1-1-1980

A Model For Implementing An Optimized Casino Degree Curriculum Within The Two-Year College

Russell Edwin Anderson
University of Nevada, Las Vegas

Follow this and additional works at: <https://digitalscholarship.unlv.edu/rtds>

Repository Citation

Anderson, Russell Edwin, "A Model For Implementing An Optimized Casino Degree Curriculum Within The Two-Year College" (1980). *UNLV Retrospective Theses & Dissertations*. 2895.
<http://dx.doi.org/10.25669/k2bg-c0o0>

This Dissertation is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Dissertation in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Dissertation has been accepted for inclusion in UNLV Retrospective Theses & Dissertations by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

**University
Microfilms
International**

300 N. Zeeb Road
Ann Arbor, MI 48106

8325592

Anderson, Russell Edwin

A MODEL FOR IMPLEMENTING AN OPTIMIZED CASINO DEGREE
CURRICULUM WITHIN THE TWO-YEAR COLLEGE

University of Nevada, Las Vegas

Ed.D. 1983

University
Microfilms
International 300 N. Zeeb Road, Ann Arbor, MI 48106

Copyright 1983

by

Anderson, Russell Edwin

All Rights Reserved

A MODEL FOR IMPLEMENTING AN OPTIMIZED CASINO DEGREE
CURRICULUM WITHIN THE TWO-YEAR COLLEGE

By

Russell E. Anderson

A Dissertation Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

in

Educational Administration and Higher Education

Department of Educational Administration
and Higher Education
University of Nevada, Las Vegas
May, 1983

DISSERTATION APPROVAL

The Dissertation of Russell E. Anderson for the degree of Doctor of Education in Educational Administration and Higher Education is approved.

Chairperson, Dr. Anthony Saville

Examining Committee Member, Dr. George Kavina

Examining Committee Member, Dr. George Samson

Graduate Faculty Representative, Dr. Paul Loveday

Graduate Dean, Dr. James Adams

University of Nevada
Las Vegas, Nevada
May, 1983

ABSTRACT

A research project was undertaken to develop a casino degree curriculum model for two-year colleges. The study began with an overview of the gambling industry and the advent of gaming curricula at various institutions of higher learning.

The casino model was developed using Bloom's Taxonomy for course structure and Kalani's Model for curricular framework. Additional studies were conducted on curriculum development methods, and various other curriculum designs and models.

The research design included data from two questionnaires and one personal interview instrument. Further data was provided by gaming employment statistics, gaming revenue statistics, and proprietary gaming school programs. This data was used to develop a proposed Casino Curriculum Model for Clark County Community College in Las Vegas. The model utilized a four-step approach to curriculum design encompassing (1) Demand Factor, (2) Selection Factor, (3) Skills and Knowledge Factor, and (4) Curriculum Factor. The Demand Factor determined various gaming occupations available. The Selection Factor determined highest employment opportunities. The Skills and Knowledge Factor determined core and specialized learnings. The Curriculum Factor determined basic curricular elements. Also shown were model variations for specialized programs and a comparison between proposed and existing CCCC curriculum models.

Recommendations included the development of various gaming certificates and degrees. Further studies on the potential of gaming programs in other institutions and locales, and a greater vocational/technical emphasis for CCCC.

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
LIST OF FIGURES	x
 Chapter	
1. THE PROBLEM	1
Introduction	1
Statement of the Problem	3
Justification	3
Limitations	4
Treatment of the Data and Design of the Study	4
Definition of Gaming Terms	6
Definition of Educational Terms	8
Organization of the Study	8
2. REVIEW OF RELATED LITERATURE	10
Gaming in Higher Education	10
University of Nevada, Reno	10
University of Nevada, Las Vegas	10
Clark County Community College	11
Atlantic Community College	16
Curriculum Development Theory	20
Vocational Aspects of Curriculum Design	22
Taxonomy of Educational Objectives	23
Development and Evaluation Components of Curriculum Design	53

Chapter	Page
Advisory Committees	53
Faculty Input	59
Student Input	65
Chapter Summary	77
3. DESIGN OF THE STUDY	79
Research Design	79
Population	79
Distribution	80
Instruments	81
Treatment of the Data	83
Assumptions of the Study	83
Curriculum Models Surveyed	85
Career-Based	88
Future-Based	89
Experience-Based	90
Chapter Summary	99
4. CASINO CURRICULUM MODEL	100
Model Implementation	100
Model Variations	114
Chapter Summary	119
5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	120
Summary of the Findings	120
Conclusions	121
Recommendations for Gaming Curricula	122
Recommendations for Further Study	126
SELECTED BIBLIOGRAPHY	127

	Page
APPENDICES	133
A. GAMING CURRICULUM QUESTIONNAIRE, FORM 1A	134
B. GAMING CURRICULUM QUESTIONNAIRE, FORM 1B	135
C. GAMING CURRICULUM PERSONAL INTERVIEW FORM	136
D. GAMING CURRICULUM PERSONAL INTERVIEW FORM RESULTS	137
E. EXAMPLE SYLLABUS (ROULETTE)	139

TABLES

Table	Page
1. Major Data Source Categories	5
2. Five Top Rankings of Faculty Inservice Training Needs by Validation Teams at Eight Representative Colleges, Business Occupations Program Area	60
3. Ten Most Critical Needs for Improvement Identified by Validation Teams at Eight Representative Colleges, Administration of Justice Area	61
4. Unemployment Rates of Former Community College Vocational Students not Enrolled in School	75
5. Annual Incomes of Graduates and Nongraduates of Community College Vocational Programs in Four States	75
6. 1982 Gaming Occupations Projections	101
7. Average Annual Job Openings, 1976-1985 Period	101
8. Southern Nevada Private Gaming Schools	102
9. Average Win Per Unit (Las Vegas)	105
10. Questionnaire Form 1A, Relative Importance Quotient Matrix	106
11. Questionnaire Form 1B, Relative Importance Quotient Matrix	107
12. Personal Interview Question Number One, Relative Importance Quotient Matrix	108
13. Personal Interview Question Number Two, Relative Importance Quotient Matrix	109
14. Employment Demand Chart	110
15. Las Vegas Employment Demand	111

Table

Page

16. Comparisons Between Existing and Proposed CCCC Casino Curriculum Models	119
--	-----

FIGURES

Figure	Page
1. Clark County Community College, 1980-81 Casino Degree and Certificate Programs	12
2. Clark County Community College, 1982-83 Casino Degree and Certificate Programs	14
3. Atlantic Community College Course Description	16
4. Clark County Community College, Casino Management Course Descriptions, Number 1	28
5. Figuring Payoffs on the Inside	30
6. Summary of Craps Proposition Keys	36
7. Clark County Community College, Casino Management Course Descriptions, Number 2	37
8. Clark County Community College, Casino Management Course Descriptions, Number 3	39
9. Mini-Baccarat Course Outline	44
10. The Push (Roulette)	48
11. Converting Wheel Checks	51
12. Check Cutting	52
13. Advisory Committee, Lake Region Junior College, North Dakota	54
14. Updated Skills Survey Memorandum	58
15. The Development Process	63
16. The Solution Giver Team Role	64
17. The Catalyst/Facilitator Team Role	65
18. Clark County Community College, Course Description, Number 4	77
19. A Model for Curriculum Design (Taba)	86

Figure	Page
20. The Goldstein Model of an Instructional System	87
21. Hospitality Education Curriculum Design (Specific).	95
22. Hospitality Education Curriculum Design (General)	96
23. Casino Organization Chart	103
24. Proposed Casino Curriculum Model, Clark County Community College - Southern Nevada	112
25. Casino Curriculum Model - Slot Repair	115
26. Casino Curriculum Model - Casino Marketing	116
27. Casino Curriculum Model - Pit Management and/or Dealing	117
28. Actual Casino Curriculum, Clark County Community College	118

Chapter 1

THE PROBLEM

Introduction

Gaming, because of its unique nature, has not become a discipline in higher education until recently. Illuminating this fact were the latest major college informational publications such as Lovejoy's College Guide which did not identify gaming as a field of study (39, 1981). Gambling's reputation probably had much to do with this situation. Scarne pointed out that the nation's negative attitudes toward gambling were pushed to a peak during the 1950-51 Kefauver Committee hearings. Later, in 1961, Senator John McClellan headed a Senate Subcommittee investigation of organized gambling which drew even more adverse national attention and resulted in the most severe anti-gaming laws in U.S. History (56, 1974, p. 4).

Nevada, until 1978, was the only state with major unlimited, legalized casinos (78, 1979, p. 2). During the initial rapid growth era of gaming in the state of Nevada, only one institution of higher learning existed--the University of Nevada in Reno (72, 1981, p. 12), which chose not to assimilate gaming courses into its curriculum until 1975 with a three-credit course called, "The Economic and Social Aspects of Gaming and Gambling" (70, 1975, p. 190). The Las Vegas campus of the University of Nevada, established in 1957 (48, 1968, p. 9), also had no gaming courses in the curriculum until its College of Business Administration's hotel program

instituted a two-credit gaming related course in 1968 entitled, "Statistics of Gaming" (48, 1968, p. 57).

Community colleges for Nevada were established in 1971 as part of the university system (13, 1980, p. 1). These colleges, with their vocational/technical curricula, still did not initially offer courses in gaming, even though it had become Nevada's leading industry (39, 1981, p. 8). Clark County Community College in North Las Vegas offered small numbers of gambling courses beginning in the fall semester of 1978 (11, 1978, p. 31). Subsequently, the Nevada Board of Regents approved two casino management programs, an Associate of Applied Science Degree and a Certificate of Achievement, for Clark County Community College, beginning in the 1980-81 academic year (13, 1980, pp. 51-52). This new program was not only unique in Nevada, but represented the world's first Casino Management Degree (35, 1982, p. 13).

New Jersey, by legalizing casino gambling, enabled another institution to offer a program in gaming at the college level. Atlantic Community College in Atlantic City, as indicated in its Casino Career Institute Bulletin, implemented a program using a proprietary school approach rather than a traditional academic curriculum mode. ACC offered a vocational body of courses in dealing the table games of "21," "Baccarat," "Craps," "Roulette," and "Big Six" as well as three casino slot machine repair courses. The courses were terminal in nature and not integrated into the rest of the ACC curriculum or fee structure (1, 1980, pp. 12-14).

This approach, especially the high student fees, was reflective of the unique circumstances in Atlantic City; great consumer (student) demand, a lack of skilled personnel, a large population, no competing schools, and excellent job opportunities (2, 1981, pp. 84-87).

Statement of the Problem

The purpose of this study was to develop a curriculum model for two-year college gaming programs. Specifically, this model attempted to determine the following:

1. What determines the basic components of a core curriculum in the casino field?
2. What determines the elements of an elective curriculum in the casino field?
3. What evaluative components might be included in a gaming curriculum model?

Justification

Scarne stated that gambling is the biggest industry in the United States with \$500 billion wagered annually; \$50 billion of that total amount was wagered on legalized gaming (56, 1974, p. 1). He further pointed out that based on his own survey, Americans favored legalized gaming by a two-to-one margin (56, 1974, p. 7).

Nevada, New Jersey, Puerto Rico, Australia, Haiti, Panama, France, Italy, and West Germany are among the areas which have existing legal casinos (2, 1981, p. 82). Many of these areas have institutions of higher learning which would benefit from a usable casino curriculum (40, 1981).

In the United States, legalized casino gaming continued to appear on the ballots in some state elections (New York and Florida) and more states (California and Massachusetts) are considering casino gaming in limited geographic areas (37, 1980, p. 5). As state and city governmental budgets became more and more strained, gambling appeared a less undesirable way to attain fiscal health (2, 1981, p. 89).

As Kolar pointed out, recognized major corporations and companies, with histories of formally educated management, were now entering the casino business. These entities were not operating in the same manner as the "old line" individual casino owners did. Operations have become highly structured, with great emphasis placed on control and accountability (32, 1979, p. 50). These companies appeared to have a real need for the college trained technician and/or manager.

Limitations

The limitations of this particular study were as follows:

1. The study was developmental; therefore, input from gambling industry personnel followed no previously established patterns and represented unscientific, divergent views.
2. Gaming research was based primarily on data gathered in Nevada, with New Jersey serving as a secondary data source.
3. The personal interview surveys were administered through telephone contacts and face-toface interviews in Las Vegas casinos and were limited to those individuals willing to respond.
4. Distribution of the questionnaires (with return address and postage) was conducted through mass mailings or physical presentation to potential respondents with the inherent limitations therein.

Treatment of the Data and Design of the Study

Data for analysis was gathered from three major sources and categorized as shown in Table 1.

Table 1. Major Data Source Categories

I	II	III
GAMING INDUSTRY	EDUCATION	PUBLICATIONS
Executives	Administrators	EDUCATION
Employees	Instructional Faculty	Books
Consultants	Students	Journals
Regulators	Consultants	Institutional
Casinos	Institutions	Printings
Training Programs	Vocational/Trade	Monographs
	Schools	Dissertations
	Proprietary Schools	Magazines
		Proprietary Catalogs
		College Catalogs
		INDUSTRY
		Books
		House Organs
		Magazines
		Trade Journals
		Training Manuals
		GENERAL
		Governmental
		Documents
		State Publications
		Writings from other
		applicable disciplines
		Newspapers

Because opinions varied concerning what a casino curriculum should contain, a basic framework for the model was built based on elements which initially tended to have a high degree of respondent convergence. As the research and analysis continued, the model's composition was more determined by the application of recognized theories in the field of curriculum design.

Several models were examined and considered including:

1. Tyler's model, because of its use of multiple information sources, as a basis for deciding curricular objectives (65, 1949, p. 5).
2. Taba's model, due to its wide scope and general application (64, 1962, p. 438).
3. Goldstein's model, owing to its emphasis on planning and evaluation, and the ability to provide ongoing program revision (22, 1974, p. 18).
4. Warren Wilson College's model, by reason of its career-based, work-simulation emphasis (80, 1977, pp. 2-5).
5. William James College's model, due to its future-based, student-centered emphasis (10, 1977, pp. 274-275).

Henry Kalani's model was used as the final theoretical basis for the casino curriculum model since it was designed specifically for developing new hospitality programs in two-year colleges (29, 1975, p. 2).

Definition of Gaming Terms

Baccarat: a big-money banking card game, usually prevalent in major casinos; the most popular table game in Europe and Latin America (56, 1974, p. 459).

Banking game: all major table games--Craps, Blackjack, Baccarat, and Roulette; any betting scheme that gives the operator/casino a percentage or odds advantage of his opponents/players (56, 1974, p. 830).

Big Six (The Wheel): a giant wheel of chance. It is the most popular casino side game (56, 1974, p. 501).

Blackjack ("21"): most widely-played banking card game in the world today (56, 1974, p. 342).

Boxman: a casino employee who is in charge of a craps table (56, 1974, p. 832).

Cage: the casino bank.

Casino: a gambling house.

Craps ("Dice"): the biggest and fastest action game (a banking dice game) in history. The most widely played game of chance in the U.S. (56, 1974, p. 259).

Dealer: the operator of any casino game.

Floorman: the floorwalker in a gambling house whose duties are to spot and correct irregularities (56, 1974, p. 838).

Keno and Bingo: electronic tally board games played with tickets used by individual customers.

Layout: a felt diagram covering a casino table, with spaces designated for different bets.

Pai Gow: an oriental table game using dominos. New to the U.S.

Pit Boss: a casino employee who supervises a gaming table(s). He stands in the pit (gaming area), watches the game, writes out cash-out and fill slips (a paper signed in order to bring more money onto the table from the cage), corrects errors made by dealers or players and watches for cheating (56, 1974, p. 846).

Poker: a popular casino card game which is not banked by the house. The casino takes a percentage of each pot (amount wagered per hand) by what is called the rake.

Roulette: a table banking game in which players bet on the various number and color combinations on a wheel.

Slots: coin-operated electronic and mechanical games of chance.

Definition of Educational Terms

Associate Degree: a two-year college degree, usually conferred by a junior or community college and typically requiring 60 to 64 semester credit hours (21, 1977, p. 61).

Certificate of Achievement: a one-year college certificate, usually conferred by a junior or community college and typically requiring 15 to 36 semester credit hours in a concentrated discipline (21, 1977, p. 62).

Narrative Curriculum Model: a written description of a curriculum prototype.

Proprietary School: a privately owned school, usually offering employment training in vocational/technical fields.

Schematic Curriculum Model: A diagram or drawing of a curriculum prototype.

Terminal Degree or Program: a community college certificate or Associate Degree program designed to lead to direct employment and/or career entry upon completion. These programs are generally not vehicles for transfer to four-year institutions.

Organization of the Study

The study was divided into five chapters:

1. The problem, which included a short history of the United States gaming industry's growth and higher education's response to

that growth. The chapter stated the purpose of the study was to develop a curriculum model for two-year college gaming programs. Also included was a design of the study and basic definitions of gaming and educational terms.

2. Review of related literature, which included studies of existing curriculum models and designs in the fields of gaming, hospitality, vocational/technical, business, occupational, and proprietary education. Curriculum theory and curriculum development modes were reviewed, with special attention given to the roles of advisory committees, faculty, students, and industry. Additionally, both the cognitive and psychomotor domains in Bloom's Taxonomy of Educational Objectives were studied in relation to gaming education and training.

3. Design of the study, which encompassed instrumentation, distribution procedures, treatment of the data, and a survey of curriculum models.

4. Casino curriculum model, which contained schematic and narrative versions of the final model and its modified configurations. Also included were recommendations for application using Clark County Community College as an example institution.

5. Summary, conclusions, and recommendations, which contained a summary and conclusive analysis of the study and made final recommendations.

Chapter 2

REVIEW OF RELATED LITERATURE

Gaming in Higher Education

Initial examination of the literature was done researching the catalogs, bulletins, class schedules, and other informational publications from various institutions of higher learning involved in some form of gaming education.

University of Nevada, Reno

As pointed out in Chapter 1, UNR offered its first gaming course in 1975. The course, "The Economic and Social Aspects of Gaming and Gambling," was worth three credits, both at the upper division undergraduate level as EC 411 and at the graduate level as EC 711 (70, 1975, p. 190). In 1978 a second gaming offering was added, a two-credit lower division course, ACC 261, "Hotel and Casino Accounting" (71, 1978, p. 189).

Both courses have remained the sole gaming offerings at UNR since 1978, with only a minor alteration of numbering which changed EC 711 to EC 644 (72, 1981, p. 190).

University of Nevada, Las Vegas

UNLV, while still known as Nevada Southern University, implemented its first casino course in 1968, a two-credit offering titled "Statistics of Gaming" (48, 1968, p. 57). No additional gaming courses were placed into the curriculum until 1977 with the advent of two classes, "Casino

Operations and Management" and "Mathematics of Casino Games," each worth three credits (67, 1977, pp. 218-219). In 1981 two more three-credit gaming courses were added, "Casino Operations and Management II" and "Sociology of Gambling" (68, 1981, p. 50).

By 1982 UNLV had expanded its gaming curriculum considerably. The Spring 1982 Schedule of Classes listed the following course offerings:

1. HOA 121 - Introduction to the Casino
3 credits
2. HOA 424 - Casino Operations and Management
3 credits
3. HOA 427 - Gaming Regulations and Control
2 credits
4. HOA 472 - Mathematics of Casino Games
3 credits
5. HOA 478 - Accounting for Casino Hotels
2 credits
6. HOA 479 - Protection of Casino Table Games
3 credits (69, 1981, pp. 54-56).

