be derived from well-conceived plans appears to be an unquestioned article of faith.” Colleges outside of California have documented successful implementation of integrated planning processes (McPhail, 2005), while current research suggests that California community colleges have only integrated planning, budgeting, resource allocation, and outcome assessment to a limited degree, thus far.

Conclusions

This study has produced several important conclusions. California community colleges have been slow to adopt integrated planning, budgeting, and outcome assessment as a result of resistance by shared governance groups and bargaining units. Accreditation agencies have created urgency to adopt integrated planning processes that support institutional priorities and improve institutional effectiveness. Unfortunately, California community colleges utilize 85 to 95% of their budgets to meet personnel expenses, with only 3 to 5% left for discretionary spending, at best. College representatives interviewed in this study stated that currently only discretionary funding is applied to institutional priorities and annual planning activities. California community colleges therefore have
little ability to address rapid economic changes and emerging community needs based upon budget limitations and resource allocation methodologies. Planning processes have improved since White’s 1998 study, but funding limitations will negatively impact delivery of programs and services unless additional financial resources are identified for the California community colleges, or resource allocation is changed to somehow address the entire college budget.

Based on the statewide survey and interviews, the California community colleges seem to be behind the times, as expressed in the literature, concerning planning systems in place within the colleges. The discrepancies between what exists in the way of planning and what is important attests to the observation that there is a serious disconnect between what is practiced in planning and what is desirable. As observed in this study’s document analysis of regional community colleges, the gap between importance and practice must be closed to prevent accreditation sanctions. The number of institutions in California placed on warning, or other forms of sanctions, has dramatically increased over the past eighteen months. ACCJC/WASC has made it clear that the commission will no longer allow colleges to simply make progress towards compliance with accreditation standards, but rather expect a demonstration of results that prove compliance and sustainability. College leaders are notorious for claiming that they are in the process of bringing about desirable change, yet such results are not readily apparent from this study. When colleges face sanctions from the accrediting agency, the change process seems to be expedited.

It appears that there is lip service paid to a system of integrated planning. However, there is little evidence from college documents or personal interviews that this integration has taken place. There are numerous types of plans completed by colleges but no apparent
linking of these plans with the colleges’ strategic and institutional plans. Planning appears, for the most part, to be a decentralized process. Although colleges seem able to create planning processes, planning still appears to occur in silos rather than across the larger campus community. The ability to evaluate outcomes from those plans appears limited by the availability to and transparency of data that could inform decision making. In fact, most colleges are still working on ways to adapt academic program review processes to student and administrative services. Lack of annual program evaluation, using relevant data, appears to be the greatest shortcoming among the California community colleges, currently. This lack of annual program evaluation, combined with only developmental progress in creating comprehensive learning and service outcome measures has prevented California community colleges from “closing the loop” and reaching compliance with ACCJC/WASC Accreditation Standard IB3.

The setting of institutional priorities seems to be based on scattered data from a variety of sources, some formal and some informal. There does not appear to be a systematic collection of input sources, in a user-friendly format, for priority setting among California community colleges. Along with the development of a culture of inquiry that utilizes data to inform decisions, colleges need to view data generated by their organizations as a strategic asset that requires integration and transparency. Adopting the principles of knowledge management would encourage colleges to warehouse quantitative and qualitative data and provide universal access for employees. Such data could then be utilized by faculty, staff, and administrators to inform decision making, facilitate distillation of institutional priorities, and perform continuous improvement as required by accrediting agencies. These data could be made available in a variety of formats ranging
from electronic reports of key performance indicators to dashboards, and also may be useful in the form of balanced scorecards that could integrate planning priorities with program evaluation outcome data.

The emphasis on planning in California community colleges appears to be on involving constituent groups in the planning process and less on using the plan in decision-making processes. While it is important that various internal groups within a college have an active, positive role in planning, if the plan is not used by these same individuals and groups to make decisions the process is sterile. Observations made by interview subjects are consistent with the literature, noting the requirements for lengthy vetting processes and negotiations to achieve agreement on new college processes within California community colleges. Due to the current nature of planning in these institutions, where unit and department planning takes place in silos, viewed as a linear function that has a beginning and end, it is little wonder, then, that people view the plan as a document designed to gather dust on a bookshelf. To become effective, strategic planning must be transformed into strategic thinking applied to institutional decision making, as an ongoing and continuous process.