Clark County Community College

CCCC began offering gaming courses in 1976 with a three-credit class called "Casino Management" (11, 1978, p. 31). In 1980 a decision was made by the University of Nevada System Board of Regents approving the first casino degree program in higher education (37, 1980, p. 5).

The 1980/81 CCCC catalogue description and outline of the program appears in Figure 1 (12, 1980, pp. 50-52).

CASINO MANAGEMENT TECHNOLOGY
Associate of Applied Science Degree

Program Requirements

To attain the A.A.S. degree in Casino Management Technology the student is required to:

1. Complete 22 to 25 credits in general education requirements.
2. Complete 24 credits of the core courses in Casino Operations.
3. Complete 15 credits of elective courses.

The curriculum is designed to provide the student with the following options:

1. An opportunity to seek employment in entry level supervisory positions.
2. For those currently employed in the casino industry, an opportunity for job advancement, professional growth, and career mobility.
3. Transfer to a four-year institution to pursue a major degree.

CASINO MANAGEMENT TECHNOLOGY
Associate of Applied Science Degree

Program Requirements

General Education Requirements	Credits
English/Communications	6
Math and Science	6-7
U.S. and Nevada History	4-6
Social Science	6
Total	22-25
 Program Core Requirements	 Credits
CM 101 Introduction to the Casino Industry	3
CM 102 Gaming Security and Surveillance	3
CM 103 Casino Cage Operations	3
CM 104 Casino Count and Report Procedures	3
CM 105 Survey of Gaming Regulations	3
CM 106 Supervising Casino Games	3
CM 107 Casino Credit and Collections	3
CM 108 Slots Management I	3
*Electives	14
Total Credits Required	60-64

Figure 1. Clark County Community College, 1980-81 Casino Degree and Certificate Programs

*Recommended Casino Electives	Credits
CM 109 Slots Management II	3
CM 120 Techniques of Casino Games - Blackjack (21)	3
CM 121 Techniques of Casino Games - Craps	3
CM 122 Techniques of Casino Games - Roulette	3
CM 123 Techniques of Casino Games - Baccarat	3
CM 124 Techniques of Casino Games - Poker	3
CM 125 Management of Keno and Bingo	3

CASINO MANAGEMENT TECHNOLOGY
Associate of Applied Science Degree

TWO YEAR PROGRAM

First Semester	Semester Hours
English/Communications	3
Math	3
CM 101 Introduction to the Gaming Industry	3
CM 103 Casino Cage Operations	3
Elective	3
Total	15

Second Semester	Semester Hours
English/Communications	3
Social Science	3
CM 104 Casino Count and Report Procedure	3
CM 105 Survey of Gaming Regulations	3
Elective	3
Total	15

Third Semester	Semester Hours
Social Science	3
U.S. and Nevada History	4
CM 107 Casino Credit and Collections	3
CM 108 Slots Management	3
Elective	2-3
Total	15-16

Fourth Semester	Semester Hours
Science	4
CM 102 Gaming Security and Surveillance	3
CM 105 Survey of Gaming Regulations	3
Electives	5-6
Total	15-16

Figure 1. (continued)

CERTIFICATE OF COMPLETION
Casino Operations

Program Requirements

The Certificate of Completion Program in Casino Operations is designed as a thirty college credit program to provide the student with employable job skills in the ever expanding casino industry. The curriculum has been specifically designed to prepare students with the specialized skills and knowledge for career opportunities within the casino industry.

CASINO OPERATIONS
Certificate of Completion

	Credits
English/Communications	6
CM 101 Introduction to the Casino Industry	3
CM 102 Gaming Security and Surveillance	3
CM 103 Casino Cage Operations	3
CM 104 Casino Count and Report Procedures	3
CM 105 Survey of Gaming Regulations	3
CM 106 Supervising Casino Games	3
CM 107 Casino Credit and Collection	3
CM 108 Slots Management	3
Total	30

Figure 1. (continued)

The 1982-83 CCCC catalog indicated several changes in its casino curriculum as shown in Figure 2 (14, 1982, p. 67).

CASINO MANAGEMENT TECHNOLOGY
Associate in Applied Science

The Curriculum is designed to provide the student with the following options:

An opportunity to seek employment in entry level supervisory positions.

For those currently employed in the casino industry, an opportunity for job advancement, professional growth, and career mobility.

Transfer to a four-year institution to pursue a major degree.

Figure 2. Clark County Community College, 1982-83 Casino Degree and Certificate Programs

<u>General Requirements</u>		<u>Credits</u>
English/Communications		6
Math and/or Science		6
U.S. & Nevada Constitutions		4-6
Social Science		6
 <u>Core Courses</u>		
ACC 151	Elementary Accounting	3
ECON 161	Statistical Methods	3
RO 101	Introduction to Resort Industry	3
RO 180	Resort Marketing	3
RO 225	Hotel, Restaurant and Gaming Law	3
 <u>Required Courses</u>		
CM 102	Survey of Casino Games	3
CM 103	Casino Cage Operations	3
CM 106	Superivisng Casino Games	3
CM 108	Slots Management I	3
 Select two courses from the following:		
CM 120	Techniques of Casino Games, "21"	3
CM 121	Techniques of Casino Games, Craps	3
CM 122	Techniques of Casino Games, Roulette	3
CM 123	Techniques of Casino Games, Baccarat	3
CM 124	Techniques of Casino Games, Poker	3
 <u>Recommended Electives</u>		
CM 104	Casino Count and Report Procedures	
CM 107	Casino Credit and Collections	
CM 109	Slots Management II	3
CM 115	Casino Marketing and Promotions	3
CM 125	Management of Keno and Bingo	3
HM 120	Hotel Labor Relations	3
HM 195	Hotel Practicum/Internship I	3
HM 196	Hotel Practicum/Internship II	3
Minimum total credit hours		<u>60</u>

CASINO MANAGEMENT

Certificate of Achievement

The Certificate of Achievement program in Casino Management is designed as a thirty college credit program to provide the student with employable job skills in the ever expanding casino industry. The curriculum has been specifically designed to prepare students with the specialized skills and knowledge for career opportunities within the casino industry.

Figure 2. (continued)

<u>General Requirements</u>		<u>Credits</u>
English/Communications		6
<u>Core Courses</u>		
ACC 151	Elementary Accounting I	3
ECON 161	Statistical Methods	3
RO 101	Introduction to the Resort Industry	3
RO 180	Resort Marketing	3
RO 225	Hotel, Restaurant and Gaming Law	3
Select three courses from the following:		
CM 102	Survey of Casino Games	3
CM 103B	Casino Cage Operations	3
CM 106	Supervising Casino Games	3
CM 108B	Slots Management I	3
Minimum total credit hours		<u>30</u>

Figure 2. (continued)

Atlantic Community College

ACC, as described in Chapter 1, brought its Casino Career Institute on line as a vocational gaming school which was licensed by the state of New Jersey's Casino Control Commission (1, 1980, p. 2).

Figure 3, from the ACC Career Institute Bulletin, shows how the college approached the teaching of casino table games (1, 1980, pp. 9-15).

CCI 00:700 BLACKJACK

Designed to train students in the fundamentals of dealing Blackjack. Emphasis will be placed on card totaling, chip handling and cutting, card shuffling and card pitching. Special attention will be given to procedure, accuracy and game speed.

CCI 00:701 BLACKJACK As a Second Game

Prerequisite: 240 hours of training in dealing Craps
(CCI 00:710)

This course is designed to train students in the fundamentals of dealing Blackjack when students have already had 240 hours of training in the dealing of Craps. This course is tailored to accommodate this previous training in the dealing of Craps. Emphasis will be placed on card pitching. Special attention will be given to procedure, accuracy and game speed.

Figure 3. Atlantic Community College Course Descriptions

CCI 00:702 BLACKJACK As a Second Game

Prerequisite: 200 hours of training in dealing of
Roulette (CCI 00:720)

This course is designed to train students in the fundamentals of dealing Blackjack when students have already had 200 hours of training as a dealer in Roulette. This course is tailored to accommodate this previous training in the dealing of Roulette. Emphasis will be placed on card totaling, chip handling and cutting, card shuffling and card pitching. Special attention will be given to procedure, accuracy and game speed.

CCI 00:703 BLACKJACK As a Second Game

Prerequisite: 200 hours of training in the dealing of
Baccarat (CCI 00:730)

This course is designed to train students in the fundamentals of dealing Blackjack when students have already had 200 hours of training as a dealer in Baccarat. This course is tailored to accommodate this previous training in the dealing of Baccarat. Emphasis will be placed on card totaling, chip handling and cutting, card shuffling and card pitching. Special attention will be given to procedure, accuracy and game speed.

CCI 00:705 BLACKJACK As a Player's Game

Designed to give the student an understanding of the fundamentals of the game Blackjack to permit a knowledgeable playing of the game.

CCI 00:710 CRAPS

Designed to train students in the fundamentals of dealing Craps. Emphasis will be placed on the knowledge of odds on a variety of bets, on accurate and quick mental multiplication and on chip handling. Special attention will be given to procedure, accuracy and game speed.

CCI 00:711 CRAPS As a Second Game

Prerequisite: 160 hours training in Blackjack
(CCI 00:700)

This course is designed to train students in the fundamentals of dealing Craps when students already have had 160 hours of training as a dealer in Blackjack. The course is tailored to accommodate this previous training in the dealing of Blackjack. Emphasis will be placed on the knowledge of odds on a variety of bets, on accurate and quick mental multiplication and on chip handling. Special attention will be given to procedure, accuracy and game speed.

Figure 3. (continued)

CCI 00:712 CRAPS As a Second Game

Prerequisite: 200 hours of training in Roulette
(CCI 00:720)

This course is designed to train students in the fundamentals of dealing Craps when students have already had 200 hours of training in the dealing of Roulette. The course is tailored to accommodate this previous training in the dealing of Roulette. Emphasis will be placed on the knowledge of odds on a variety of bets, on accurate and quick mental multiplication and on chip handling. Special attention will be given to procedure, accuracy and game speed.

CCI 00:713 CRAPS As a Second Game

Prerequisite: 200 hours of training in Baccarat
(CCI 00:730)

This course is designed to train students in the fundamentals of dealing Craps when they already have had 200 hours of training in the dealing of Baccarat. The course is tailored to accommodate this previous training in the dealing of Baccarat. Emphasis will be placed on the knowledge of odds on a variety of bets, on accurate and quick mental multiplication and on chip handling. Special attention will be given to procedure, accuracy and game speed.

CCI 00:715 CRAPS As a Player Game

Designed to give the student an understanding of the fundamentals of the game Craps to permit a knowledgeable playing of the game.

CCI 00:720 ROULETTE

Designed to train students in the fundamentals of dealing Roulette. Emphasis will be given to accurate and quick mental multiplication, chip handling and memorization of wheel and table layouts. Special attention will be given to procedure, accuracy and game speed.

CCI 00:721 ROULETTE As a Second Game

Prerequisite: 160 hours of training as a dealer in Blackjack
(CCI 00:700)

Designed to train students in the fundamentals of dealing Roulette when they have already had 160 hours of training as a dealer in Blackjack. The course is tailored to accommodate this previous training in dealing Blackjack. Emphasis will be given to accurate and quick mental multiplication, chip handling and memorization of wheel and table layouts. Special attention will be given to procedure, accuracy and game speed.

Figure 3. (continued)

CCI 00:722 ROULETTE As a Second Game

Prerequisite: 240 hours of training as a dealer in Craps
(CCI 00:710)

Designed to train students in the fundamentals of dealing Roulette when they already have had 240 hours of training as a dealer in Craps. The course is tailored to accommodate this previous training in dealing Craps. Emphasis will be given to accurate and quick mental multiplication, chip handling and memorization of wheel and table layouts. Special attention will be given to procedure, accuracy and game speed.

CCI 00:723 ROULETTE As a Second Game

Prerequisite: 200 hours of training as a dealer in Baccarat
(CCI 00:730)

Designed to train students in the fundamentals of dealing Roulette when they already have had 200 hours of training as a dealer in Baccarat. The course is tailored to accommodate this previous training in dealing Baccarat. Emphasis will be given to accurate and quick mental multiplication, chip handling and memorization of wheel and table layouts. Special attention will be given to procedure, accuracy and game speed.

CCI 00:725 ROULETTE As a Player Game

Designed to give the student as a player an understanding of the fundamentals of the game to permit a knowledgeable playing of the game.

CCI 00:730 BACCARAT

Designed to train students in the fundamentals of dealing Baccarat. Emphasis will be given to the knowledge of commissions and percentages and the ability to figure them immediately and to the importance of customer relations which is especially significant in the game of Baccarat. Special attention will be given to procedure, accuracy and game speed.

CCI 00:731 BACCARAT As a Second Game

Prerequisite: 160 hours of training as a dealer in Blackjack
(CCI 00:700)

Designed to train students in the fundamentals of dealing Baccarat when they have already had 160 hours of training as a dealer in Blackjack. The course is tailored to accommodate this previous training in Blackjack. Emphasis will be given to the knowledge of commissions and percentages and the ability to figure them immediately

and to the importance of customer relations which is especially significant in the game of Baccarat. Special attention will be given to procedure, accuracy and game speed.

CCI 00:732 BACCARAT As a Second Game

Prerequisite: 240 hours of training as a dealer in Craps
(CCI: 00:710)

Designed to train students in the fundamentals of dealing Baccarat when they have already had 240 hours of training as a dealer in Craps. This course is tailored to accommodate this previous training in dealing Craps. Emphasis will be given to the knowledge of commissions and percentages and the ability to figure them immediately and to the importance of customer relations which is especially significant in the game of Baccarat. Special attention will be given to procedure, accuracy and game speed.

CCI 00:733 BACCARAT As a Second Game

Prerequisite: 200 hours of training as a dealer in Roulette
(CCI 00:720)

Designed to train students in the fundamentals of dealing Baccarat when they have already had 200 hours of training as a dealer in Roulette. The course is tailored to accommodate this previous training in dealing Roulette. Emphasis will be given to the knowledge of commissions and percentages and the ability to figure them immediately and to the importance of customer relations which is especially significant in the game of Baccarat. Special attention will be given to procedure, accuracy and game speed.

CCI 00:735 BACCARAT As a Player Game

Designed to give the student an understanding of the fundamentals of the game Baccarat to permit a knowledgeable playing of the game.

Figure 3. (continued)

Curriculum Development Theory

Although little material was available that used gaming as a curricular core subject, the literature showed that curriculum design was not simply a function of subject matter area. Hilda Taba of San Francisco State College, stated that

Generally speaking a conceptual system for curriculum or theory of curriculum is a way of organizing thinking about all matters that are important to curriculum development: what the curriculum consists of, what its important elements are, how these are chosen and organized, what the sources of curriculum decisions are, and how the information and criteria from these sources are translated into curriculum decisions (64, 1962, p. 420).

Further, Taba asserted:

A design needs to be supported with and to make explicit a curriculum theory which establishes the sources to consider and the principles to apply. Both are needed in consistent decisions about the curriculum (64, 1962, p. 421).

Organizing thinking (learning experiences), coupled with a good theory of curriculum appeared to be the basic key elements in developing a sound curriculum model.

The Carnegie Foundation gave acknowledgment to the concept of program uniqueness in higher education, particularly for community colleges. Their findings were that

The two-year colleges are easily the most diverse of all colleges in the country. Not only are they distinctive as compared to one another, but they also pride themselves in encouraging diversity of programs within each college. The result is a spectrum of institutions in which colleges with narrowly defined technical or vocational are at one end and multi-unit community colleges are at the other (1, 1977, p. 128).

William Bergquist identified a list of eight curricular model types which included most curricular innovations now prevalent in higher education. Three of these had special significance when applied to casino education:

1. Career-based: Programs are specifically designed to prepare students for a certain vocation, admissions to a professional training program, or a vocational decision-making process.

2. Future-based: Conditions are created for students to acquire knowledge, skills, and attitudes that are appropriate to the creation of a desirable future or that are adaptive to a predictable future society.

3. Experience-based: On-and-off campus experiences that are in some sense educational are created or provided: the college takes some responsibility for controlling the quality of the experiences, sequencing the experiences, and relating the learnings from these experiences to principles that have been conveyed through more traditional modes--lectures, discussions, seminars (10, 1977, p. 83).

These three models were important in that they reflected some consequential factors for the gambling area in that:

1. Gaming was chiefly a career-based, vocational/technical discipline (46, 1980, pp. 21-27).

2. Gambling was a growth industry, with a seemingly unlimited future (2, 1981, pp. 80-89).

3. Gaming had almost exclusively been an "experience-based" business and no casino career could advance without certain specific kinds of experiences (41, 1981, pp. 14-16).

Vocational Aspects of Curriculum Design

Arthur Levine of the Carnegie Council on Policy Studies in Higher Education, made an important point concerning enrollment trends when he stated, "The rationale most frequently attributed to changing enrollment patterns is the job market. In fact, vocational/professional majors are increasing in popularity relative to traditional majors" (11, 1978, p. 45). This employment-related trend was especially meaningful, because gaming, when it became a part of an area's economy, had the potential to totally dominate the job market much as in Nevada (39, 1981, p. 8) and Atlantic City (45, 1982, p. 7).

Francis Keppel of Harvard University pointed out that

A problem of significance in the 1980's will be how to use the educational system to prepare people to perform more effectively on

their jobs. This will require that a new set of relations be established between business and industry, on one side, and educational institutions on the other (31, 1980, p. 152).

Taxonomy of Educational Objectives

Bloom's taxonomy of educational objectives was developed as an all-encompassing plan for classifying and correlating objectives which utilized three principal categories or domains.

The cognitive domain involved the obtaining of knowledge through problem solving or knowledge acquisition.

The affective domain focused on those objectives describing changes in interests, values, and attitudes, as well as development of character, tastes, biases, and appreciations.

The psychomotor domain consisted of outcomes that constitute muscular/motor skill and manipulation/neuromuscular coordination (3, 1972, p. 160).

Since the taxonomy was intended to assist various educational practitioners in solving problems of curriculum and evaluation (33, 1956, p. 1), its components most applicable to gaming in higher education, cognitive and psychomotor, provided a basis for more accurately identifying curricular issues relevant to that field.

Cognitive Domain

The cognitive domain contained six major categories, each with specific elements that together with current casino education, training, and job data, could be utilized in curriculum planning.

1. Knowledge

Bloom defined knowledge as

...the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting. For measurement purposes, the recall situation involves little more than bringing to mind the appropriate material. Although some alteration of

the material may be required, this is a relatively minor part of the task. The knowledge objectives emphasize most the psychological processes of remembering. The process of relating is also involved in that a knowledge test situation requires the organization and reorganization of a problem such that it will furnish the appropriate signals and cues for the information and knowledge the individual possesses. To use an analogy, if one thinks of the mind as a file, the problem in a knowledge test situation is that of finding the problem or task the appropriate signals, cues, and clues which will most effectively bring out whatever knowledge is filed or stored (5, 1956, p. 1).

A. Terminology: Gaming language and symbols provided the underpinning for many courses including the various table games. For instance, the craps manual used by Valley School of Gaming, contained several pages of terminology including the following which had to be mastered prior to the actual theory of physical movements of craps dealing being taught.

COME BETS are made after a point has been obtained. Here, again, the rule, "TAKE, PAY, AND PLACE" takes effect. The most important concern of the "come bet," as affects the dealer, is the placing of the bet. The bets must be set on the come number in relation to the player's position at the table. Number 1 player is next to the stickman, and Number 8 player is next to the base dealer. When come bets are properly placed, they can be properly paid off. Often, a player will ask what numbers they are on. If the bets are placed correctly, the answer can be readily given. When a come bet comes down and the dealer is not sure of the ownership, he should ask before setting it on. Guessing can lead to misunderstandings.

COME BETS - ODDS have the same payoff as line odds and are handled in the same manner as line odds with one very important difference. While line bets are paid in order toward the center of the table or toward the proposition layout, come bets are paid just the opposite or, from the proposition layout, toward the end of the table in respect to the dealer's position. When odds are present, payoff should be made so as to prove the correctness of the payoff. Very often, a player will not realize he has received a payoff of a come bet. Again, common courtesy calls for the dealer to call the attention of the player to the payoff by stating, "This is your last come bet, sir."

One thing of importance in regard to come bets is to ascertain whether the player's "odds" are "on" or "off" on the come-out roll. Odds are automatically off on the come-out. However, when a player desires his odds to "work," place an "on" button on top of one of the player's bets, thus showing the boxman that this player's "odds are working."

Very often, after a roll of "craps" or one of the dice has left the table, a player will request his odds to be "off on the next roll" or "off until I say back on." When a player makes this request, put an "off" button on top of the odds, and call the boxman's attention to what bets are off. Whenever there is any possibility of confusion, notify your boxman what is being done and why.

In general, "come bets" should present no major problems as long as rules of placing and paying are observed.

PLACE BETS are usually made in units. The standard bet is 5 units on the "4 and 10" or "5 and 9." While the standard wager is 6 units on the "6 and 8." The payoff is 9 to 5 on the 4 and 10, 7 to 5 on the 5 and 9, and 7 to 6 on the 6 and 8 (75, 1982, p. 10).

B. Conventions: Bloom pointed out that, "workers in a field employ usages, styles, practices, and forms which best suit their purposes...although these forms and conventions are...set up on arbitrary, accidental, or authoritarian bases" (5, 1956, p. 2). A good application of this point was found in the following list of basic casino house rules for "21" dealers. The list contains conventions which have evolved primarily from an authoritarian foundation:

1. Always enter and exit the pit from the designated area. Relieve the Dealer by standing behind and tapping him/her on the shoulder.
2. Always call shuffle-up.
3. Making change for cash: Count the amount and spread it on the layout so that it can be easily read. Do not count more than five bills a row. Call out to the Floorman any amount over \$20, i.e., "Change one hundred."
4. Making change for checks: From higher to lower, call out, "Check change." From lower to higher, call out, "Change of color." Cut checks; always cut \$25, \$100, and \$500 checks back down in front of the player. Then, put the exchanged check(s) in the rack.
5. Tips (tokens): When a Player makes a bet for the Dealer, he must place it in front of the circle. If he wins, pay his bet first, then pay the Dealer's bet. Finish paying and taking and clearing the layout; then, pick up the Dealer's bet. Tap it on the check rack and say, "Thank you." Put it into your shirt pocket. Always say, "Thank you for the bet," win or lose.

In the case of double-downs and splits, the Player does not have to double the Dealer's bet. In case of splits, your bet goes on the first hand. Do not carry anything in your shirt pocket (cigaretts, etc.). Bets for the Dealer cannot be parlayed. If a Player gives you a tip and says, "What do you want to do with it, bet it or take it?" you must take it. Checks for \$25 and \$100 must be changed. Remember, you depend on tokens to supplement your wages, so do not abuse the customer by hustling.

6. Whenever you find a bent, broken, or defective card, place it aside and call the Floorman's attention to it. Always try to straighten bent cards.
7. If a card is exposed when pitching, the Player must take it. If a card is exposed when hitting and the Player states that he did not signal for it, call the Floorman. Cards accidentally exposed in this manner are usually burned. The Floorman must make the decision. In some Casinos, the next Player(s) cannot take it, but the Dealer must take it.
8. If a Player plays more than one hand, pitch the first hand over the bet and place the next hand(s) in front of the bet(s). He must act on the hands one at a time, i.e., the Player cannot look at the next hand until he has completed play on the previous hand. Also, in most Casinos, the minimum is doubled when a Player plays more than one hand.
9. Watch for Players capping or dragging bets. Case the layout. Always remember how much is bet on 1st and 3rd base. Most of the time, when a Player does this, it is an honest mistake; so, the first time that you see it, tell the Player that after the cards are dealt, he cannot change his bet. Always move laterally on the game so that you can watch all bases. If you see something suspicious, tell the Floorman. His job is to protect you and the house.
10. Cash play: When the Player puts money in the circle, always attempt to change it. If the Player says, "Money plays," you must first count it and then call out, "Money plays \$100." If the Player wins, spread or recount the bills; if he loses, count it and drop it in the box. If the Player puts money down and says, "Do not touch it," call out, "Money plays up to the limit."
11. Fills and credits: Always check the slip to make sure the amount and table number are correct. In the case of a fill, you must take the checks out of the rack(s) and line up the stacks. Then, run down the end stack. Sign the slip and put the checks into the check rack with all tubes capped off in units of twenty. Drop the fill slip. In the case of a credit, always check the buttons on the table against the amount on the slip, then sign and drop it.
12. When a customer asks for a marker, call the Floorman. Before you give the checks to the Player, he will place the button(s) on

the left side of the layout. The Player then must sign a counter-check (marker). The Floorman enters the Player's name and the amount on a table card and signs the card. You will sign the card and then, the Floorman takes the button(s) off the layout, completing the transaction. When a Player pays a marker, call the Floorman. Count the checks and place them on the left side. The Floorman will give the marker back to the customer. Then, he will circle the amount on the table card and sign it. You will sign it and then put the checks into the rack.

13. Never get into a disagreement or argument with a Player. If you are having trouble with a Player or if a dispute arises, call the Floorman.

14. When leaving the game, clap your hands, say, "Good luck," and turn toward the pit (74, 1982, pp. 8-9).

C. Criteria: Bloom said this area was, "knowledge of the criteria by which facts, principles, opinions, and conduct are tested or judged" (5, 1956, p. 3). Valley School of Gaming's Blackjack Manual gave a good example of the criteria for judging a good "21" dealer in the following:

To be a good "21" dealer, many important procedures must be learned.

There are three basic elements:

1. Protection; 2. Readability; and 3. Speed and Accuracy.

1. Protection

a. Protect the cards. Never let go of the deck; always keep your eye on the deck. The deck(s) should be in either one of three places: (1) in your hand; (2) spread on the layout; or (3) in the discard rack.

b. Protect the check rack. Never turn your back on the rack, it is an open cash register.

c. Watch the Players. You must protect the game, not only from dishonest Players, but from honest Players who would take advantage of a mistake. Case the bets. When the game is dealt properly, "protection" is automatic.

2. Readability

You must deal the game in a neat and orderly manner so that the Floorman can "read" your actions. Readability is accomplished by

maintaining a uniform pattern of motion and placement. If the Floorman can easily read the game, then the Player, the eye-in-the-sky and the Casino Manager can also read the game.

3. Speed and Accuracy

You must maintain a consistent balance between speed and accuracy. The Casino percentage only works when the game is in progress. Keep the game in action. However, remember that too fast a pace can result in running over the Players and in unnecessary mistakes. Keep the game moving at a steady pace. Don't let the Players run the game.

The more hands that are dealt, the more income for the Casino (74, 1982, p. 2).

D. Methodology: Bloom stated that, "The emphasis here is on the individual's knowledge of the method rather than his ability to use the method" (5, 1956, p. 3). This was an important point, since it was recognized that no curriculum could teach the total applied methodology of the gaming business within the normal time frame of a two-year or even four-year college program. For example, Figure 4 shows course descriptions used in Clark County Community College's Catalogue (12, 1980, p. 93). As can be seen, they emphasized knowledge of methodology rather than strict application of methodology.

CM 101 Introduction to the Casino
Industry

3 credits

Basic fundamentals to understanding the operation of a successful gaming casino. Instructional areas include the organizational structure of a resort hotel casino; theory of operational strategies; marketing and promotional approaches. Stressed will be the identification of employment and career opportunities available within the casino industry.

Figure 4. Clark County Community College, Casino Management Course Descriptions, Number 1

CM 102 Gaming Security and Surveillance

3 credits

An overview of the security systems found in Nevada casinos and resort complexes; the role of security in gaming and interrelationship with public agencies at all governmental levels; intra-spection and considerations of management towards in-house security personnel and their defined functions; gaming security as related to employees and the public.

Figure 4. (continued)

E. Theories and Structures: Bloom said this component of knowledge was, "The body of principles and generalizations together with their interrelations which present a clear, rounded, and systematic view of a ... field" (5, 1956, p. 4). The following quote, taken from Clark County Community College's Catalogue, shows an emphasis on this "body of knowledge" (principles) concept:

The program is structured to provide the following educational options:

1. Course of study for those currently employed in the gaming industry who seek professional improvement, upward job mobility or to upgrade and improve job skills.
2. A program of study for those seeking initial employment within the gaming industry.
3. A certificate program that will allow a continuation of study toward the attainment of an Associate of Applied Science degree in Casino Technology.

The design of the curriculum has as its highest priority a focus on outcomes rather than process. A major emphasis stresses skill techniques and a body of knowledge that will enable the student to succeed in the job market (11, 1980, p. 51).

2. Comprehension

Bloom stated that comprehension

...represents the lowest level of understanding. It refers to a type of understanding or comprehension such that the individual knows what is being communicated without necessarily relating it to other material or seeing its fullest implications (5, 1956, p. 4).

A. Translation: Bloom felt that translation was the ability to convert symbols or mathematical material into another form

accurately. Translation was judged on the accuracy of its conversion when compared to its original form (5, 1956, p. 4).

Figure 5, taken from Valley School of Gaming's Roulette Manual shows the importance of accurate translation and conversion in gaming education (76, 1982, p. 8).

6 numbers: Pays 5 to 1. (a) Every 5 checks gets 25 checks: e.g., 18 checks bet; size the bet down in stacks of five, and for every 5, count 25: 25-50-75 plus (3×5) 15 = 90. You owe the player 90 checks. (b) 5 times any number is not difficult to figure so: e.g., $5 \times 18 = 90$.

5 numbers: Pays 6 to 1. (a) Every 5 checks gets 30 checks or (b) 6 times any number is not difficult to figure.

3 numbers: Pays 11 to 1. (a) Add the two digits of the bet: e.g., 14 checks bet, $1 + 4 = 5$. Now, insert the sum (5) between the two digits. Thus the payoff equals 154. (b) Add a zero to the bet; then, add the bet to that number: e.g., 14 checks, $140 + 14 = 154$; 26 checks, $260 + 26 = 286$.

4 numbers or corner bet: Pays 8 to 1. (a) Each group of 5 is given a 40 count or (b) 8 times the bet.

Split or two-number bet: Pays 17 to 1. Use multiplication. Memorize 1 through 20 bet. Also, know the following checkoff points: Every 6 = 102; e.g., 18 splits, $3 \times 102 = 306$.

Straight-up or one-number bet: Pays 35 to 1. Use multiplication. Memorize 1 through 20 bet. Also, know the following: Divide the bet in half, times by 7, add a zero: e.g., 16 straight-up, $8 \times 7 = 56$; thus, 16 straight-up = 560.

For the splits and straight-up, there are checkoff points: e.g., 5 splits = 85; 10 = 170; 15 = 255, etc.--e.g., 5 straight-up = 175; 10 = 350; 15 = 525, etc.

For an equal-amount bet, split and straight-up, you can use the following key: $1/2$ the number of total checks bet times 50, plus the total of checks bet = the payoff: e.g., 4 split and 4 straight-up: $4 \times 50 = 200 + 8 = 208$. The payoff is 208.

Except for 11 to 1, it is better to use multiplication. The keys only support your math. Know 1-20, split and straight-up.

Figure 5. Figuring Payoffs on the Inside

When paying more than five checks on the outside, you must either size into it or break it down and convert to the next color: \$1 checks - break into units of 5; \$5 checks - break into units of 5; \$25 checks - break into units of 4; \$100 checks - break into units of five. When paying more than five checks on the inside, you must stagger the stack in units of five. E.g., 17 checks:

Cut checks with your left hand as much as possible, or rather use the hand opposite the floorman so that he/she can see the payoff.

Figure 5. (continued)

B. Interpretation: Bloom viewed interpretation as the ability to view the elements of a body of work as a whole (5, 1956, p. 5). This was especially important in teaching the game of craps. The Craps Manual of Valley School of Gaming explained how the multitude of mental and physical skills used by a dealer must still be viewed in the greater context of the craps game itself.

Besides doing his general work, a base dealer will find that he has other duties to perform. The base dealer assists the stickman, whenever possible, to keep the speed of the game consistent by returning hard-to-get dice or by calling a die which is hidden from the stickman by chips.

Another instance when base dealers can be of untold assistance to the stickman is when a player making a bet calls the bet in a manner understood by the base dealer, but not by the stickman. The base dealer should repeat the bet to the stickman. Remember, you are working as a team, and whatever position you are working, it is your duty to assist the other dealers as much as possible without dereliction of your own duties.

Probably the most important rule to remember while working the base position is to keep your eyes on your own layout. Never "bird dog" the dice. Rely on the stickman for the call, and let his call

trigger your actions. If your mind or eyes wander from your layout, strange things can happen, such as "don't pass" bets growing and "pass line" bets diminishing or disappearing altogether on an unfavorable point. Another very important rule worth mentioning again is that at all times, you deal to the man on the box. In making any move where there is any possibility of later confusion, explain to the boxman what you are doing and why. Make all payoffs and change in the "come" area. Also, make up your place bet payoffs in the come area before setting off to the player. When handling any transaction which directly involves the boxman, such as change for a bill, coming in, changing color, "on the turn" bets, be sure to place the bill, chips or bet directly in front of the boxman in the area at the top of the proposition layout. When putting anything in front of the boxman, be sure to state what it is for and what action is to be taken on it clearly so that the proper action can be taken by the boxman.

Whenever leaving base position, turn toward the boxman with palms up, showing clean hands, continue turn, and leave table. Use this same procedure when leaving stick position. It is not necessary to clap hands or make an unnecessary show of this action. Never leave your position until you have definitely been relived by a "tap on the shoulder" from the incoming dealer. Never leave stick position while the dice are in action. Be sure that the dice are in the center of the table before leaving, and also, that the incoming dealer knows who is shooting the dice.

As a dealer, you cannot act on "called action" without the boxman's approval. Never put a player up until told to do so by the boxman.

A good dealer, in doing his work correctly, protects all parties concerned--himself, boxman, house and, last but not least, the player--without which there would be no need for a dealer (75, 1982, p. 20).

3. Application

Bloom asserted that, "abstractions may...be technical principles, ideas, and theories which must be remembered and applied" (5, 1956, p. 5).

The Baccarat Manual of Valley School of Gaming outlines the technical principles, ideas and theories of the game which must be applied by the student if he is to successfully complete the course:

"Baccarat" is pronounced "ba-ka-ra" (soft "a's" and the "t" is silent). The spelling is the French version of the Italian word "baccara," which means "zero." It refers to the 10 count cards and hands totaling 10, 20, or 30, which have a count of nothing or zero in the game.

In Baccarat, two hands are dealt from the shoe containing eight decks. One hand represents the Player, the other the Bank. The Customers can bet on either side and can also bet on a tie hand. The tie bet pays 9 for 1, which is 8-1 (figured 8 times the bet). The wagers on the Player or Banker pay 1-1, or even. However, the Customer must pay a 5% commission on all winning Bank wagers; that is, if you win \$20 on a Bank hand, you owe the house a commission of \$1.00. This commission, or "vig," is marked up and kept track of in a box in front of the money rack corresponding to the Customer's chair.

When the game begins, the shoe starts in chair #1, and moves to chair #2, i.e., counter-clockwise, when the Bank hand loses. Every time the Bank hand loses, the shoe moves. The Customer with the shoe deals the cards out to the Stickman. The Stickman calls the cards. The Customer with the shoe almost always bets on the Bank, just as the shooter in Craps bets on the pass line. This adds to the excitement of playing Baccarat. The Customer is trying to put a streak together on the Bank side. Most of the other Players try to parlay on the Bank side, mainly because the Bank hand is the better bet, even with the 5% rakeoff. The Player's hand does not win quite as often as the Bank's hand does because of the differing third card rule for the two hands. The Bank hand has the edge, not over the house, of course, but over the Player hand. Experts have computed the house advantage at 1.16% on the Bank hands and 1.37% on Player hands.

The Customer with the shoe deals the cards, and is given the honorary title of Banker, although he is not betting against the other Customers, but against the house. This also lends to the excitement and gives the game a certain European flare. Nevada-style Baccarat is derived from "Chemin de Fer," the difference being that in Chem de Fer, the Customers bet against each other not against the house (73, 1982, p. 1).

4. Analysis

Bloom described analysis as

The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit. Such analyses are intended to clarify the communication, to indicate how the communication is organized, and the way in which it manages to convey its effects, as well as its basis and arrangement (5, 1956, p. 5).

A. Elements: Included the ability to recognize unstated assumptions (5, 1956, p. 6).

Valley School of Gaming's Craps Manual provided a good illustration of this need in gaming education.

It is impossible for the stickman to book a bet he does not understand. So, if you are given a bet you do not understand, your best defense is to quickly reply, "No bet." However, it is to the advantage of the house to book all possible proposition action, so the superfluous use of the "no bet" defense is frowned upon. It is better to have a general knowledge of the different ways players may call in proposition bets.

For example, players will call for a "craps-eleven" bet in any of the following ways:

1. C and E
2. Eleven and any
3. Eleven and craps
4. Any and eleven

So, you see, it is necessary for you to understand what the player wants, and to place the wager in the correct position on the layout, at the same time, repeating the proposition correctly for the boxman's information, and, at the same time, you are politely showing the customer how to correctly call in the wager he desires (75, 1982, p. 12).

B. Organization Principles: Includes the structure, "explicit" and "implicit," which holds the communications system together (5, 1956, p. 1).

A proprietary school craps manual pointed out the importance of this principle.

Again, for emphasis, it should be remembered that all payoffs are made in a manner understandable by boxman, player, floorman or pit boss. Many situations not mentioned here will arise as you work on the table. The important thing is to observe and remember each new incident and how to correctly handle it in the future (75, 1982, p. 3).

5. Synthesis

Synthesis was characterized by Bloom as

The putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements, etc., and arranging and combining them in such a way as to constitute a pattern or structure not clearly there before (5, 1956, p. 6).

A. Production of a unique communication: Included the ability to convey a complicated idea effectively (5, 1956, p. 6).

Valley School of Gaming's Blackjack Manual pointed up the importance of this communications skill, particularly when a complicated concept like an insurance bet in the game of "21" is involved.

You must consider the following points. The Insurance bet:

1. is an optional bet;
2. can only be made when the Dealer's top card is an Ace;
3. must be placed in a designated area in front of the Player's original bet;
4. is a side bet, no relation to the original bet, except:
 - a. cannot be for an amount more than half of the original bet;
 - b. can be for less than half of the original bet; and
 - c. pays 2 to 1;
5. is a bet when the Player is betting that you have Blackjack, i.e., you have a 10 in the hole.

After you put your hole card under, announce: "Insurance"; then, move your right hand across the layout from left to right. Players who do not want to make an Insurance bet should do so verbally, before you look under your hole card. Remember to give the Players a reasonable amount of time to respond; then, peek. Do not get past-posted. If you do not have Blackjack, all Insurance bets lose; take from right to left. If you do have Blackjack, all Insurance bets win; pay from right to left.