Colleges do not seem to hold the evaluation of budget development processes in the same light as they do evaluation of planning processes. Without a viable budget evaluation process colleges are inclined to repeat the same mistakes they make in budgeting year after year. As previously mentioned, colleges have difficulty designing annual program evaluation processes, and sometimes confuse the terms “program review” with “planning.” Evidently both of these terms need to be infused into the administrative services departments of community colleges, since the majority of these departments have
seemingly viewed budget planning as the process of rolling last year’s budget to this year’s budget. These departments also judge clean audits to be adequate in assessing the effectiveness of budget expenditures. Institutional effectiveness can only be assessed in light of how budget expenditures impact student learning in the classroom, as well as achievement of outcomes. A budget should provide not only a guide to expenditures of funds by category, but a useful financial plan that addresses the critical needs of the institution.

There is an ideal cycle of integrated planning, budgeting and program evaluation depicted in figure 9 that does not appear to have widespread usage in the California community colleges. The failure to understand and use this type of a cycle apparently leads to disparate planning systems that lack integration. A major problem noted by all interview subjects was the inability of the institution’s leadership to adequately communicate college processes to employees, particularly part-time and full-time faculty. Such communication may be facilitated by simplifying the planning process required by ACCJC/WASC to two simple steps that are communicated as follows: Planning must drive budget development, and college expenditures will be assessed annually to determine their impact on programs, departments, and the college. In assessing the “how” of college planning among San Diego and Imperial Counties community colleges, it became evident through the interview process that institutions have developed highly complex systems in an attempt to meet accrediting agency requirements. These complex systems are difficult, if not impossible, to explain or diagram to employees, or visiting team members representing the accrediting commission. Human nature demands that leaders simplify a
message to convey its critical points rapidly and effectively, while facilitating being able to recall the message, when necessary.

This research resulted in the formation of a grounded theory stating change to institutional planning processes requires distributed leadership (Figure 10). Since the average tenure of a college president in California is between three to five years, sustainability of change is only possible if colleges identify leaders among shared governance groups to facilitate institution-wide communication, discussion, and acceptance of the change process. Accreditation agencies currently drive change in California, hovering over noncompliant colleges like helicopters, providing sequential sanctions to move stubborn colleges toward desired outcomes, while maintaining pressure to sustain these processes. Even with the urgency created by accrediting commissions, the likelihood of sustainable change in planning systems seems highly unlikely as colleges have only responded to the fear of losing accreditation. Short timeframes resulting from sanctions have exacerbated the problem, encouraging colleges to create complex systems and confusing terminology that obfuscate processes and attempt to hide the fact that planning still takes place in silos without integration with the college’s operating budget. Faculty and staff need to see a “what’s in it for me?” benefit before adopting changes in planning, demonstrated through a reduced overall workload for planning and budgeting, as well as a return on investment, translated into additional funding. Ultimately, such changes must be integrated into a college’s culture if these new processes are to be sustainable. Receiving buy-in from constituent faculty, staff, and administrators helps move new processes toward acceptance into college culture as seen in figure 2.
The recent state budget crisis has brought additional urgency to the implementation of efficient integrated planning and budgeting processes within California community colleges. The State Chancellor’s Office recently published an announcement that due to funding limitations, California community colleges should restrict their mission to three areas: 1) awarding degrees and certificates, 2) facilitating transfer to four year universities, and 3) supporting basic skills education. The intent of this message was to focus available resources and enhance outcomes in these three areas, while reducing or eliminating programs that do not serve central roles within the colleges. Integrated planning methods could help in this crisis, if budgets could be more broadly targeted beyond just discretionary funding. Strategic planning must address potential downturns, as well as economic growth of colleges. In fact, strategic enrollment planning could identify core academic areas that should be protected during such funding limitations, rather than allowing wholesale reduction of course sections as seen at most college campuses. The current lack of state funding may serve as a catalyst for California community colleges to pursue enhancements in integrated planning. Colleges also may choose to develop non-traditional sources of funding to buffer future fluctuations in state funding, as has been seen in other states.