For example: Player on 3rd base has \$20 original bet. The maximum or full Insurance bet is \$10. You have blackjack; his hand is 14, so he loses his \$20 original bet and wins his \$10 Insurance bet, which is paid 2-1 or \$20. He breaks even. This is why it is called "Insurance." The correct procedure is to take the original bet (unless the Player also has Blackjack) and pay the Insurance bet. Experienced Dealers, however, use a short-cut. They push the Insurance bet back to the Player. They can only do this when it can be easily seen by the Floorman that the Insurance bet is exactly half of the original bet (74, 1982, p. 14).

B. Derivation of a set of abstract relations: Included the ability to make mathematical computations (5, 1956, p. 7).

Valley School of Gaming's table games manuals all contained many pages of mathematical computations. Above average mathematical

ability was viewed as a prerequisite for students enrolling in most games. Figure 6 gives examples of craps mathematical formulas (75, 1982, p. 14).

1. Crap-eleven split - 11 hits: 7 x total bet
 3 hits: 3 x total bet
2. Eleven - 1 1/2 x total bet and add a zero
3. Hi-low split (2&12) - 14 1/2 x bet
4. Horn bet (equal units on 2, 3, 11, 12; it must be in units of 4)
 - 3 or 11 hits - 3 x bet
 2 or 12 hits - 7 x bet - (minus)
5. Seven-eleven split - 11 hits: 7 x bet
 7 hits: 1 1/2 x bet
6. Two or twelve - 3 x bet and add a zero
7. Horn high bets (betting an extra unit on 2, 3, 11, or 12; it must be in units of 5)
 - A. Horn high - 11 & 11 hits
 - 5 x bet + 2 x number of checks bet
 - B. Horn high - 11 & 2 or 12 hits
 - 5 x bet + 1 x number of checks bet
 - C. Horn high - 11 & 3 hits
 - 11 x number of \$5 checks
 - D. Horn high - ace-deuce and ace-deuce hits
 - 5 x bet + 2 x number of checks bet
 - E. Horn high - 12 & 2 hits
 - 5 x bet + 1 x number of checks bet
 - F. Horn high - 12 & 3 or 11 hits
 - 11 x number of \$5 checks
8. Remember that any proposition bet can be figured out the long way by taking the odds times the bet and subtracting the bet from the payoff.

Figure 6. Summary of Craps Proposition Keys

6. Evaluation

Bloom described evaluation as

Judgments about the value of material and methods for given purposes. Quantitative and qualitative judgments about the extent to which material and methods satisfy criteria. Use of a standard of appraisal. The criteria may be those determined by the student or those which are given to him (5, 1956, p. 7).

A. Judgments in terms of internal evidence: Included evaluation of the accuracy of communications, using logic, past history, and other applicable criteria (5, 1956, p. 7).

Gaming curriculum emphasizing management or technical functions, such as those at Clark County Community College in Figure 7, stressed internal factors in developing course descriptions and content (11, 1980, p. 93).

CM 104 Casino Count and Report Procedures 3 credits

Basic procedures in the methodology and techniques of conducting the casino count and the preparation of the manager's consolidated daily report. Emphasis on conforming to internal control procedures and the impact of applicable gaming regulations.

CM 103 Casino Cage Operations 3 credits

This course is structured to provide the student with knowledge and skills directly relevant to employment as a casino cage cashier. Stressed is practical application of the material presented. Emphasis is on "learning by doing."

CM 106 Supervising Casino Games 3 credits

Basic casino managerial techniques with an emphasis on protection of casino games, staffing, labor/management relations, floor, pit, and shift supervision, credit and marker control, cash and chip control, and internal control forms.

Figure 7. Clark County Community College, Casino Management Course Descriptions, Number 2

B. Judgements in terms of external criteria: Included the ability to compare a performance with the state of the art in the same field (5, 1956, p. 7).

The prime criteria for judging a casino dealer was shown above in section 1.C., parts 1, 2, and 3. Clark County Community College's Catalogue course descriptions further reinforce this criteria in Figure 7 above and Figure 8 (11, 1980, p. 93).

CM 120 Techniques of Casino Games - Blackjack (21) 3 credits

Fundamentals of dealing twenty-one with an emphasis on card totaling, chip handling and cutting, shuffling, multiple deck delivery, single deck deliver, the shoe, call bets, procedures, accuracy and game speed. Special attention will be given to the managerial aspects of twenty-one.

CM 121 Techniques of Casino Games - Craps 3 credits

Fundamentals of dealing craps with an emphasis on accurate and quick mental multiplication, chip handling, knowledge of odds on a variety of bets, procedures and game speed. Special attention will be given to the managerial aspects of craps.
Prerequisite: CM 120 or "21" dealing experience.

CM 122 Techniques of Casino Games - Roulette 3 credits

Fundamentals of dealing roulette with an emphasis on accurate and quick mental multiplication, chip handling, memorization of wheel and table layouts, procedures and game speed. Special attention will be given to the managerial aspects of roulette.

CM 123 Techniques of Casino Games - Baccarat 3 credits

Fundamentals of dealing baccarat with an emphasis on the knowledge of commissions, percentages, mental computations, procedures, accuracy, game speed and the importance of customer relations--a significant component of the game. Special attention will be given to the managerial aspects of baccarat.

CM 124 Techniques of Casino Games - Poker

3 credits

Fundamentals of dealing poker with an emphasis on accurate and quick mental computations, card handling, the rake, side pots, brushing, shilling, proposition players, procedures, game speed and the various forms of poker. Special attention will be given to the managerial aspects of poker.

Figure 8. Clark County Community College, Casino Management Course Descriptions, Number 3

Psychomotor Domain

The psychomotor domain, in its tentative form, contained five major categories, each with particular components that when used with existing gaming education, training, and job data, could be applied to curriculum planning.

1. Perception. Elizabeth Simpson said that perception was

...an essential first step in performing a motor act. It is the process of becoming aware of objects, qualities, or relations by way of the sense organs. It is the central portion of the situation - interpretation - action chain leading to purposeful motor activity (58, 1967, p. 1).

A. Auditory: The sense of hearing was important in the majority of gaming learning experiences. For example, the Valley School of Gaming's "21" Manual shows that both the floorman and the dealer must be taught auditory cues:

Player also has Blackjack. The original bet is a push and the Insurance bet is paid 2-1. The Player will win "even money," or 1-1. In some Casinos, he is allowed to call "even money" and does not have to put up the Insurance bet. You would call out to the Floorman, "Even money." He would say, "O.K." and then, you would pay the original bet 1-1. If the Player is required to make the Insurance bet, the outcome will be the same, "even money," whether you have Blackjack or not. It is a courtesy to the Player to pay even money (74, 1982, p. 12).

B. Visual: Visual perception was the basic underpinning for all casino training and education. Students had to learn to read

layouts, wheels, boards, sheets, chips, cards, dice, currency, and signals from players, other dealers, and supervisors.

Blackjack, a basic casino game, had many visual requirements for the student to master. For example, on a "21" layout it was noted that in addition to the ability to learn visual cues, accurate color perception was needed in order to learn the game. A private school "21" brochure contained the following information:

The Blackjack table consists of a chip rack containing \$2,000 to \$3,000 in greens (\$25 checks), \$1,000 in reds (\$5 checks), 200 silver or metal \$1 tokens and about \$20 in halves. Blacks (\$100) and/or Whites (\$500) are filled on the game when the action calls for them.

The table is shaped so that six or seven Players can sit around it, all facing the Dealer. The layout has either six or seven circles, or boxes, printed on it so that each Player has a betting area. Also, the layout usually has printed messages, e.g., "Insurance pays 2-1," "Dealer must draw to 16 and stand on all 17's," or "Dealer must hit soft 17." The table has a discard rack and a money drop with a paddle. The game should also have a sign indicating the table minimum. The minimum bet can be \$1, \$2, \$3, \$5, \$25 or \$100 (74, 1982, p. 2).

Craps was found to be the table game placing the most difficult visual demands on the learner. The following list of instructions for stickmen who, along with boxmen and basemen, deal the game of craps, was an example:

1. Your eyes are kept on the dice at all times, until they are thrown. Do not be in a hurry to look the other way, but take a split second to be sure the shooter's hand is clean.
2. The stickman always has the right-of-way. The baseman waits for the stickman to get the dice out of the way before paying off the bets. If the stickman cannot get the dice, he asks for help. If the dice cannot be seen, say, "Call it," and the baseman or boxman will say what the dice are.
3. The dice are brought back outside the pass line, then to the middle of the table in front of the boxman.
4. DO NOT set up any bets once the player has the dice in his hands; just repeat the bet and let the chips stay where they land until you have brought the dice back to the center.

5. The stickman watches the end where the dice land. He must watch all payoffs at that end, as the boxman will be watching the other. After he is sure that the dealer on his end has finished, he checks out the other side and then proceeds.
6. Always be courteous. Call the players "Sir," "Miss," or Ma'am." They are not man, girl, buddy, or partners.
7. Repeat all proposition bets. Never just say, "Bet," but state the whole bet, such as, "One dollar hard eight."
8. The stickman announces to the baseman and player all payoffs of proposition bets. He shows the dealer who gets paid by pointing the stick in front of the player (on the layout). He makes sure that the baseman pays the correct amount and that the right persons receive the money. The stickman pays off his end first, starting with the player nearest himself, unless otherwise stated by the casino; some pay from the base dealer around to the stickman. An example of paying off a proposition bet: "Pay the gentleman fifteen dollars for his eleven and he is still up."
9. You do not carry on a conversation with a player or dealer while the game is in progress.
10. Announce that all odds and place bets are off coming out; also state that the HARDWAYS WORK UNLESS CALLED OFF.
11. Always make sure that the player hits the end (rubber backing) with the dice. HE MUST SHAKE THE DICE WITH ONE HAND; DICE MUST BE KEPT IN SIGHT AT ALL TIMES. If the player moves them out of sight, such as below the table, or drops one on the floor and reaches down with the other die in his hand to get it, BOTH DICE MUST BE GIVEN TO THE BOXMAN. Dump the bowl and give him new dice, unless the same dice are requested. ONLY THE SHOOTER CAN REQUEST THE SAME DICE.
12. If there is a disagreement with a player, do not argue; let the boxman solve the problem.
13. It is the stickman's job to keep control of the game. Watch for mistakes and call them to the attention of the boxman and dealer. This makes a top stickman.
14. If you do not hear or understand a bet, or if a player does not state an amount, say, "NO BET THIS ROLL." NEVER book a bet unless you are sure of what it is!
15. Try to get as many rolls of the dice as possible, but do not overrun the dealer.
16. Place proposition bets in the correct place on the layout. If you did not see who made the bet, ask the baseman.

17. Take down the losing propositions before paying winning bets. Leave the player up on the winning bets unless he asks for the bet down. For example: The player has \$1 on crap and \$1 on eleven. Eleven hits. BE SURE to subtract the dollar on any crap and leave him up on both bets. Then say, "Pay the gentleman fourteen dollars and he's still up on his crap-eleven."
18. NEVER MAKE CHANGE FROM THE STICK.
19. After the come out roll, pause so that the players can make their bets. Mention the hardways. For example, come out roll: "Six easy six, the point's six. Came easy, bet it hard!" Before the come out roll, mention eleven. For example, "Coming out, seven-eleven, any craps. Now's the time to bet yo' eleven!"
20. DO NOT CHEW GUM OR CANDY!
21. Speak clearly, not too loud and not too soft. Be loud enough so that all the players, crap dealers, boxman and floormen can hear.
22. NEVER PUT MATCHES, CIGARETTES, ETC., IN YOUR TOP POCKETS; THESE ARE FOR TOKES.
23. Set losing bets in front of the boxman. DO NOT THROW THEM.
24. DUMP THE BOWL IF A DIE GOES OFF THE TABLE unless the player states he wants the same one.
25. DO NOT DUMP THE BOWL IF THE DICE ARE ON THE RAIL OR IN THE BANK (the money in the rack in front of the boxman).
26. DUMP THE BOWL IF A DIE LANDS INTO IT. Do not pick out the one die.
27. DUMP THE BOWL IF A PLAYER PASSES THE DICE.
28. BE SURE THE BOWL IS BACK AGAINST THE MIRROR AFTER DUMPING.
29. DUMP THE BOWL FROM THE FRONT.
30. KEEP YOUR CHIPS A LITTLE DISTANCE FROM THE BOWL AND MIRROR (75, 1982, pp. 10-12).

C. Tactile: The sense of touch was especially important to those people learning to deal cards and cut chips. The following four items explained the intricate touch needed in handling cards and checks (chips):

1. Cut Checks

In order to excel at dealing, it is necessary to learn how to cut checks, i.e., cut checks with great proficiency. You must practice every day. (\$5 - red; \$25 - green; \$100 - black; and \$500 - white). Start with a stack of 20 reds. Cut the first amount with your index finger (5) and drop it on the layout. Now, push the rest of the stack into the first 5, using your little finger and thumb. Your other fingers should be poised and suspended. However, your index finger should be ready to do the cutting. Scrape the tip of your index finger across the center of the first five (5) and size the remainder down. Repeat the procedure until you have four stacks of 5 each in a straight line. Cut all the way through, as if you have 22 or 23 checks in your hand. Now, try your other hand. Practice cutting the checks down in 2's, 3's, and 4's. Practice making change. Cut \$5 checks in five's, \$25 checks in four's, \$100 checks in five's and \$500 checks in two's. Change for \$100 is twenty reds, for \$500 is twenty greens, etc. Practice drop cutting 3, 4, and 5 checks.

2. Spread

Spread the deck of cards face down on the layout by holding it with your right hand so that your index and middle fingers are on the left edge. Put an equal amount of pressure on the cards and make a sweeping motion from left to right. Try to spread the deck about 24" in a semi-circle. You will need to use the spread in order to check a new deck by starting at the right and moving each card verifying that all of the cards are there and that there are no duplications. Check the backs of the cards by spreading the deck face down.

3. Shuffle

There are four steps to a professional casino shuffle:

- a. Box the deck by pinching the edges with your middle fingers and thumbs or index fingers and thumbs.
- b. Break the deck in half by raising a portion with the thumb of your left hand.
- c. Keeping your hands flat, and most importantly, your index fingers straight, raise the corners fairly high, then release the pressure. The deck will shuffle itself. Do not bend the corners. Concentrate on an even shuffle. Do not slug shuffle. Watch the deck.
- d. Grab the ends of each portion. Make sure your little finger (or little finger and ring finger) is behind each section; then push together. Finish as you started by boxing the deck. Then repeat the procedure to shuffle again.

4. Strip

Break the deck in the same manner as above, but this time, bring the bottom portion to the top. Now, off the top of this portion, strip

5-8 cards, using your left hand to grab them. Let them fall to the portion now on the layout. Keep your left hand steady. Repeat this about four times, and then place the remainder on top and box them. Break for the next shuffle. Never end on a strip; always end on a shuffle (73, 1982, pp. 1-2).

2. Set

Simpson stated that set was, "A preparatory adjustment or readiness for a particular kind of action or experience" (58, 1967, p. 3).

A. Mental: In gaming education, a mental set or readiness for performing the function of dealing a particular game was predicated on the student's level of perception and its subcategories which were identified above (58, 1967, p. 3). Based on this premise, the student, in order to be mentally prepared to deal the game, had to master the game's auditory and visual concepts as well as its physical or tactile requirements. Figure 9, a course outline from the Original School of Dealing, gives an example of eleven basic functions that had to be learned so the student would have the desired mental set of a mini-baccarat dealer (6, 1981, p. 2).

The following Mini-Baccarat Course will be taught according to each student's ability.

1. Cutting Chips	7. Shoe Make-up for Mini game
2. Shuffle	8. Deck Lacing
3. Card Calling	9. Call Bets
4. Change Procedure	10. Markers
5. Payoffs	11. Game Protection
6. Commission	

Average hours per component: 10
Total hours per course: 120

Each component is taught one at a time. Upon satisfactory performance, the student will be checked off on a performance chart signed by the instructor. The student will then be taught the next step, and so on until all components are performed properly.

Figure 9. Mini-Baccarat Course Outline

B. Physical: Included the positioning of the hands and body prior to doing a task (58, 1967, p. 4).

Valley School of Gaming's Blackjack Manual gave an example of the importance of physical set in properly delivering cards:

Feed the first card by cocking your left thumb and then pushing the top card forward to the right. Grab the corner of that card with your index finger and thumb. Your index finger should be below the card, and the edge of the card should be resting just below the nail of your middle finger. Then, by flicking your middle finger, pitch the card over the Player's bet. The card should turn two or three times. At first, practice pitching to one bet. The bet is your target. You must pitch the cards directly over the bet. Remember the following:

1. Stand up straight and lean into the table.
2. Spread the deck in your hand.
3. Feed the card with your left thumb.
4. Grab the card with your right index finger and thumb.
5. Kick the card with your middle finger.
6. Pitch over the Player's bet.
7. Hold the deck just over the front of the check rack.
8. When pitching to several bets, move the deck. Do not stay in one position (74, 1982, p. 4).

C. Emotional: Included the elements of attitude and disposition as prerequisites for certain motor acts (58, 1967, p. 4).

Gaming was not viewed as a good occupation for the person who, because of unsuitable emotional set, was unable to handle pressure situations or distracting conditions. The Nevada Employment Security Department's description of the casino environment illustrated this point.

Nature of Work: Conduct activities at gaming tables such as roulette, craps, blackjack ("21"), and poker. Dealing is a highly skilled occupation. Advancement opportunities are enhanced by the degree of proficiency executed in dealing and by the ability to deal more than one type of game. Often work under stress and must be able

to perform efficiently with music playing nearby, noise reverberating from the slot machine area, and other conditions not conducive to the concentration required of the position.

The structure of a gaming table in relation to dealing positions can vary significantly among different casino operations. The duties also may differ within a casino depending upon the shift worked and, to some degree, by the volume of activity during any given shift. This is especially true for craps dealers (46, 1980, pp. 22-23).

The importance of attitude was further amplified by the following statements from Valley School of Gaming's Poker Manual.

Your attitude toward the customer is very important. A pleasant "hello" and a smile will go a long way toward making people feel at ease and helping them enjoy themselves. By being at ease yourself, you will also help the customer. Customers are by no means "suckers," "snores," or other descriptions sometimes used by dealers. (We know most terms ourselves, having all been dealers in the past.) People often tend to irritate dealers by asking silly questions, but you must realize that they don't know the answers or they wouldn't ask. Your friendly help to the customer is to your credit.

Excess conversation is not the answer to good public relations. Use of terms such as "honey," "sweetheart," with women customers is not in good taste. Use "Ma'am," "young lady," or "miss." The same applies to men: "Pal," "Buddy," etc., are not to be used. Instead, try "friend," "sir," etc. Again, keep within the bounds of good taste without being excessively familiar.

NEVER argue with a customer. Call the Floorman and let him settle any dispute. No argument is ever won if we lose the customer, so let the Floorman take the responsibility--that's what he's there for.

The Floorman will help you at all times; feel free to ask him any questions (76, 1982, p. 17).

3. Guided Response

According to Simpson, guided response was

...an early step in the development of skill. Emphasis here is upon the abilities which are components of the more complex skill. Guided response is the overt behavioral act of an individual under the guidance of the instructor. Prerequisite to performance of the act are readiness to respond, in terms of set to produce the overt behavioral act and selection of the appropriate response. Selection of the appropriate response. Selection of response may be defined as deciding what response must be made in order to satisfy the particular requirements of task performance. There appear to be two major subcategories, imitation and trial and error (58, 1967, p. 4).