Recommendations

This research has produced qualitative and quantitative data which can inform change at the system level for California community colleges, accrediting agencies, as well as individual college campuses. Many of the observations contained in this study may be generalized to colleges throughout California and the rest of the country. The following
recommendations for practice improvements are directed to the State Chancellor’s Office, accrediting agency policy makers, college presidents, vice-presidents, and institutional planners.

Recommendations for Practice

State Chancellor’s Office:

1. Encourage the continued development of a culture of evidence, as well as an understanding and use of data among California community college employees, by facilitating training and interventions through organizations such as the Research and Planning Group for California Community Colleges.

2. Incentivize changes to budget development and resource allocation processes that impact institutional effectiveness by introducing performance budgeting. Consider providing a limited percentage of additional state funding to community colleges based upon improvement in graduation and transfer targets.

3. Help increase efficiency of college campuses to stretch limited state funding. Provide incentives and opportunities for retraining of classified staff to meet new job duties and services, emphasizing electronic communication and web-based services.

4. Facilitate creation and/or expansion of fee-based corporate continuing education programs within each college district to develop an alternate revenue source for colleges. Capitalize on intellectual capital contained within each college’s faculty and create a competitive cost-effective continuing education program for local industries to bring discretionary funding to local colleges.
5. Facilitate introduction of knowledge management techniques to colleges. Utilize the California Community College System Office to warehouse enhanced database information that can facilitate planning efforts and standardize processes among individual colleges. Decrease turn-around time to post data to the Datamart system to improve usefulness of statewide data available for annual planning activities. Build on existing management information system (MIS) and accountability data to provide transparent financial and operational data to college employees engaged in planning.

6. Work with Statewide Academic Senate to sponsor training of faculty leaders in planning and budgeting systems.

Accreditation Agencies (ACCJC/WASC):

1. Working with other relevant groups such as the Research and Planning Group for California Community Colleges, the State-Wide Academic Senate, and the Association of California Community College Administrators, expand educational opportunities to train college administrators, faculty, and staff in integrated planning methods, budget development, and outcome assessment practices by sponsoring workshops that present best practices from California and other states. Workshops should provide concrete examples of acceptable practices, and pathways to achieve compliance with accreditation standards for continuous improvement.

2. Clarify accreditation commission expectations for planning, budgeting, and outcome assessment. Publish best practice white papers that define planning and
budgeting terminology, as well as recommended practices, including program evaluation and outcome assessment.

3. Provide guidance for development of key performance indicators of continuous improvement and sustainability for integrated planning systems, as they apply to accreditation standards. Work with the State Chancellor’s Office to develop recommended measures for institutional effectiveness that match the missions of the California community colleges.

College Presidents and Vice-Presidents of Administrative Services:

1. Incorporate zero-base budgeting into budget development process every three to five years. Make all college units justify their base budgets and reapply for funding.

2. Utilize performance budgeting each year, in addition to other budget methodologies, to incentivize college department/unit performance by offering additional funding to meet program planning targets and goals.

3. Change staffing processes such that faculty and staff replacement positions must compete for budget dollars with other institutional priorities each year.

4. Develop alternate revenue streams to increase discretionary funding. Become entrepreneurial and develop college advancement programs, foundations, grant departments, and expand fee-based corporate continuing education programs.

5. Use planning documents and procedures in institutional decision making. Develop a data-informed decision system based on the planning model in use.
6. Hold workshops with major constituency groups on campus such as the academic senate, classified senate, department chairs, and program coordinators to explain and demonstrate the planning system in use.

7. Insure that the planning and budgeting systems in use at the college are transparent and understood by important external and internal groups.

Institutional Planners:

1. Increase the institutional availability of information necessary to planning, budgeting, and program evaluation. Utilize knowledge management techniques and corporate enterprise software products to centralize data and information for planning, budgeting, and outcome assessment processes. Allow transparent access to institutional data through existing reports and supporting requests for additional research, while protecting private student information per federal law.

2. Collaborate with administrators, faculty, and staff to identify key performance indicators for institutional programs and services. Support integrated planning processes for the campus by implementing and tracking institutional effectiveness indicators through reports, scorecards, and dashboards to inform planning and budgeting processes.