A. Imitation: Encompassed such components as illustration, demonstration, and performanc based on demonstration and/or illustration (58, 1967, p. 5).

Figure 10, from Valley School of Gaming's Roulette Manual illustrated the physical movements of the push (77, 1982, p. 7).

For 1, 2, and 3 stacks, place your thumb on the top and either little finger or ring finger behind the stack. All of the rest of the pushes are made by placing your thumb on the layout. Your thumb and fingers must make contact with the bottom check, as illustrated below:

Note: The checks must be locked at all times throughout the push.

Figure 10. The Push (Roulette)

B. Trial and Error: was described by Simpson as

Trying various responses, usually with some rationale for each response, until an appropriate response is achieved. The appropriate response is one which meets the requirements of task performance, that is, "gets the job done" or does it more efficiently. This level may be defined as multiple-response learning in which the proper response is selected out of varied behavior, possible through the influence of regard and punishment (58, 1967, p. 5).

The goal of this concept's application was discovering the most efficient method of completing a task. In gaming education it was used for teaching such skills as dealing the game of poker.

Valley School of Gaming's Poker Manual stated

The fact that most students will be shills before they are allowed to deal makes this a logical and necessary part of the course. Many students, upon entering school, have no knowledge of dealing or playing poker. Shilling is playing poker according to casino rules, i.e., jacks or better in 7-card stud to see a fourth card. The student who can shill well and lose minimal amounts of the house money will have a job. Shills who don't do well at shilling or don't know the rules will not have a job. The fact that shilling is required when not dealing in many small card rooms makes this knowledge valuable (76, 1982, p. 12).

4. Mechanism

Simpson defined mechanism as

Learned response has become habitual. At this level, the learner has achieved a certain confidence and degree of skill in the performance of the act. The act is a part of his repertoire of possible responses to stimuli and the demands of situations where the response is an appropriate one. The response may be more complex than at the preceding level; it may involve some patterning of response in carrying out the task. That is, abilities are combined in action of a skill nature (58, 1967, p. 5).

Mechanism was further described as primarily those skills involving hand movements (58, 1967, p. 6).

The following exercises, taken from Valley School of Gaming's Roulette Manual, provided an example of mechanism in casino training:

Exercise #5

Pick up each check by snapping it into your palm, using your index finger and thumb. Build a stack of 10-12 in each hand; then, place them in one large stack and continue to muck the rest of the pile. You must learn the feel of 20 checks in one hand. The bankroll and colors are kept in stacks of twenty, so keep them neat and orderly, usually in rows of two.

Cutting Checks

Exercise #6

In order to excel at dealing any casino game, it is necessary to learn how to cut checks: i.e., to cut checks with great proficiency, you must practice every day. Practice with a stack of twenty. Cut the first amount with your index finger (5 checks) and place it on the layout. Do not thumb through the checks. Now, push the rest of the stack into the first 5, using your little finger and thumb. Your fingers should be raised and suspended, but your index finger should be ready to do the cutting. Scrape the tip of your index finger across the center of the first 5, and size the remainder down. Repeat the procedure until you have four stacks of 5. Make sure the stack is cut down in a straight line. Cut all the way through, as if you have 22 or 23 checks in your hand. Now, try the other hand. Practice cutting checks in 2's, 3's, and 4's (77, 1982, p. 6).

5. Complex Overt Response

Complex overt response as characterized by Simpson enabled the individual to

...perform a motor act that is considered complex because of the movement pattern required. At this level, a high degree of skill has been attained. The act can be carried out smoothly and efficiently, that is, with minimum expenditure of time and energy. There are two subcategories: resolution of uncertainty and automatic performance (58, 1967, p. 6).

A. Resolution of Uncertainty: was seen as the ability to perform a complex act with complete confidence and without hesitation (58, 1967, p. 6).

Figure 11, also from Valley School of Gaming's Roulette Manual, gave a typical example of the need for "resolution of uncertainty" in gaming education (77, 1982, p. 9).

You must know the money value per one hundred checks (5 stacks) for each denomination. Whenever it is necessary to make part of a payoff in money, the rule is to pay the hundred units in money and the odd amounts in wheel checks. For payoffs less than 100 checks, you can pay money per stack (20) and the odd amounts in wheel checks.

When converting a payoff or cashing out, remember the following:

Quarters:	\$25 per 100 - \$5 per stack
Halves:	\$50 per 100 - \$10 per stack
Dollars:	\$100 per 100 - \$20 per stack
Fives:	\$500 per 100 - \$100 per stack
Twenty-fives:	\$2,500 per 100 - \$500 per stack
One hundreds:	\$10,000 per 100 - \$2,000 per stack

For example, convert 26 split = 442, 50¢ checks. Pay 400 in money and 42 in wheel checks. Every 100 gets \$50. The payoff = \$200 in \$25 or \$100 house checks and 42 in wheel checks.

To figure the cash value for 25¢ checks, divide the amount of checks in half; then, divide one of the halves in half, e.g., 140 checks divided in half = 70 divided in half = \$35. The cash value for 50¢ checks can be figured by dividing the amount of checks in half: e.g., 140 checks = \$70.

For \$25 checks, add two zeroes. For \$5 checks, add one zero.

Figure 11. Converting Wheel Checks

B. Automatic Performance: centered on the individual's ability to execute a finely coordinated motor skill with considerable muscle control and skill (58, 1967, p. 6).

Typical check-cutting exercises, as shown in Figure 12, indicate that "automatic performance" is an important course objective in the teaching of casino table games (75, 1982, pp. 9-10).

Exercise #8

Common payoffs: Straight-up - 1 straight-up = 35 checks. Take two stacks (40), drop 5 checks from the bottom or take 5 checks off the top of one stack.

2 straight-up = 70 checks. Three stacks and 10 checks on top.

3 straight-up = 105 checks. Five stacks and 5 checks on top.

4 straight-up = 140 checks. Seven stacks, i.e., "Rosebud."

5 straight-up = 175 checks. Eight stacks and 15 checks on top.

6 straight-up = 210 checks. Ten stacks and 10 on top.

7 straight-up = 245. Checks + money.

Exercise #9

Figure 7-25, straight-up: Money + checks for: 25¢, 50¢, \$1, \$5.
Convert per 100 checks.

Exercise #10

Common payoffs: Splits

1 split = 17 checks. Drop three from the bottom of one stack.

2 split = 34 checks. Two stacks and cut 6 checks from bottom of the lead stack.

3 split = 51 checks. Two stacks and cut 9 checks from the bottom of one stack and place the remainder (11) on top or muck 11 checks from the dirty money.

4 split = 68 checks. Three stacks and 8 checks on top.

5 split = 85 checks. Four stacks + 5 checks on top.

6 split = 102 checks (can be used as a key)
(12 = 204; 18 = 306; 24 = 408)
Five stacks + 2 checks on top.

7 split = 119. Six stacks minus 1 check.

8 split = 136. Seven stacks minus 4 checks.

9 split = 153. Seven stacks + 13 checks.

Figure 12. Check Cutting

10 split = 170. Eight stacks + 10 checks.

11 split = 187. Nine stacks + 7 checks.

12 split = 204. Chips and money.

Figure 12. (continued)

Development and Evaluation Components of Curriculum Design

Charles R. Monroe felt that much of the future success of vocational education in the community college depended upon the quality of those relations established between its occupational programs, and the business community, and must be part of an ongoing process including curriculum planning and evaluation (44, 1975, p. 93).

Advisory Committees

The natural outgrowth of these relations between business and education was the advisory committee, which A. J. Riendeau described in his book, "The Role of the Advisory Committee in the Junior College." Riendeau was of the opinion that planning for occupational education programs first required the formation of an advisory committee composed of community, business, industrial, and labor leaders. He cited three basic types of advisory committees: general, occupational, and joint apprenticeship. The most pertinent to the casino field was the occupational advisory committee which Riendeau believed should be "skilled at assessing the values, objectives, and goals of specific skill areas or subsystems" (53, 1967, p. 7).

Advisory committees are part of what R. W. Stadt used as a five-way approach to planning for career education programs:

1. Analysis: Investigate and predict future trends.
2. Synthesis: Use all analyzed data to reach valid predictions.

3. Develop goals or objectives.
4. Implementation of the programs.
5. Evaluation of the programs (60, 1973, pp. 23-24).

Although implementation and evaluation would not seem to be part of the advisory committee's planning function, the handbook, "Developing the College Curriculum," pointed out that evaluation after implementation actually restarts the planning process. And that vocational-type programs are usually in a state of flux due to changing conditions in the workplace (10, 1977, p. 173).

Advisory committees were generally viewed as an evaluative tool. A representative example of this was found in Clark County Community College's following position statement:

Department and program advisory committees represent a liaison between the college community and the industries served. All programs have advisory committees which continuously evaluate and update curricula. They meet at least once a semester to adjust programs to existing and future needs and student proficiency (13, 1980, p. 143).

Figure 13 is a good illustration of a typical advisory committee with the evaluative function cited in parts II.A. and II.B.4 (62, 1978, pp. 44-46).

I. NAME

The name of this organization shall be the Small Business Management Advisory Committee of the Lake Region Junior College.

II. PURPOSE

- A. The major purpose of the advisory committee shall be to provide an association between the college and community which will, through advice, assistance and counsel, help establish, maintain and improve a program in small business management education.

Figure 13. Advisory Committee, Lake Region Junior College, North Dakota

B. Specific purposes include:

1. To provide advice and counsel concerning philosophy, objectives and curriculum of the small business management education program.
2. To be alert to new business and technical developments which require changes in curriculum or program operation.
3. To aid in securing enrollment by suggesting prospective enrollees and publicizing the program.
4. To make a yearly evaluation of the program.
5. To make appropriate recommendations through proper administrative channels to the administrative body of the school.
6. To provide a communications link between the college and the community, especially the small business segment.

III. AUTHORITY

- A. The committee shall serve in an advisory capacity only. Recommendations to the board of education shall be forwarded through appropriate administrative channels.
- B. The committee shall have no administrative or legislative authority and is not established to assume any of the rights or duties of the administrative body or administrative staff.

IV. MEMBERSHIP

A. Number of Members

The advisory committee shall consist of 9 members.

B. Qualifications of Members

Persons selected to serve on the committee should:

1. Be genuinely interested in the Small Business Management Education Program and be knowledgeable about the needs of small business managers.
2. Be broadly representative of small businesses in the community to be served.

3. Be willing to devote the necessary time and effort to serving as a committee member.
4. Possess desirable personal qualities such as integrity, responsibility, maturity, open-mindedness and a constructive attitude.

C. Committee Membership

The committee may include persons from the following groups:

1. Owners or managers engaged in business.
2. Class members or prospective class members.
3. Persons closely associated with credit institutions.
4. An instructor of business or farm management.
5. A person representing a profession.
6. Minority group members.
7. Ex-officio members for school liaison, such as a board of education member and/or a member of the school administration.
8. Editor of local paper or other mass media representative.

D. Selection of Members

1. Members shall be nominated by the small business management instructor and the director of the Lake Region Vocational Education Department.
2. Members shall be appointed by the board of education and shall be notified of their appointment by the director of the Lake Region Vocational Education Department.

E. Terms of Membership

1. Advisory committee members shall be appointed for three-year terms and may be reappointed for one term. Terms of membership shall begin on January 1.
2. Terms of membership shall be staggered so that approximately one-third of the committee will be

beginning terms each year. The initial committee members shall be either appointed for 1, 2, and 3 year terms or shall draw lots for these terms so that approximately one-third of the members will be appointed for each of the 1, 2, and 3 year terms.

V. OFFICERS AND EX-OFFICIO MEMBERS

- A. Officers of the committee shall consist of a chairman, vice-chairman, and secretary. The chairman and vice-chairman shall be regular committee members elected by the committee at the annual organizational meeting. The secretary, to be elected at the same meeting, may be a committee member or a school staff member.
- B. The small business management instructor and any board of education representative or school administrator shall serve as ex-officio members only.

VI. MEETINGS

A. Number of Meetings

The Small Business Management Advisory Committee shall hold its annual organizational meeting in January of each year to (1) receive new members, (2) select officers for the year and (3) plan their yearly program. It is suggested that committees hold at least 2 or 3 additional meetings each year. Special meetings may be convened at the call of the chairman.

B. Minutes

Regular minutes of the advisory committee meetings shall be recorded and maintained. Copies shall be distributed to all committee members, appropriate school administrators, and small business management education teachers.

Figure 13. (continued)

As can be viewed in Figure 14 from Henry Kalani's "Curriculum Guide for Hospitality Education," the advisory committee's scope in program evaluation further extends to judging the instruments used in evaluation (29, 1975, p. 131).

March 6, 1975

MEMORANDUM

TO: Hospitality Industry Advisory Committee Members

FROM: Henry Kalani

SUBJECT: Your Reactions to Updated Skills Survey

Attached to this memo is the updated Skills Survey of the hospitality industry personnel. It has been revised and, hopefully, is more accurate and useful in the revised form.

Please look it over critically, and return the pages to me at the next Advisory Committee meeting, which is March 24, 1975, at 2 p.m., in the AmFac Center Building, C. Brewer and Company Conference Room.

Please look at and react to the following:

What the Workers Do. This column describes the tasks performed by the worker on the job. If you find that some tasks are not described or are incorrect, please note them.

Skills and Knowledges. The skills and knowledges needed by the worker. Note the separation of the minimum and desirable amount of skills and knowledges required by the worker. This is essential for us in terms of the minimum skills we should train the students for. Please check the lists and edit as necessary.

- a. Minimum Requirements means the amount needed at the point of hire, not all of the knowledges and skills required on the job. What is the minimum needed to qualify for the job?
- b. Desirable Requirements means the additional skills and knowledges needed by the worker to do a good job and which are required for the job. These can be obtained after the worker is hired, through job development and training, and educational opportunities provided by company or other.

Earlier Column of "Equipment Used" has been combined under "Skills," and "Level of Competency" will be described as "Standards of Performance" to be done later.

Mahalo

Figure 14. Updated Skills Survey Memorandum

In the final analysis, the advisory committee's function, after basic responsibilities such as curriculum planning and evaluation were met, was providing the program's graduates with a form of "job insurance" or "employability" (57, 1978, p. 24). Kalani's project indicated this function had four target components including:

1. Students and graduates.
2. The institution and/or program.
3. Business and/or industry.
4. The community.

Each component benefits from a healthy, well-integrated relationship. The students and graduates are employed, successful, and happy, the institution and its program have increased enrollments and prestige due to alumni success; business and industry get better quality employees, lower turnover, and higher productivity; and the community gets a good citizen, a raised standard of living, lower unemployment, and an increased tax base (30, 1976, pp. 11-16).

Faculty Input

In a study conducted to demonstrate the effectiveness and usefulness of the Community College Occupational Programs Evaluation System (COPES) in assessing program areas in California community colleges, it was shown that in two samples of occupational program critical needs surveys, faculty members felt they were out of touch with both the students and industries or vocations they served (9, 1977, p. 29-46). Table 1 indicates the business occupations faculty needed training in, use of advisory committees (Rank 1), and fundamental curriculum development areas such as goal identification, job data, and real work involvement. Curriculum formulation could lose accuracy and be less effective if, as Table 2 suggests, faculty

are not aware of business conditions and attitudes. Table 3 also denotes problems for the Administration of Justice faculty in use of advisory committees (Rank 4) as well as program goals (objectives and direction), and student data input. In this instance, the same conditions exist as those listed for business occupations above, with an additional problem created by the lack of a student feedback system. Table 3 then, was a clear indication that the faculty information-base, in this particular instance, suffered from two major deficiencies which eventually would impact on curricular decisions (9, 1977, pp. 99-101).

Table 2. Five Top Rankings of Faculty Inservice Training Needs by Validation Teams at Eight Representative Colleges, Business Occupations Program Area

<u>Rank</u>	<u>Area of Training Need</u>	<u>Points</u>	<u>Colleges</u>
1	Advisory committees	13	4
2	College's occupational education goals and the mission of community colleges in occupational education	10	2
3	Obtaining and using data on job performance requirements	9	3
4	World-of-work linkages for full-time instructors	6	2
7.5	Involvement in professional organizations and conferences	5	2
7.5	Alternative teaching methods	5	1
7.5	Instructional materials, testing, and student objectives	5	1
7.5	Individualized instruction	5	1
7.5	Administrative decisions and actions resulting from faculty input	5	1
7.5	Orientation for part-time faculty	5	1

Table 3. Ten Most Critical Needs for Improvement Identified by Validation Teams at Eight Representative Colleges, Administration of Justice Program Area

<u>Rank</u>	<u>Item</u>	<u>Points</u>	<u>Colleges</u>
1.5	Inservice education opportunities for faculty (Item 27)	37	6
1.5	Use of student follow-up information (Item 9)	37	5
3	Provision for direction and coordination (Item 23)	33	4
4	Use of advisory committees (Item 34)	27	3
5.5	Use of measurable program objectives (Item 5)	25	5
5.5	Emphasis on counseling and guidance to evening and weekend students (Item 17)	25	3
7	Use of support staff (Item 28)	19	3
8	Use of information on job performance requirements (Item 8)	18	2
9	Number of instructors (Item 25)	16	3
10	Adaptation of program instructional approaches (Item 10)	15	2

Jack Lindquist also saw the problems associated with faculty involvement in curriculum decisions. He pointed out that there are so many levels to work faculty curriculum proposals through, that many curriculum committee members simply give up. As proposals reach various levels, confrontations occur with people who are unaware of the attributes or needs for those proposals, resulting in protracted debates. Committees meet on a limited basis with agendas predetermined and often merely acting as review groups for lower committees. Few committee members know how to facilitate

task group productivity and effectiveness. This problem is exacerbated by individual and groups interests which are traditionally protected (10, 1977, pp. 116-117).

James W. Reynolds pointed out that the instructional staff should hold primary responsibility for curriculum development, but to be effective in doing so, they must have:

1. Knowledge of student traits and how the individual student learns.
2. Knowledge of the subject matter with which the students will be concerned.
3. Knowledge of what constitutes efficient instruction (51, 1962, p. 119).

Reynolds further believed that the administrator-instructor relationship was the key to the success or failure of junior college curriculum development. He felt that on an administrative style continuum of democratic to authoritarian, the authoritarian style would produce mediocre curriculums due mainly to the fact that since instructional staff has little to do with decision making, they ultimately feel no professional pride in supporting or carrying out resultant programs. Conversely, at the democratic extreme, curricular resolutions are slowed due to an increased sharing of opinions and decision making. The outcomes, however, should be more favorable except where reaching a consensus requires settling for less than the best because of compromise (51, 1969, pp. 145-146).

Curriculum implementation through faculty committees was viewed by Lindquist as a team concept. He felt that team roles need to be strongly articulated and that all members must be oriented to their roles and functions. Figure 15 shows the general problem-solving activities a team

might take part in: identifying needs, clarifying objectives, searching and retrieving information, formulation solutions, gaining acceptance, making decisions, preparing for implementation, implementing and evaluating. Most committees carry out their functions through administrative directives. But internally, they will complete the full problem-solving cycle many times as they consider what to do next, decide, do it, and evaluate where that particular step took them (10, 1977, pp. 146-148).

Figure 15. The Development Process

The traditional committee role was that of being the thinking mechanism for the institution. The team withdraws to study the problem and returns with a solution which, in effect, lets the institution know what to do. Figure 16 depicts this "Solution-Giver" role. A problem can arise from this type of committee role in that professionals tend to resist having their thinking done for them, and may fail to share the team's

opinions. Upon receiving the finished product, they approach it with the same negative attitudes that the committee has already been able to work out during team deliberations. The outcome of this interaction between team members and contradictory faculty members should be the addition of functions to the team role, not ongoing conflict.