3. Facilitate the development of a culture of evidence, in support of data-informed decision making, by providing professional development opportunities to faculty, staff, and administrators addressing the use of data, outcome assessment tools, and program evaluation and review processes. Offer training opportunities to specific
groups, such as leadership councils, program review committees, and institutional effectiveness committees.

4. Develop a comprehensive system of communication to support the introduction of, and sustain, the college planning process for all internal and external college groups, using web-based tools such as informational web pages, video clips, data collection and reporting systems.

Recommendations for Further Study

Replicate this state-wide survey and interview process in five to ten years to:

1. Determine the impact of integrated planning and budgeting processes on institutional effectiveness including the areas of:
   a. Delivery of educational services.
   b. Student equity.
   c. Student success.
   d. Meeting accreditation standards.
   e. Utilization of financial resources.

2. Compare the planning and budgeting methodologies of multi-college and single college districts.

3. Assess the opinions of other college constituencies, beyond college administrators, regarding current practice versus importance of planning and budgeting methodologies. Survey and interview faculty, staff, and students for their perspectives on the impact of current planning processes on programs and services.
4. Assess colleges in other geographic regions of the state and see if the integrated planning model identified in this research can be generalized to other institutions.

5. Conduct a study matching colleges using various planning models to compare college outcome data such as student graduation rates, retention, course-level success, and persistence.

6. Investigate impacts of various budgeting models on college outcome data such as student graduation rates, retention, course-level success, and persistence.

7. Conduct longitudinal studies of college planning systems before and after changes in cabinet-level administrative positions to determine the viability and sustainability of planning systems after these personnel changes take effect.
REFERENCES


Brewer, J. T. (2003). Perceptions held by selected members of the wayne community college planning council about their participation in the strategic planning process at wayne community college. (Ed.D., North Carolina State University).


http://www.sandag.org/resources/demographics_and_other_data/demographics/fastfacts/index.asp


Appendix A

Survey Instrument
Survey of Integrated Planning Systems

1. Study Participant Information:

This is an anonymous survey of community college personnel that have primary responsibility for guiding institutional planning. No personnel or college names will be used in reporting the results of this research. The survey consists of 10 questions and should only take 5 minutes to complete. All 110 California community colleges will be asked to participate, identifying standards of practice. Therefore, your experience with college planning will be extremely important to this study. Please answer each question based upon your institution’s current practice and your professional opinion:

1. Your position title:

2. Time spent facilitating institutional planning at your college (in years)

3. Please select the best description for your campus:

   My college is a:
   - Single college
   - College in a multicampus district

4. College size (FTES)

   Number of Students:
   - Under 3,000
   - 3,000 to 10,000
   - Over 10,000
## Survey of Integrated Planning Systems

### 2. Survey

Instructions: Please rate each of the following questions by marking one answer on each of the two scales. Record your view of current practice on the first scale. Use the second scale to indicate desired practice, or importance, of the item or practice.

**Rating Scale:**

- **SD** = Strongly disagree
- **D** = Disagree
- **U** = Undecided or unable to respond
- **A** = Agree
- **SA** = Strongly agree

**Example:** The college's institutional planning process provides/should provide a mechanism for student discussion in the development of institutional goals.

- Current practice (provides)......SD D U A SA
- Importance (should provide)......SD D U A SA

*Current practice* for the purpose of this study, means your opinion of current methods of planning, budgeting, and evaluation. Whereas, *Importance* represents your opinion of desired practice, or what you view as the ideal situation.

1. The college planning process precedes/should precede development of the annual budget.

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
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<tbody>
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<tr>
<td>Importance (should precede)</td>
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</tbody>
</table>

2. The college planning committee includes/should include representatives of all constituency groups.

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
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<td>Current practice (includes)</td>
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<tr>
<td>Importance (should include)</td>
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</tbody>
</table>

3. The institutional plan is/should be an integration of college planning processes, budgeting, and resource allocation, linked to institutional effectiveness.

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
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<td></td>
<td></td>
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</tbody>
</table>
# Survey of Integrated Planning Systems

4. The institutional plan is/should be used in all the college's decision making processes.

<table>
<thead>
<tr>
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<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
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<tbody>
<tr>
<td>Importance (should be)</td>
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5. Annual institutional priorities are/should be derived from the strategic plan.

<table>
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<th>U</th>
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<td>Importance (should be)</td>
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6. Identification of institutional priorities is/should be the result of collaboration between college constituencies.

<table>
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<tr>
<th>Current practice (is)</th>
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<th>D</th>
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<th>A</th>
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<tbody>
<tr>
<td>Importance (should be)</td>
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</table>

7. Financial resources are/should be allocated based upon institutional priorities.

<table>
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<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
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<tbody>
<tr>
<td>Importance (should be)</td>
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8. The college's financial resource allocation process is/should be the result of collaboration between college constituency groups.

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<th>D</th>
<th>U</th>
<th>A</th>
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9. Program review is/should be part of the institution's process for allocating financial resources to academic, student services, and support services.

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<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance (should be)</td>
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10. The budgeting process provides/should provide the college with a useful annual financial plan.

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</table>
### Survey of Integrated Planning Systems

11. College expenditures are/should be assessed periodically to determine support for institutional priorities.

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<tbody>
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12. The budget process is/should be evaluated periodically.

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<tbody>
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13. The college’s planning process is/should be evaluated periodically.

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<th>U</th>
<th>A</th>
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14. Institutional effectiveness requires/should require the periodic evaluation of planning, budgeting, and resource allocation through a program review process.

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<td>Importance (should require)</td>
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</table>
Survey of Integrated Planning Systems

3. Budget Methodologies

Program budgeting: Resources allocated to encourage the achievement of specific program outcomes related to the institutional mission.

Zero-based budgeting: A process that requires a rationale or justification of budgeted expenditures each year.

Formula budgeting: Resources are allocated through the use of a formula or model.

Performance budgeting: Allocations are made on the basis of an organizational unit's achievement of institutional mission and priorities.

Incremental budgeting: Allocations are made by increasing or decreasing the previous year's budget by a fixed percentage.

1. Which of the following budgeting processes are/should be used at your college:

(Mark all that apply)

<table>
<thead>
<tr>
<th></th>
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<th>Should be used:</th>
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<td>Incremental budgeting:</td>
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</table>
Survey of Integrated Planning Systems

4. Acknowledgement

Thank you very much for taking the time to participate in this survey...

Sincerely,

Jerry L. Buckley
San Diego State University
Appendix B
Interview Instrument
Interview Questions

Opening

1. Please tell me your name, position in your organization, and the number of years you have spent facilitating planning and/or budgeting activities at this college. How have you been involved with institutional planning and budgeting?

Introductory

2. How does the college integrate its institutional planning process with budget development?

Key

3. How does the budget development process support implementation of annual institutional planning priorities?

4. What data, such as program review elements, are utilized to support the development of annual institutional planning priorities and/or budget priorities?

5. How has your institution’s planning process impacted its institutional effectiveness?

Projected Question – Select a diagram

6. Select one of the five following diagrams that best describes what your planning and budget development process looks like, and use this diagram to describe the degree of integration of institutional planning and budget development.

7. Based upon your experience, would you say that the planning processes that you described above are consistent with published procedures and other public documents? Why or why not?

8. Based upon accreditation standard III D. a. “Financial planning is integrated with and supports all institutional planning,” do you feel that the planning process that you described meets current accreditation guidelines? Why or why not?

Summary

9. How well have we discussed planning and budget processes at your college? Would you like to describe any additional components or details of the college’s planning and budgeting process or resource allocation methodology?
Institutional Planning Diagrams:

Model 1

Model 2
Model 5
Appendix C

Document Analysis Instrument
Document Analysis Instrument

College ID#:

<table>
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<tr>
<th>Document Type</th>
<th>Integration* (Y/N)</th>
<th>Comments</th>
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<tr>
<td>College Mission Statement</td>
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<td></td>
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<tr>
<td>College Vision / Values / Goals</td>
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<tr>
<td>A. Strategic Plan</td>
<td></td>
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<td>B. Program Plans</td>
<td></td>
<td></td>
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<tr>
<td>C. Operational Plans</td>
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<td></td>
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<tr>
<td>D. Issue-Specific Plans</td>
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<tr>
<td>E. Budget Plan</td>
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<tr>
<td>F. Facility Plan</td>
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<td>Accreditation Self-Study Report</td>
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<tr>
<td>Institutional Effectiveness Reports</td>
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</table>

*Note: Integration is interpreted as any language which specifically indicates integration of planning processes with budget development and resource allocation, along with program evaluation and institutional effectiveness, consistent with ACCJC/WASC Standard III. Observations may be: Yes, No, or Partial.
Appendix D

Survey Recruitment Letter
October 21, 2009

Dear Colleague:

You, no doubt, are aware of the financial challenges which exist for our colleges this year. In addition, the heightened emphasis of the ACCJC relative to institutional planning, budgeting, and resource allocation merely underscores the importance that institutions must attach to planning and the effective use of resources. I would like to request your participation in a research project to assess strategic planning, budgeting, and resource allocation practices within California community colleges.