Figure 17 shows the added team role function of Catalyst and Facilitator of institution or program problem-solving. The committee initiates action, helps organize and chart it, brings information and expertise to bear on it, perpetuates it, helps settle discords in it, trains faculty for it, but avoids doing any of the thinking for faculty members. The team's skills, in the final analysis, are used to facilitate and stimulate the curriculum development process through their developmental skills, knowledge, and concerns (10, 1977, pp. 145-147).

Figure 16. The Solution Giver Team Role

Figure 17. The Catalyst/Facilitator Team Role

Student Input

Lindquist listed several ways to obtain student information relevant to curricular goal-setting, including:

1. The Learning Portfolio

Ask students during or prior to entrance, after a year or two of college, and at exit, to answer several questions such as the following:

a) What do you hope to learn in the next year or two? State your learning objectives, including if appropriate, the knowledge, skills, appreciations, occupational status and enjoyments you hope to derive. Be as specific and candid as you can. Take a look at the stated objectives for this institution (program) and state the ways your objectives and our programs do and don't fit. Keep in mind that you should not change meaningful personal goals just to fit our statement. Be frank about differences so we

can adjust our goals to fit yours. b) What learning have you acquired already in relation to the learning objectives you have just stated. Include learnings gained in formal schooling or through other experiences (jobs, volunteer work, travel, reading and living in another culture.)

Please specify what you have learned, not just what you have done, and indicate ways that those learnings can be verified. (What evidence would persuade someone else that you indeed have learned what you claim?)

c) Under what conditions do you learn most effectively? For instance, do you learn best from lectures and exams, readings, discussions, and papers; field assignments or lab work; by yourself or in a group; in competition for grades or in "mastery" arrangements in which everyone can achieve mastery; at a fairly fast pace or slowly, with care and repetition; only in subjects you know and like or in new and different areas; with supportive and informal teachers or with demanding and formal ones? Think of the times you felt you really were learning well. What made it work so well?

This Learning Portfolio can be designed as a survey instrument by inserting forced choice answers to each general question. It can be designed as an essay. Or it can be administered in an oral interview. The latter approach has particular merit when students find the questions unfamiliar ("Nobody ever asked me what I wanted before") or when writing is a problem for an otherwise qualified entrant. In each case, answers can be coded, tabulated and summarized to give a general picture of entering students. For the purposes of needs assessment, the Learning Portfolio may be administered only to a representative sample of students rather than to everyone.

2. The Survey of Student Characteristics

Several standardized survey instruments gather the kind of information or student characteristics that is helpful in setting program objectives.

STUDENT BIOGRAPHICAL INVENTORY (SBI)

This questionnaire is given to students at entrance to a college or program and covers prior educational experience and status, financial status, learning objectives, personal traits related to learning (e.g., independence, persistence, mathematical ability), and self-assessments regarding Bloom's cognitive and affective areas of development (e.g., ability to analyze, synthesize, clarify purposes, understand self and others). The SBI is used in several kinds of colleges and universities.

HIGHER EDUCATION MEASUREMENT AND EVALUATION KIT (HEMEK)

Along with student assessments of college environment, the kit includes student estimates of the student body on learning objectives and progress, academic orientation, cosmopolitanism, personal traits, values and priorities.

STUDENT INFORMATION FORM (SIF)

This is an annual freshman survey administered by the American Council on Education and Alexander Astin of UCLA. It includes questions on student backgrounds, past educational behaviors, and attitudes.

MYER-BRIGGS TYPE INDICATOR

The instrument assesses ways students feel they learn most effectively. Other instruments on learning styles include the Student Orientations Survey and the Student Learning Styles Questionnaire: General Form.

OMNIBUS PERSONALITY INVENTORY (OPI)

This instrument is designed to assess attitudes, values and interests relevant to academic functioning of students. Scales include: Thinking Orientation, Complexity, Autonomy, Practical Outlook and Estheticism.

STANDARDIZED EXAMINATIONS

The SAT, the College Level Examination Program (CLEP), the Undergraduate and Graduate Record Examinations (URE and GRE), and other such tests help assess student knowledge and intellectual skill at entrance, during the program and after exit. Such tests, aggregated, can suggest areas in which students are strong or weak.

3. Assessment of Learning Experiences

Besides student characteristics, it is helpful when setting program goals to know what kinds of learning experiences students are having. Are they experiencing the form of education we mean them to have? Several techniques for getting at that question follow:

TRANSCRIPT AND COURSE ENROLLMENT SURVEY

At the most general level, you can picture student learning experiences by studying transcripts and enrollment counts of courses or contracts taken. Is there a pattern of emphasis in certain fields? Do history majors take different kinds of sciences course than sociology students? Are certain courses consistently bulging and others nearly empty? Are certain supposedly upper division courses taken and passed by many lower division students, and vice versa? Can you identify informal interdisciplinary programs in the way students pick their course? Transcripts also include grades or written evaluations. These, when put against data on student characteristics and field of study, can suggest

which kinds of students seem to do well or poorly in what subjects. A computer program is usually necessary to produce these profiles, but if registration is computerized, it is not a programming task beyond the ken of local computer experts.

EXPERIENCE OF COLLEGE QUESTIONNAIRE

This instrument seeks to discover how students go about learning in courses and in the extra-curriculum. It asks them to describe what percentage of their time in particular classes they spend in such activities as listening and taking notes or participating in discussions, then what percentage of the time they spend studying for that course they devote to such mental activities as memorization, analysis and synthesis. It asks students how much contact they have with faculty members and close friends, what they talk about, and what impact these contacts have in such vectors of development as increasing intellectual competence and clarifying purposes. It devotes considerable attention to the extra-curriculum and includes a short scale regarding dependence and independence in learning.

PERIODIC INTERVIEWS

William Perry, in Forms of Intellectual and Ethical Development in the College Years, describes a process of assessing student development in college through periodic, in depth interviews. Ernest Palola and his staff in their Program Effectiveness and Related Costs Handbook, use such interviews at entrance, mid-point, and exit to provide a rich view of student experiences to augment surveys. A small sub-sample of the survey group can be asked to describe what they are studying, how they go about it, what they are learning, what helps and hinders that learning, and what they plan to do next to advance their learning. Their professors can be asked what they were trying to teach, how, and what seemed to them to help

or hinder the learning of the students in question. Case reports or content analysis of interview transcripts can yield vivid pictures of what a curriculum is currently doing to students.

THE SNAPSHOT

By directly observing a group of students all day for a week or two, and asking them to keep a log, you can develop another vivid depiction of the curriculum in action. Again, the faculty they contact during this brief period also can be observed and asked to keep logs. For a week or two, such inspection and recording usually is more curious novelty than noxious chore.

CRITICAL INCIDENTS

Critical incidents are another kind of snapshot. Ask selected students to focus on incidents that were particularly effective or ineffective (preferably one of each) learning experiences. Ask them to describe those incidents in full, either orally to recorders or in writing. A fair sample which includes students of varying backgrounds, objectives, abilities and learning styles should yield sharp views of the kinds of curriculum worth constructing.

COURSE AND TEACHER EVALUATIONS

Here is yet another source of valuable information for assessing program effectiveness. Ask faculty for permission to use their course evaluations to aggregate summary pictures of programs, not courses or teachers, with individual faculty rating kept confidential. In a small school, summaries of evaluations may need to be by general division, such as social or natural science, to protect individuals. Courses also can be aggregated in a major or non-major sequence to see, for example, how majors

evaluate all their physics courses over four years or how non-majors rate all the physics courses open to them.

PEER REVIEW OF OFFERINGS, COURSE DESIGNS AND SYLLABI

Students are good sources of information regarding their own learning experiences; but professional colleagues in the same field, perhaps as outside consultants, are better judges of the appropriateness and timeliness of program offerings, course schedules, assignments and bibliographies. Again, aggregate such data by program, keeping individual professors anonymous.

4. Assessments of Institutional Environment

There is such a thing as institutional "climate" which encourages or discourages learning and curriculum development. Is the institution open and tolerant of various ways to learn? Is there trust and respect among students, faculty, and administration? What kind of achievements are rewarded? Is it easy or hard to get institutional consideration of new ideas? Several instruments assess institutional environment.

THE COLLEGE AND UNIVERSITY ENVIRONMENT SCALES (CUES)

This instrument asks students to describe such institutional characteristics as a sense of community, the supportiveness of faculty-student relationships and the degree of attention paid to scholarly effort.

THE INSTITUTIONAL FUNCTIONING INVENTORY (IFI)

This survey instrument asks faculty members, students and administrators to rate such aspects of the institution's vitality as its diversity, the freedom of faculty and students, the amount of concern for undergraduates, the degree of democracy in governance, amount and adequacy of self-study and planning, concern for innovations, and esprit between faculty and administration.

5. Assessment of Learning Outcomes

Many of the instruments and procedures just described can be used as measures of learning outcomes. Pre-post tests of student learning abilities, attitudes and objectives, plus longitudinal case studies, form a nice package. Without pretests, it is not possible to have good evidence that a curriculum, rather than prior learning experiences, accounted for outcome abilities and interests. Without in-process pictures, a good view of why scores changed from entrance to exit will be lacking. Also, interviews and learning portfolios are excellent exit studies (whether the exit is graduation or attrition). With adaptation to allow for the forgetting curve and for later work and family experiences, most of these procedures can be used a year or five years after exit to see if residual effects of a program can be traced. Are they still reading books or going to lectures in a program area? Are they applying program learnings on the job, at home, or in the community? Are they accomplishing the objectives they had in mind during college? Looking back, what college learning experiences now seem most valuable to them? Such questions may have to be answered over the phone, for mailed surveys to college graduates are devilishly hard to get back; but the information can be well worth the trouble. A low-cost way to conduct such interviews is to ask current students to conduct them as a way for them to learn what it is like after graduation and what current learning experiences they may want to have.

6. Assessment of Program Costs

In setting program objectives, it is well to keep costs in mind, for they are unavoidable and become major issues, especially in these times of rising expenses. Normally, costs are measured only in dollars; but the human costs of overwork, of doing unrewarded or unenjoyable work, take

their toll as well. One assessment tactic worth considering, therefore, is an interview or survey of staff members to ask them their attitudes about activities in and rewards from current curriculum. Also, three dollar-costs analysis approaches are worth considering:

PROGRAM EFFECTIVENESS AND RELATED COSTS (PERC)

Under support from the Fund for the Improvement of Post-Secondary Education (FIPSE), Empire State College, in cooperation with the University of Wisconsin at Green Bay, Northland College, the State University of New York-Plattsburgh, and Hampshire College, is developing a way to assess program costs in relation to the amount of learning which occurs in students as estimated by students, faculty and external measures. It is among the first approaches to relate costs to learning and therefore is of major importance.

NATIONAL CENTER FOR HIGHER EDUCATION MANAGEMENT SYSTEMS (NCHEMS)

Also under federal subsidy, NCHEMS has developed computer-based costs analysis instruments and procedures in cooperation with a national network of colleges and universities. Primarily a system to assess unit costs rather than learning costs, it nevertheless is a very helpful tool and is in the process of developing learning outcomes measures.

CASC COST ANALYSIS PROGRAM

The National Research and Management Project of the Council for the Advancement of Small Colleges has developed a system for determining detailed comparative instructional costs for four-year private colleges. It identifies unit costs by department and student program (major) and is based on NCHEMS' Program Classification Structure. A simplified data collection system has been designed, and cooperative electronic data processing service is available at modest cost (10, 1977, pp. 125-130).

Reynolds contended that a student's value system impacts greatly on the nature of curriculum, especially in the two-year college. For the student who views education as a means to attain full-time employment, course requirements that are not directly applicable to the vocational core are resented and will not do him any good in the long run less instructors are aware and concerned enough to help him overcome his negative feelings. Students with unrealistic educational goals also impact on curriculum through failure or avoidance of courses beyond their limited abilities (curriculum curtailment).

The most important fact brought out by Reynolds was that based on many years of data, 67 to 75 percent of all two-year college students do not transfer to four-year institutions, but that about 75 percent of two-year college curriculums are planned for the transfer student. These findings indicated that community colleges essentially have failed to meet their established purpose by ignoring the needs of the majority of consumers (51, 1969, pp. 146-147).

Fred L. Pincus, of the University of Maryland, collected data which indicated that based on student feedback, two-year college vocational programs failed, in many cases, to deliver what they promised. A major problem was that numerous vocational curriculums were designed strictly to provide industry with skilled workers and gave no consideration to the future growth and mobility of the graduate. Pincus, as shown in Tables 4 and 5, viewed these "industry centered" curriculums as being highly questionable in terms of the graduate's income potential and employability (50, 1980, pp. 332-361).

Table 4. Unemployment Rates of Former Community College Vocational Students not Enrolled in School

State or Study	Year	Former Vocational Students	
		Graduates (n)	Nongraduates (n)
Somers	1969	2.9% (587)	n.a.
Virginia	1972	2.4 (2,237)	3.8% (3,908)
Wilms	1973	13.3 (772)	n.a.
Minnesota	1972	8.3 (n.a.)	n.a.
	1973	9.0 (n.a.)	n.a.
	1974	13.4 (n.a.)	n.a.
	1975	11.9 (n.a.)	n.a.
Connecticut	1975	9.3 (388)	n.a.
Illinois	1975	7.5 (266)	7.3 (993)
	1976	4.0 (673)	6.1 (507)
Colorado	1976	2.3 (7,350)	n.a.
Pennsylvania	1976	10.2 (3,111)	n.a.
Texas	1976	6.2 (2,644)	10.2 (1,041)
New Hampshire	1975	9.0 (606)	n.a.
	1977	5.6 (887)	n.a.
Hawaii	1976	14.4 (n.a.)	n.a.
	1977	9.4 (717)	16.1 (99)
South Carolina	1977	9.4 (785)	14.4 (1,372)

n.a. = not available

Table 5. Annual Incomes of Graduates and Nongraduates of Community College Vocational Programs in Four States

State (Year)	Graduates	(n)	Nongraduates	(n)
Virginia				
Initial income ^a	\$5,320	(1,505)	\$ 4,934	(2,232)
Latest income ^b (1972)	6,759	(1,571)	7,409	(2,358)
Illinois				
First year ^c (1975)	5,508	(254)	7,452	(779)
Second year ^d (1976)	6,792	(774)	8,436	(439)
Maryland				
Began New Job				
Initial income ^a	7,486	(232)	6,469	(233)
Latest income ^b (1976)	9,636	(271)	9,212	(268)
Kept Same Job				
Initial income ^a	7,717	(45)	9,184	(267)
Latest income ^b (1976)	9,471	(50)	11,528	(330)
South Carolina (1977)	7,656	(706)	7,392	(1,181)

^aIncome of first job after leaving college; since not all students left at the same time, these data refer to salaries in several different years.^bIncome of most recent job.^cStudents who graduated or dropped out within one year.^dStudents who dropped out after one year or who graduated within two years.

William H. Berquist, a higher education consultant, listed five different approaches used in increasing student participation in curricular matters:

1. Students are given increased freedom in the selection of their own course of study from among traditional offerings;

2. Students engage in individualized learning through tutorial or independent study programs;
3. Students draft individualized learning contracts in association with faculty members or mentors;
4. Students work together with faculty, on a yearly basis, in the formation of new curriculum which is responsive to the needs of both parties; and
5. Students initiate and run their own courses or curricula.

A primary drawback to these student-centered approaches to curriculum design was a lack of continuity from year to year, and the resultant inability of faculty and students to make full use of the institution's assembled resources.

A second disadvantage was the inability of many students to survive and improve in this kind of educational environment. Most students are accustomed to traditional classrooms in which instructors dictate the direction of the course. The responsibilities which must be assumed by persons in a student-centered curriculum often generate a great deal of discomfort and confusion among those who have successfully adjusted to a more traditional setting (10, 1977, pp. 101-103).

Chickering has identified four categories of people who are inclined to find the student-centered curriculum attractive:

1. Young persons who want to take major responsibility for planning and carrying out their own educational programs;
2. Working people who have completed courses offered by their employers or unions, and veterans who start from studies undertaken during military service;

3. Older or retired, pursuing new interests or new careers, who want further education which suits their particular interests and which recognizes the experience and knowledge they already have; and

4. Men and women of all ages who must pursue education while continuing substantial employment in or out of the home (10, 1977, p. 103).

Clark County Community College allowed for a limited degree of student-centered study within its casino management program as shown in its CM 197B course description in Figure 18 (14, 1982, p. 68).

CM 197B: Casino Practicum/Internship

Students will have an opportunity to gain practical gaming work experience with cooperating Casinos prior to graduation. The supervised program is flexible and may be designed as either a single or multiple department internship, depending on the student's level of education, background and experience.

Prerequisite: Limited to resort area majors--Casino, Hotel, Food Service or approval of the instructor.

3 credits

Figure 18. Clark County Community College, Course Description, Number 4

Chapter Summary

This chapter concentrated on research of existing gaming curriculums in higher and proprietary education.

Special emphasis was given to the study of the cognitive and psychomotor domains contained in Bloom's Taxonomy of Educational Objectives and their relationship to existing gaming curriculums and casino industry skills.

Also examined were various curricular models and principles. Included were acknowledged components used in curriculum development and evaluation such as faculty, advisory committees, and students.

Chapter 3

DESIGN OF THE STUDY

This study was conducted by using various resources including questionnaires, personal interviews, and extensive literary research. The literary research provided a theoretical framework on which other elements of the study could be supported. Since the subject matter of the research, gaming education, had not been undertaken in any known prior study, the instrumentation was developed mainly by using existing proprietary gaming school curriculums, vocational/technical curriculums, hospitality curriculums, business curriculums, and casino industry job and position classifications as a base.

Research Design

Population

Groups surveyed for this study included:

1. Managers in the Southern Nevada gaming industry.
2. Workers in the Southern Nevada gaming industry.
3. Students enrolled in the casino management classes at Clark County Community College, North Las Vegas, Nevada.

The Las Vegas area provided a good population to draw the samples from since it had the largest number of casino operations and, consequently, more persons employed in gaming than any other place in the world (36, p. 18, 1981). Many of those surveyed had worked not only in Las Vegas but in casino operations in Northern Nevada, New Jersey, and various foreign countries. Las Vegas also provided the advantage of a multiplicity

of casino operating modes including corporate contrasted with individually owned casinos, large convention hotel/casinos opposed to small casinos having no hotel rooms, and "high roller" versus "grind" operations (56, p. 245, 1974).

Distribution

Questionnaire Forms 1A (see Appendix A) and 1B (see Appendix B) were administered to a 230-person sample and personal interviews (see Appendix C) were conducted with 108 respondents.

Distribution of instruments 1A and 1B was accomplished primarily through direct mail to various casino personnel in the Las Vegas gaming industry, using the Las Vegas Chamber of Commerce VIP publication as a mailing list source (25, 1981, pp. 37-46). Secondary distribution of 1A and 1B was achieved by hand carrying the instruments to ten Las Vegas casinos and placing them in areas such as dealers' lounges and the casino cage. The third mode of distribution was effected by administering the questionnaires to students in two Casino Management classes at Clark County Community College.

Personal interviews were facilitated by both telephone conversations and in-person meetings. Telephone interviews were conducted using the Las Vegas area telephone directory yellow pages. Casinos were telephoned at random and potential respondents were asked for by their job titles such as Casino Manager, Shift Manager, Pit Boss, Floorman, Cage Manager, Credit Manager, and Slots Manager.

In-person interviews were completed in eight random casinos. Approval for the interviews was gained from the Casino Manager in all cases. After approval was secured, interviews were conducted during break or meal periods in the dealers' lounges or executive dining areas.

Interviews were not conducted in any of the ten casinos that had already received distribution of the questionnaires 1A and 1B.

Instruments

Three instruments were used to gather the data including:

1. Questionnaire Form 1A, shown in Appendix A, focused on the degree to which respondents felt that specific areas were important in gaming curricula. The questionnaire had fifteen items and used a four-response, numbered scale. Number 1 on the scale was "HIGH IMPORTANCE"; number 2, "MEDIUM IMPORTANCE"; number 3, "LOW IMPORTANCE"; and number 4, "LITTLE OR NO IMPORTANCE."

2. Questionnaire Form 1B, shown in Appendix B, concentrated on obtaining opinions about areas of gaming curricula that were more exact in nature. The questionnaire had eleven items and used a simple three-response answer mode consisting of "YES," "NO," and "NO OPINION."

3. The Personal Interview Form, shown in Appendix C, centered on more complex answers and allowed for respondents to express opinions with wider latitude. The instrument had eight items which called for multiple responses based on some degree of mental calculation and/or contemplation.

Interview items were supplemented by the following interviewer explanations:

Item 1. Rank the various casino table games in order of their importance.

Explanation: According to customer demand, casino profits, and trends in the gaming industry, rank the following: "21," Craps, Roulette, Baccarat, Poker, and Big Six.

Item 2. Rank the basic casino skills in order of their importance.

Explanation: In order of significance, name the necessary managerial and technical skills you would emphasize for a career gaming individual, such as dealing, promotions, casino credit, accounting, slots, collections, surveillance, supervision, protection, electronic board games (Keno and Bingo), and cage operations.

Item 3. What do you consider the greatest education/training need in the gaming industry?

Explanation: Where is the gaming industry having personnel and/or skill problems? What one major area of the gambling business could be improved through education?

Item 4. How can a two-year college best serve the needs of the gaming industry?

Explanation: In a broad sense, what should be a college's mission in serving the industry? Should it be vocational/technical, managerial, specialized, or some other form of curricular delivery system?

Item 5. How would you sequence gaming courses?

Explanation: In what order would you teach the gaming courses? What are the introductory-level versus the advanced-level courses?

Item 6. Who should determine the content of a two-year college gaming curriculum?

Explanation: Who are the specific persons in the gambling industry, public and private education, or other areas, that would be most qualified to decide on what the institution should teach?

Item 7. Who should teach two-year college casino courses?

Explanation: Other than the college's full-time staff, who would you select to teach the areas you identified on Items 1, 2, 3, and 4?

Item 8. What teaching methods would you use in a two-year college casino program?

Explanation: There are many methods available to teach various technical, managerial, and special skills used in the gaming industry including: lectures, laboratories, on-the-job training, internships, tutorial, and independent study. What are your choices for the areas identified on Items 1, 2, 3, and 4?

The three instruments were developed by using input from a committee of gaming industry supervisors and executives. These individuals were all involved in gaming education as part-time instructors in the Casino Management program at Clark County Community College. The committee members were: Ken Yerike, Director of Casino Observation, Sahara Hotel; Ron Halm, Surveillance Supervisor, Tropicana Hotel; David Schugar, Floorman, Stardust Hotel; Michael Musante, Pit Boss, Dunes Hotel; Glenn Schuler, Electronic Games Supervisor, Del Webb Corporation; and Don Spence, Casino Manager, Hotel Continental.

Treatment of the Data

The results of all three instruments were counted manually using a Rockwell 202 Slide Rule Calculator for computations. These results are shown in Appendices A, B, and D. Tables and figures indicating response comparisons and patterns are displayed and analyzed in Chapter 4.

Assumptions of the Study

In this study, several assumptions were made. The assumptions reflected the history of the gaming business, which, over time, has evolved its own customs and methods for career advancement and training (46, 1980, pp. 21-27).

1. It was assumed that the foundation of a gaming curriculum should contain basic technical and/or vocational components such as knowledge of table games, slot operations, and cage operations. This view was supported not only by industry "career tracking" practices, but by the gaming control agencies in Nevada and New Jersey, who demand extensive "on-the-job" industry training and background prior to granting "key employee" (higher level executive) licensing (61, 1981, p. 6).

2. It was assumed in this study that the personnel employed in the gaming industry were qualified to report, with a reasonable degree of accuracy, through both questionnaires and personal interviews, the basic educational and/or training needs of the gambling business.

3. It was assumed in this study that students enrolled in the Casino Management program at Clark County Community College were qualified, by reasons of education and experience, to respond on questionnaires to the basic educational and/or training needs of the gaming industry.

4. It was assumed for this study that individual respondents would judge the importance of the various questionnaire and personal interview items based on their own frame of reference and career experience.

5. It was assumed for this study that many of the respondents were "work experience" rather than "formal education" oriented (46, 1980, p. 27).

6. It was assumed that opinions expressed by those respondents used in this study would have reasonable long-term applicability and validity in legalized casino markets of the future.

Curriculum Models Surveyed

Curriculum models reported in the literature appeared both in narrative form and schematic configuration. Models used in the study were limited to those with some degree of relevance to gaming education.

Taba, cited in Chapter 2, developed a basic model for curriculum design. Her model, shown in Figure 19, had certain components useful in specialized programs like Casino Management such as

1. Learning Experiences.
2. Staff Utilization.
3. Curricular Scope.
4. Course Sequence.
5. Learning Accountability.
6. Course Content (64, 1962, p. 438).

Irwin Goldstein's model was a systems approach schematic emphasizing specific instructional objectives, controlled learning experience to achieve the objectives, criteria for performance, and evaluation.

This model, shown in Figure 20, involved three phases: assessment, training and development, and evaluation. The most important aspect of the model was that it represented a total system, incorporating the important instructional processes that should be part of a well-conceived educational and/or training program (22, 1974, p. 18).

The model had several advantages when applied to industry-related programs such as gaming. First it provided a frame of reference for planning and evaluation. It emphasized that evaluation was an important part of the total system and not an activity undertaken only when something was wrong. Second, use of the model gave impetus to the establishment of education and/or training objectives and the development of evaluation

Figure 19. A Model for Curriculum Design (Taba)

Figure 20. The Goldstein Model of an Instructional System

procedures. It directed attention to the agreement that should exist between industry goals and overall educational objectives and added the necessary emphasis to evaluation planning. This model also represented a closed-loop system that used feedback to modify the program continually. The greatest benefit to be derived from the model's use was its flexibility. Programs were viewed as unfinished products; they could be continually modified by information indicating whether the program objectives were being met.

Berquist identified three types of college curricular models applicable to gaming education: Career-Based; Future-Based; and Experience-Based (10, 1977, p. 83).

The following examples were used to illustrate each of the three model types.

Career-Based. Warren Wilson College in Swannanoa, North Carolina, was typical of what many institutions use as a career-based curriculum model. The college had an on-campus work-study program designed to mirror the real world of work. The model included the following elements:

1. The Work Council, which functions like a company or corporation.
2. The Work Director and Assistants, who function as the Chairman of the Board and his or her staff.
3. Work Supervisors, who function as managers.
4. Work grades, which serve as employee evaluations.
5. Supervisor and Work Director evaluations, which simulate grievance procedures.
6. Job changes, which mimics career mobility patterns.

7. Work probation, which serves as alternative punishment to firing.
8. Work program disciplinary actions, act as methods of placing negative information into an individual's file.
9. Warnings and firings.
10. Timekeeping, serves as a method of keeping track of hours worked (80, 1977, pp. 2-5).

Future-Based. William James College in Allendale, Michigan, set forth its future-based curriculum model in the following:

WILLIAM JAMES COLLEGE aims to be person-centered, fostering intellectual and personal growth within a community of learners.

WILLIAM JAMES COLLEGE aims to be future-oriented, connecting our programs and activities with humanity's projected needs.

WILLIAM JAMES COLLEGE aims to be career-directed, with programs and activities satisfying and socially useful work, as well as to enable those who wish to move on to advanced study.

It is important to note that at William James, career education is not viewed as incompatible with a liberal arts education.

The curriculum is created anew each term, in response to three co-equal tensions: (1) is the proposed course something that a particular faculty member desires to offer? (2) is the proposed course something that the college might want to offer frequently? (3) is the proposed course something that students have expressed an interest in having offered?

Students are challenged to set and test their own goals, and seek out or create learning situations that will fulfill those identified needs. Learning situations may include taking classes at other undergraduate institutions, taking classes at the other Grand Valley State Colleges, taking classes at William James College (which they may have helped to create); independent study; and internships or work experience. The individual programs do not require classes, majors, or minors. There are

no distribution requirements, letter/number grades, or examinations. The curriculum is un-ranked.

Requirements for the B.S. degree are: (1) 45 hours in the Synoptic Program (students select from one to four concentration programs and illustrate the relationship of each concentration by integrating the whole unit), (2) 45 hours in the concentration program in which the degree is awarded, and (3) demonstration of the ability to write with clarity (10, 1977, pp. 274-275).

Experience-Based. The Prescott Center for Alternative Education, an outgrowth of the now defunct Prescott College, in Prescott, Arizona, developed an Experience-Based curriculum model using the following Learning Log notebook as its framework:

The Learning Log is a notebook which collects, orders, sorts, and focuses learning. Through the Log we can record what we experience while learning. This record allows us to share learning with others.

The Learning Log is primarily an organization tool. The exercises and discussions in the Learning Log Workbook can be used to help you learn more from your work. The exercises are for your benefit; they do not have to be done for anyone else. Use the ideas in the Workbook when they seem appropriate.

There are six sections in the Learning Log. Each section is designed to help with different aspects of learning. Use the sections which are most useful to your particular study project. The sections are:

PLANNING-getting ready and continually checking plans.

LISTENING-hearing what others think about your work.

RELATING-putting the pieces together, digesting the experience, and relating it to yourself.

CREATING-saying it in another way.

TELLING-summarizing the learning experience for others.

There are many ways the Log can be useful:

- .To help you plan your study.
- .To help you make better use of your teacher and advisor.
- .To help you relate your studies to other aspects of living.
- .To help you develop your skills of awareness.
- .To help you focus on your strengths and weaknesses.
- .To help you use your abilities and energies more effectively.
- .To help others see the value of your experience.

INTERRELATIONSHIPS OF THE SECTIONS

The Learning Log is a complete system. Each of the sections work to enhance the others. If we delete one section, we lose the power of the whole Log. The sections not only convey different aspects of the work, they also balance each other off. There are many different ways that the sections can work together. If you notice that you usually use only one or two sections, deliberately use another section. Ask yourself how you can benefit from using the different sections of the Log. Remember that the Log is a complete system which is interrelated. Allow these relationships to develop. Be selfish and let the Log help you derive more from your learning experiences (10, 1977, pp. 210-216).

The three preceding example models each contained several elements and/or concepts applicable to a casino curriculum model.

WMC, the Career-Based Model, included a real-world "work simulation" approach similar to the type used by all the surveyed proprietary gaming schools (75, 1982, p. 2).

WJC, the Future-Based Model, included internships, work experience, and independent study such as was available in the Casino Management program at Clark County Community College (14, 1982, p. 68).

Prescott Center for Alternative Education, the Experience-Based Model, included specific behaviors and activities such as those related to learning casino table games (75, 1982, p. 5), specific responses like those required in learning the casino game of craps (75, 1982, p. 9), and empathy, which was viewed as necessary for casino employees and managers (46, 1980, pp. 21-27).

Kalani, whose Curriculum Guide for Hospitality Education was designed specifically as a model for development of new programs in community colleges, was found, through an extensive ERIC computer search, to be the most viable theoretical model for developing gaming curricula (29, 1975, p. 2).

This model was described in the following narrative outline:

The Program Model

First: Established employment demand from high to low;

Second: Selected high and medium occupational
classifications;

Third: Reviewed skills and knowledge of selected
occupational classifications; and

Fourth: Decided on major curriculums.

First: Demand Factor

Among the 19 occupational classifications surveyed in Part I, many of the job positions fell into high to low employment demand categories.

HIGH	Food and Beverage Service Personnel
EMPLOYMENT	Food Preparation Personnel
DEMAND	Housekeeping Personnel
	Maintenance Utility Personnel
	Guest Contact Personnel
	Office Clerical Personnel
	Management and Professional Personnel
	Accounting Personnel
MEDIUM	Uniform Service Personnel
EMPLOYMENT	Attendant Personnel
DEMAND	Other Maintenance and Mechanical Personnel
	Sales Personnel
	Storeroom Personnel
	Security Personnel

LOW	Dispatcher Personnel
EMPLOYMENT	Other Transportation Personnel
DEMAND	Recreational Personnel
	Computer Personnel

Second: Selection Factor

From the 19 occupational clusters, 15 occupational clusters were selected which would provide significant employment and career opportunities.

- (1) Supervisory, mid-management, and professional
- (2) Sales
- (3) Guest contact clerical
- (4) Office clerical
- (5) Accounting
- (6) Storeroom
- (7) Security
- (8) Uniform services
- (9) Housekeeping
- (10) Mechanical and maintenance journeymen
- (11) Grounds and maintenance utility
- (12) Food and beverage service
- (13) Food preparation and kitchen
- (14) Reservations and ticketing
- (15) Guide Attendant

Third: Skills and Knowledge Factor

With the selection of the 15 occupational clusters, a thorough

review of needed skills and knowledge was done in order to develop curriculums that provided necessary training and education.

Analysis of the Skills Survey, Part I, indicates that there are two classes of skills and knowledge which can be grouped into: (a) core learnings and (b) specialized learnings. It is evident, therefore, that any curriculum developed for hospitality education should plan to incorporate each of these. Core learnings are an important part of all 15 occupational clusters. In addition to the core learnings, specialized learnings would be required for food and beverage services, and hotel, tour, and travel services.

Fourth: Curriculum Factor

The 15 selected occupational clusters suggest that they can be divided into two curriculum components: food and beverage service and hospitality service.

Based on these two components, the Exemplary Project proposes seven major curriculum, any or all of which are recommended for development by each of Hawaii's community colleges to prepare students for gainful entry-level employment and career consideration in the hospitality industry.

a. Food and Beverage Service Curriculums:

- (1) Restaurant Operations
- (2) Culinary Arts - general cooks
- (3) Culinary Arts - chefs
- (4) Food Service Management

Figure 21. Hospitality Education Curriculum Design (Specific)

HOSPITALITY EDUCATION CURRICULUM DESIGN

Figure 22. Hospitality Education Curriculum Design (General)

b. Hospitality Service Curriculums:

- (5) Hotel Operations
- (6) Travel Operations
- (7) Hospitality Service

Upon meeting the requirements of a major curriculum, the student will be awarded a certificate or degree testifying to preparation for entry-level and specialized career positions:

- a. Certificate of Achievement, for those job positions that are first-line entry but require some cognitive and affective learning, as well as psychomotor learning;
- b. Associate in Science Degree, for those job positions that have career ladder potential and require cognitive, affective, and psychomotor learning; and
- c. The Exemplary Project suggests the awarding of a Certificate of Completion for students or workers who satisfactorily complete a special course or skill that requires training for a short period of time (29, 1975, pp. 21-23).

Figure 21 shows Kalani's curriculum design model schematic, as specifically applied to Hawaii's community colleges, while Figure 22 is a schematic of the model in simplified general application form (29, 1975, pp. 27-28).

Kalani justified the design in the following:

The Core Learnings

There are certain basic skills and knowledge that a person must possess to be qualified for job placement in the hospitality industry and also to find personal satisfaction. These are the core learnings or courses important to all industry personnel:

Communication Skills
 Computation Skills
 Culinary Terms
 Human Relations Skills
 Industry Orientation
 Information on Hawaii

These core learnings or courses were developed for the three degree curriculums:

Cooperative Education
 Hospitality Management

The Specialized Learnings

Each occupation in the industry carries with it requirements for certain skills needed to get the job done. It is significant that in today's job market two areas, food and beverage, and hotel and travel service command total employment in Hawaii's hospitality industry. In general, jobs in food and beverage are dining room attendants, food preparation and kitchen personnel, supervisory personnel; and in hotel and travel service they are those who work in hotels and in tour and travel. These specialized learnings or courses were developed to meet the special needs of this segment of industry's personnel:

Food and Beverage Service Skills
 Food Preparation Skills
 Hotel Service Skills
 Travel Service Skills
 Salesmanship
 Business Machines
 Computer Science

THE CURRICULUM DESIGN

The two sectors of learnings form the framework for the curriculum design. Within this structure, students will find their area of study, from basic to advanced, from entry-level jobs to management positions. Each major curriculum employs the same structural design.

1. Each curriculum will include selected core learnings or courses; and
2. Each curriculum will offer training in specific skills for targeted job positions.

EXPLICATION ON SELECTION OF CORE AND SPECIALIZED COURSES

Once the curriculum design was established, the task at hand was to develop core and specialized courses that would best prepare students to enter the job market as qualified persons well able to find a place for themselves in the hospitality industry.

As plotted in the curriculum design, every student, whatever curriculum he is enrolled in, will receive corresponding parallel learnings in general skills and knowledge. In the structure of special training courses, however, attention is given primarily to particular job demand and needs (29, 1975, pp. 30-32).

Chapter Summary

This chapter identified the research approach, reviewed the elements and instrumentation of the research design, listed the assumptions of the study, and surveyed various curriculum models.

The curriculum models surveyed provided several components which were used in selecting the final Casino Curriculum Model including:

1. The Taba Model contained methods for selecting curricular experiences and organizing curriculum.
2. The Goldstein Model emphasized the need for correlating industry goals with educational goals.
3. The Warren Wilson College Model stressed the need to reflect the world of work in its curricular design.
4. The William James College Model emphasized a multiplicity of educational experiences within the curriculum.
5. The Prescottt Center Model accentuated the need for the curriculum to be designed as a complete system.

These components were all found in Kailani's Model, which became the theoretical base for the final Casino Curriculum Model.

Chapter 4

CASINO CURRICULUM MODEL

The Kalani Model as depicted in Chapter 3, utilized a four-step approach to curriculum design. When employed in casino curriculum development, this approach required that the institution gather developmental input from gaming industry sources within its service region.

Model Implementation

For purposes of this study, Clark County Community College and the greater Las Vegas area that it serves were selected as an example situation to which the model could be applied (24, 1979, p. 9).

Step 1: Demand Factor

Employment demand for the Las Vegas area was determined by:

- A. Labor projections, information, and data;
- B. Gaming revenue statistics;
- C. Questionnaires; and
- D. Personal interviews.

Labor projections from the Nevada Employment Security Department are shown in Table 6 (46, 1980, pp. 2-5).

Table 6. 1982 Gaming Occupations Projections

<u>Occupational Area</u>	<u>Projected Job Openings</u>
Blackjack (21) Dealers	952
Change Persons	445
Craps (Dice) Dealers	347
Keno Writers	279
Dealers (other than "21" and craps)	177
Casino Cage Cashiers	162
Keno Runners	107
Miscellaneous Gaming Occupations	45
Keno Checkers	41
Craps (Dice) Box Persons	28
Casino General Managers	13

It was noted that the Nevada Employment Security Department did not separate individual gaming management positions in its data but rather lumped those positions into a category called "all other managers" which contained a total of 7,293 openings (46, 1980, p. 2).

As shown in Table 7, the state of Nevada provided further job data which, although broad in scope, could be applied to the gaming curriculum model (46, 1980, p. 11).