This study by Jerry Buckley, Dean of Mathematics and Sciences, at Grossmont College, and doctoral student at San Diego State University is a survey of institutional planning, budgeting, and resource allocation models.

Jerry needs the feedback of your institutional planner to accomplish this study. A unique feature of this project is that it seeks the responses of college executives in charge of planning at each of California’s 110 community colleges. He will treat your college’s reply confidentially and only aggregate data will be used in the reporting phase of this study.

Please forward this note with the survey URL below to someone who directly manages planning, budgeting, and resource allocation at your institution.

Thank you for your time and consideration with this project.

Planning survey link:

http://www.surveymonkey.com/s.aspx?sm=D0r6qcrxDt_2b_2b1nDit6cqxA_3d_3d

Sincerely,

Sunita Cooke

Sunita Cooke
President
Appendix E

Interview Recruitment Letter
October 29, 2009

Dear Colleague:

You may remember my recent letter regarding a research project involving institutional planning, budgeting, and resource allocation. I would now like to request your participation in a second phase of this research project to assess planning and resource allocation practices within the San Diego and Imperial County community colleges.

This phase of research by Jerry Buckley, Dean of Mathematics and Sciences, at Grossmont College, and doctoral student at San Diego State University consists of one-to-one interviews addressing your college’s institutional planning, budgeting, and resource allocation methods.

Jerry needs the feedback of your institutional planner to accomplish this study. We would request that you identify one person primarily responsible for planning at your college who will participate in a one hour interview consisting of nine open-ended questions. Dean Buckley will treat your college’s information confidentially and only summary data, consisting of qualitative themes, will be used in the reporting phase of this study.

Please provide me with the name and contact information for someone at your college who directly manages planning, budgeting, and resource allocation at your institution, and could participate in an interview during November or early December. I will forward this contact information to Dean Buckley so that he can arrange for the interview to take place at your college.

Thank you for your time and consideration with this project.

Sincerely,

Sunita Cooke

Sunita Cooke
President
Appendix F

Consent Form
San Diego State University

Consent to Act as a Research Subject

(Evaluation of Integrated Planning Systems in Southern California Community Colleges)

You are being asked to participate in a research study. Before you give your consent to volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

Investigators: Jerry L. Buckley, Ed.D. candidate, San Diego State University. Dr. William E. Piland, Professor Emeritus of San Diego State University, will be supervising this research.

Purpose of the Study: This research study will identify effective planning practices within California community colleges that integrate strategic and operational planning with budget development and resource allocation. The study will also evaluate whether colleges incorporate elements of program review and the measurement of institutional effectiveness to improve operational and strategic planning. Male and female college employees responsible for institutional planning at each of the nine community colleges in San Diego and Imperial Counties will be invited to participate in this study.

Description of the Study: You have been selected to participate in this study based upon the recommendation of your college's president.

If you choose to take part in this study, you will be asked to participate in a one-on-one interview about your experience with strategic and operational planning, which will last approximately 60 minutes. You will be asked nine open-ended questions about your personal experience with your campus’ planning, budgeting, and resource allocation processes and your opinion of how they comply with current accreditation standards.

The one-on-one interviews will take place on each campus in a location to be determined by the interviewee. You must agree to the interview being digitally recorded in order to participate in this study.

Risks or Discomforts: You may reflect upon unpleasant memories while responding to the interview questions if you have had an unpleasant experience with either campus-based planning or accreditation review processes. If you begin to feel uncomfortable, you may discontinue participation, either temporarily or permanently.

Benefits of the Study: This study may result in the identification of the characteristics of a sustainable integrated planning system for California community colleges that positively impact the delivery of educational services and programs during times of limited financial resources, while potentially improving student success, student equity, and overall institutional effectiveness. I cannot guarantee, however, that you will receive any benefits from participating in this study.

Confidentiality: All research materials, including digital recordings, will be kept in a locked file cabinet in my home office. I am the only person who will have access to these records. I will never identify you by name when I take notes and author my findings. I will assign a code to you and use this code when I refer to you in my notes and when my findings are written. I will be recording our conversations, which you can review up to 30 days from the date of recording. I will destroy all research records after my
dissertation is completed, which is estimated to be no later than August, 2010. Confidentiality will be maintained to the extent allowed by law.

Incentives to Participate: There is no incentive of any kind for participating in this study. There are no costs to you for participating in this study.

Voluntary Nature of Participation: Participation in this study is voluntary. Your choice of whether or not to participate will not influence your future relations with San Diego State University, or institutional planning group(s) with which you are currently affiliated. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty.

Questions about the Study: If you have any questions about this research, please ask. To ask questions regarding this research, please contact Jerry Buckley at 858-245-0024, or jerry.buckley@eccead.edu. If you have any questions regarding your rights as a participant in this study, you may contact the Institutional Review Board at San Diego State University (telephone: 619-594-6622; email: irb@mail.sdsu.edu).

Consent to Participate: The San Diego State University Institutional Review Board has approved this consent form, as signified by the board’s stamp. The consent form must be reviewed annually and expires on the date indicated on the stamp.

Your signature below indicates that you have read the information in this document and have had a chance to ask any questions you have about this study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time. You have been given a copy of this consent form. You have been told that by signing this consent form you are not giving up any of your legal rights.

____________________
Name of Participant (please print)

____________________  ______________
Signature of Participant               Date

____________________  ______________
Signature of Investigator               Date
Appendix G

Repeated Measures Analysis of Variance

Survey Questions 1-14
**Repeated Measures ANOVA for Questions 1 to 14**

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Appendix H

Gap Analysis of Estimated Marginal Means for Outcomes by Position

Survey Questions 1-15
Figure F1. Survey question 1 - Planning precedes budget development

Figure F2. Survey question 2 – The planning committee includes all constituency groups.
Figure F3. Survey question 3 – The institutional planning process is integrated.

Figure F4. Survey question 4 – The institutional plan is used in all college decision-making processes.
Figure F5. Survey question 5 – Annual institutional priorities are derived from the strategic plan.

Figure F6. Survey question 6 – Identification of annual institutional priorities results from collaboration.
**Figure F7.** Survey question 7 – Financial resources are allocated based upon institutional priorities.

**Figure F8.** Survey question 8 – The allocation process results from collaboration.
Figure F9. Survey question 9 – Program review is part of the institutional process that determines financial allocations.

Figure F10. Survey question 10 – The budgeting process results in a useful financial plan.
Figure F11. Survey question 11 – College expenditures are periodically assessed for support of institutional priorities.

Figure F12. Survey question 12 – The budget process is evaluated periodically.
Figure F13. Survey question 13 – The college planning process is evaluated periodically.

Figure F14. Survey question 14 – Institutional effectiveness is periodically evaluated using a program review process.
Figure F15. Survey question 15 – Comparison of estimated marginal means for program budgeting by position.

Figure F16. Survey question 15 – Comparison of estimated marginal means for zero-base budgeting by position.
Figure F17. Survey question 15 – Comparison of estimated marginal means for formula budgeting by position.

Figure F18. Survey question 15 – Comparison of estimated marginal means for performance budgeting by position.
Figure F19. Survey question 15 – Comparison of estimated marginal means for incremental budgeting by position.
Appendix I

Repeated Measures Analysis of Variance

Survey Question 15
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### Accreditation Findings:

| ACCREDITATION FINDINGS: | PR | PW | W | A | A | A | W | A | AF |

Legend:  
A = accredited; AF = Accredited with findings; PR = Probation; PW = past warning; W = warning;  
N = no evidence of integration; Y = (yes) evidence of integration; P = partial evidence of integration; - = no documents available.

Findings: Five colleges had significant documentation available indicating integration of planning, budget development, resource allocation, and program review processes. Four colleges had less documentation providing evidence of integrated planning.