Table 7. Average Annual Job Openings, 1976-1985 Period

<u>Occupational Category</u>	<u>Openings Due to Growth</u>	<u>Opening Due to Separation</u>
Total	18,700	11,100
Service*	5,100	3,100
Clerical	3,800	2,200
Managerial	2,500	1,700
Crafts	2,200	1,100
Professional and Technical	1,800	1,100
Operative	1,500	700
Sales	1,000	600
Laborers	700	300
Farm Workers	- 30	300

* Includes occupations such as gambling dealers, change persons, and keno runners

Although data from the state of Nevada mainly related to opportunities in nonsupervisory and nonmanagement casino jobs, its report on gaming occupations did include a hypothetical organization chart. This chart, shown in Figure 23, pointed out and displayed the opportunities available to casino employees who

...demonstrate the ability to learn, have the required personal characteristics, and are willing to work hard. The chart shows the line of command from the general manager down to the lower-level occupations; but may not be all-inclusive of occupations in particular establishments...the chart is most consistent with operations at a medium size casino (46, 1980, p. 11).

The Las Vegas area, through its many proprietary gaming schools, provided another reliable tool in developing the Casino Curriculum Model. Table 8 lists all the private Southern Nevada gaming schools and their curricular offerings (47, 1981, pp. 45-57).

Table 8. Southern Nevada Private Gaming Schools

School	Curriculum
Casino Dealing School	Poker, "21," Craps
Danny Bohan's Original School of Dealing	Craps, "21," Roulette
The Dealer's School	Craps, "21"
Denny Walker's Academy of Dealing	"21," Baccarat, Roulette
International Gaming Schools, Inc.	"21," Roulette, Baccarat, Poker, Craps
Mickey Coleman's Dealer's School	"21," Craps, Poker
Nevada Gaming Schools	Slot and Video Machine Repair
Nevada School of Dealing	Craps, "21"
The Palace Dealers' School	"21," Craps, Poker
Strip Dealers School, Inc.	Craps, "21," Roulette, Poker
Valley School of Gaming	"21," Craps, Roulette, Baccarat, Poker

ORGANIZATION CHART

Figure 23. Casino Organization Chart

Table 9 shows the importance of the various casino profit generators as well as the relative popularity and growth trends of the different games. The data divided operations into two primary groups; the downtown or smaller casinos and the strip or larger casinos. The establishments were then categorized by the following total gaming revenue/win volume.

- A. \$1,000,000 +
 Strip and Downtown
- B. \$1,000,000 to \$10,000,000
 Strip and Downtown
- C. \$10,000,000 to \$20,000,000
 Strip
- D. \$10,000,000 +
 Downtown
- E. \$20,000,000 +
 Strip (18, 1980, pp. 1-2).

Data compiled from questionnaire forms 1A (see Appendix A) and 1B (see Appendix B) were extrapolated and placed into matrices shown in Tables 10 and 11.

Data gathered from questions number one and number two on the Gaming Curriculum Personal Interview Form (see Appendices C and D) were extrapolated and placed into matrices shown in Tables 12 and 13.

The data and findings from the above sources were organized so that low to high demand could be determined. An Employment Demand Chart utilizing input from these sources is shown in Table 14.

Extrapolating from the Employment Demand Chart and other data established the demand factor for the Las Vegas area (see Table 15).

Table 9. Average Win Per Unit (Las Vegas)

	STRIP \$1,000,000+	DOWNTOWN \$1,000,000+\$1m-\$10m	STRIP \$10m-\$20m	STRIP \$20,000,000+	DOWNTOWN \$1m-\$10m	DOWNTOWN \$10,000,000+
BJ						
Upper quartile	\$ 436,830	\$ 166,360	\$ 158,910	\$ 626,310	\$ 156,540	\$ 212,040
MEDIAN	210,400	135,920	122,590	477,320	95,370	147,630
Lower quartile	141,100	104,920	79,490	314,070	89,980	121,830
CRAPS						
Upper quartile	1,873,960	755,720	497,260	2,451,950	302,980	761,670
MEDIAN	855,010	512,230	366,130	1,841,180	265,900	635,650
Lower quartile	515,440	302,880	286,010	1,171,330	246,570	488,610
ROULETTE						
Upper quartile	560,220	222,470	147,660	735,710	64,470	239,100
MEDIAN	352,760	158,770	123,320	493,610	53,370	203,090
Lower quartile	191,530	80,050	98,990	401,590	33,190	150,590
5¢ SLOT MACHINE						
Upper quartile	10,670	10,100	8,720	12,400	7,680	10,650
MEDIAN	8,230	7,680	6,210	9,540	5,990	9,180
Lower quartile	6,510	5,330	3,660	6,720	4,640	7,510
10¢ SLOT MACHINE						
Upper quartile	13,850	11,410	12,150	15,170	8,420	11,910
MEDIAN	10,920	9,270	7,850	10,980	7,150	11,190
Lower quartile	9,250	7,020	3,420	9,370	5,440	9,270
25¢ SLOT MACHINE						
Upper quartile	21,760	20,130	16,460	24,250	15,880	21,230
MEDIAN	16,240	15,880	12,080	18,180	13,400	19,940
Lower quartile	12,900	10,410	8,100	15,580	7,850	14,970
50¢ SLOT MACHINE						
Upper quartile	21,930	23,080	14,960	23,270	10,710	24,350
MEDIAN	14,960	10,050	5,750	16,560	10,310	10,050
Lower quartile	11,670	8,640	4,490	12,460	9,930	8,260
\$1 SLOT MACHINE						
Upper quartile	56,670	41,420	32,010	61,470	26,260	53,380
MEDIAN	32,010	31,770	19,190	40,810	17,380	40,020
Lower quartile	22,620	16,380	12,040	30,460	10,420	34,290
KENO						
Upper quartile	1,693,970	1,992,390	1,012,250	2,123,080	680,270	1,999,590
MEDIAN	1,382,070	1,782,210	885,360	1,615,650	570,780	1,806,840
Lower quartile	918,670	905,180	669,260	1,396,790	461,290	1,345,750

Table 10. Questionnaire Form 1A, Relative Importance Quotient Matrix

Questions	A		B		C		D		E		F		G		H	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
	827	89.9	818	88.9	707	76.8	690	75	755	82.1	648	70	363	39	816	88.7
Rank	1	142	138		94		86		98		73		49		159	4
	2	83	82		63		65		102		71		30		41	3
	3	5	10		69		72		27		57		26		27	2
	4	0	0		4		7		3		29		25		3	1

Points

Questions	I		J		K		L		M		N		O	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R
	834	90.1	736	80	870	95	677	73.6	842	91.5	746	81.1	861	93.6
Rank	1	170	103		195		59		171		109		192	4
	2	40	79		22		113		41		78		17	3
	3	17	39		11		44		17		33		21	2
	4	0	9		2		14		1		10		0	1

Points

Sample Size: 230

100% Relative Importance Score: 920 (4 x 230)

S = Total Points (Score)

R = Relative Importance Quotient

Table 12. Personal Interview Question Number One, Relative Importance Quotient Matrix

Rank	Games		"21"		Craps		Roulette		Poker		Baccarat		Big Six		Points
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	
	584	90.1	535	82.5	366	56.4	380	58.6	289	44.6	110	17			
1	55		31		9		10		0		0		6		
2	43		46		9		12		0		0		5		
3	9		27		18		26		19		0		4		
4	1		3		51		36		37		0		3		
5	0		1		21		24		50		2		2		
6	0		0		0		0		2		106		1		

Sample Size: 108

100% Relative Importance Score: 648 (6 x 108)

S = Total Points (Score)

R = Relative Importance Quotient

Table 13. Personal Interview Question Number Two, Relative Importance Quotient Matrix

Rank	Dealing		Marketing and Promotional			Casino Credit			Accounting			Slots			Collections			Surveillance			Supervision			Games Protection			Bingo/Keno			Casino Cage		
	S	R	S	S	R	S	S	R	S	S	R	S	S	R	S	S	R	S	S	R	S	S	R	S	S	R	S	S	R	S	S	R
1	76	92.6	812	63.4	341	28.7	537	45.2	857	72.1	258	21.7	731	61.5	645	54.3	659	55.5	215	18.1	736	62										
2	19		19		8		5		17		1		8		2		10		1		14											
3	2		25		0		12		13		0		11		8		6		0		14											
4	3		11		1		4		21		0		18		16		19		0		10											
5	2		12		0		8		15		2		25		20		11		0		9											
6	1		4		3		14		16		0		20		18		14		0		13											
7	0		9		1		10		10		2		14		17		17		6		12											
8	1		9		6		11		1		10		7		12		16		8		19											
9	3		7		14		19		1		27		5		14		13		14		7											
10	1		5		41		21		0		37		0		1		2		22		2											
11	0		1		30		3		0		29		0		0		0		57		0											

Points

Rank

Sample Size: 408
 Relative Importance Score: 1,186 (11 x 106)
 = Total Points (Score)
 = Relative Importance Quotient

Table 14. Employment Demand Chart

	Labor Statistics				Gaming Revenue Statistics				Questionnaire 1A				Questionnaire 1B				Personal Interview			
	1	2	14		1	2	7	14	1	2	7	8	7	16	17		1	2	7	8
HIGH									12	13	17						12	13		
MEDIUM	7	8	12	13	3	5	15		3	4	5	9	5	9	13		3	4	5	9
									10	11	14	15					10	11	14	15
									16								16			
LOW	3	4	5	6					6				10	11	12	14	6			
	9	10	11	15									15							
	16																			

Gaming Employment Classifications

1. "21"
2. Craps
3. Roulette
4. Poker
5. Baccarat
6. Big Six
7. Slots
8. Casino Cage
9. Casino Accounting/Count
10. Credit
11. Collections
12. Supervision
13. Surveillance/Protection
14. Keno
15. Bingo
16. Marketing
17. Dealing (general)

Table 15. Las Vegas Employment Demand

High Employment Demand	"21" Craps Slots Dealing (general) Surveillance/Protection Casino Cage
Medium Employment Demand	Casino Marketing Pit Supervision Casino Accounting/Count Baccarat Poker Roulette Keno
Low Employment Demand	Credit Collections Bingo Big Six

Step 2: Selection Factor

From the 17 occupational fields, 13 areas were selected which would provide important employment and/or career opportunities (29, 1975, p. 22). The 13 occupational clusters are shown in Table 15 in the high and medium employment demand catagories.

Step 3: Skills and Knowledge Factor

Core learnings were described by Kalani as being important to each of the 13 occupational clusters. Specialized learnings, on the other hand, were directed to specific jobs or career areas (29, 1975, p. 22). Figure 24 shows the core and specialized learnings for the Las Vegas region.

Step 4: Curriculum Factor

The data indicated that a casino curriculum should consist of two distinct elements: technical and managerial.

Figure 24. Proposed Casino Curriculum Model, Clark County Community College - Southern Nevada

A. Technical

1. Dealing (all games)
2. Slots mechanic/technician
3. Casino cage
4. Casino accounting/count
5. Keno

B. Managerial

1. Surveillance/protection
2. Casino marketing
3. Pit supervision
4. Slots management
5. Casino management (comprehensive)

Upon completion of the requirements of the casino curriculum, the student receives a certificate of achievement or associate or applied science degree.

Figure 24 is also schematic of the proposed casino curriculum model as applied to Las Vegas, Nevada, and Clark County Community College (14, 1982, p. 67).

Specialized course learnings for the proposed certificate of achievement programs included:

1. Cheating Prevention
2. "Eye in the Sky" Operations
3. "21"
4. Craps
5. Roulette
6. Baccarat
7. Poker

8. Casino Credit
9. Slot Electronics
10. Keno Writing
11. Casino Practicum

Specialized course learnings for the proposed associate of applied science degree programs included:

1. Casino Promotions
2. Casino Advertising
3. Casino Public Relations
4. Casino Credit
5. Casino Collections
6. Gaming Regulations
7. Gaming Odds/Mathematics
8. Human Relations
9. Casino Layout and Design
10. Casino Internship

Model Variations

The recommended Casino Curriculum Model was modified for special applications such as those identified by the Nevada Employment Security Research Section (46, 1980, pp. 7-27). Model variations are displayed in Tables 25, 26, and 27.

The existing casino curriculum at Clark County Community College was placed into the Kalani format with a slight modification for recommended electives (see Figure 28). That model was then compared with the basic recommended model (Figure 24).

Figure 25. Casino Curriculum Model - Slot Repair

Figure 26. Casino Curriculum Model - Casino Marketing

Figure 27. Casino Curriculum Model - Pit Management and/or Dealing

Figure 28. Actual Casino Curriculum, Clark County Community College

Deviations occurring between the two models are show in Table 16.

Table 16. Comparisons Between Existing and Proposed CCCC Casino Curriculum Models

CCCC Existing Model	CCCC Proposed Model
Degree in Casino Management	Degrees in Casino Management, Surveillance/Protection, Casino Marketing, Pit Supervision, Slots, Management
Certificate in Casino Management	
No Slot Mechanics or Technicians Courses	Certificates in Dealing, Slots Mechanics, Casino Cage, Casino Cage, Casino Accounting, Keno
No Actual Dealing Courses	Dealer Training
Broad Curriculum, much concentration outside actual gaming field	Curriculum concentrated basically on gaming related courses
Mathematics can be replaced by Science	Mathematics required
Theory oriented	"Hands-On," experience oriented

Chapter Summary

This chapter gave an example of the Casino Curriculum Model's application using Kilani's step-by-step approach. Also included were the model's variations and a comparison of the proposed Clark County Community College Model and the existing Clark County Community College gaming curriculum.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The conclusions and recommendations presented in Chapter 5 were recognized to be subject to continual adaptation, change, and evolution. It was impossible to predict what forms gaming would take in its future venues. Gaming laws, public attitudes, local regulations, player demand, physical restrictions, and geographic limitations would all impact on the planning of future curriculums in gaming.

Summary of the Findings

Research of the literature provided the following summary information:

1. Gaming was a new field in higher education.
2. Post-secondary education in gaming was mainly a function of proprietary schools.
3. Gaming education was a product of industry job demand.
4. Much of gaming education required physical as well as mental dexterity.
5. Gaming education followed other allied fields in hospitality education in its vocational/technical emphasis.

The survey of the data and curriculum models provided the following information:

1. There was close correlation between statistical data and instrument data in this study, including a rank correlation coefficient of 1.0 for the game of "21."

2. The educational institution could use a multiplicity of model types in designing a gaming curriculum.

The survey of the data for the Las Vegas, Nevada area as applied to Clark County Community College provided the following summary information:

1. CCCC deviated from the data findings in not offering a dealing program.

2. CCCC deviated from the data findings in not offering a slots repair program.

3. CCCC deviated from the data findings in not offering a course in casino accounting.

4. CCCC deviated from the data findings by offering "Casino Credit and Collections" as a core course.

5. CCCC deviated from the data findings by offering a management rather than a vocational/technical certificate program.

6. CCCC's Casino Management Associate of Applied Science degree had a positive correlation with the data findings.

Conclusions

Conclusions concerning the two-year college gaming curriculum resulted from: a review of the literature, the outcomes of the data, and an analysis of the final Casino Curriculum Model.

The following conclusions were made:

1. The gaming curriculum should have a strong vocational/technical foundation.

2. Knowledge of casino table games was a basic requirement for the gaming curriculum with "21" and Craps being the most important.

3. Protection, of both games and slots, was a basic requirement for the gaming curriculum.

4. Knowledge of slot operations was recommended for the gaming curriculum.

5. Knowledge of casino cage and credit operations was recommended for the gaming curriculum.

6. Managerial tools such as marketing, gaming law, supervision, and accounting were recommended for the gaming curriculum.

7. The gaming curriculum should have a high degree of actual work experience and/or work simulation attached to it.

Recommendations for Gaming Curricula

Gaming as a field in community college education could be separated into several types of programs including:

1. Mini-certificates based on credit hours.
2. Mini-certificates based on clock hours.
3. Certificates based on credit hours.
4. Certificates based on clock hours.
5. Associate degrees based on credit hours.
6. Miscellaneous certificates awarded for seminars, job conferences, limited training, internships, and practicums.

Mini-certificates based on credit hours would have application in programs such as a 15-credit curriculum in Casino Dealing. For example, the student might complete the following:

1.	Blackjack	3 credits
2.	Craps	3 credits
3.	Roulette	3 credits
4.	Baccarat	3 credits
5.	Poker	3 credits

Mini-certificates based on clock hours would have application in programs such as a 120-hour curriculum in the dealing of Mini-Baccarat.

For example, the student might complete the following:

1.	Cutting Chips	20 hours
2.	Shuffle	20 hours
3.	Card Calling	8 hours
4.	Change Procedure	6 hours
5.	Payoffs	18 hours
6.	Commission	8 hours
7.	Shoe Make-up	6 hours
8.	Deck Lacing	6 hours
9.	Call Bets	10 hours
10.	Markers	8 hours
11.	Game Protection	10 hours

Certificates based on credit hours would have application in programs such as a 30-credit curriculum in Slots Management. For example, the student might complete the following:

1.	Communications	6 credits
2.	Slots Management I	3 credits
3.	Slots Management II	3 credits
4.	Slots Mechanics I	3 credits
5.	Slots Mechanics II	3 credits

6.	Casino Supervision	3 credits
7.	Casino Surveillance	3 credits
8.	Casino Promotions	3 credits
9.	Slots Internship	3 credits

Certificates based on clock hours would have application in programs such as a 1,600-hour curriculum in Casino Cage Operations. For example, the student might complete the following:

1.	Casino Cage	400 hours
2.	Advanced Casino Cage	200 hours
3.	Casino Count	100 hours
4.	Casino Credit	50 hours
5.	Pit Clerk	50 hours
6.	Fill Procedures	50 hours
7.	Casino Computers	200 hours
8.	Casino Security	150 hours
9.	Casino Cage Internship	400 hours

Associate degrees based on credit hours would have application in programs such as a 60-credit curriculum in Casino Management. For example, the student might complete the following:

1.	Communications	6 credits
2.	Mathematics	6 credits
3.	Constitution	4 credits
4.	Social Science	6 credits
5.	Accounting	3 credits
6.	Introduction to Casino	3 credits
7.	Casino Cage	3 credits
8.	Slots Management	3 credits

9.	Casino Marketing	3 credits
10.	Casino Surveillance	3 credits
11.	Casino Supervision	3 credits
12.	Gaming Law	3 credits
13.	Survey of Casino Games	3 credits
14.	Casino Table Games	6 credits
15.	Casino Electives	6 credits

Miscellaneous certificates based on limited, specialized training could be applied to such programs as weekend workshops in Cheating Prevention or Casino Public Relations.

The recommendations relevant to Clark County Community College, as based upon the model developed in Chapter 4, were as follows:

1. Base the curriculum more on vocational/technical skills rather than management theory.
2. Institute a dealer training program.
3. Institute a slot electronics maintenance program.
4. Offer a casino surveillance, "eye-in-the-sky" course and laboratory.
5. Offer an electronic board games course with a major concentration in Keno and a minor concentration in Bingo.
6. Offer a casino accounting course.
7. Offer seminars aimed at increasing the professional knowledge of casino management personnel.
8. Offer seminars aimed at increasing the gambling knowledge of players.

9. Develop a full-scale casino laboratory with gaming tables, casino cage, "eye-in-the-sky," slot machines, Keno and Bingo facilities, pit clerk station, and mock sportsbook.

Recommendations for Further Study

Recommendations for further study included the following:

1. This study should be replicated by colleges and/or technical institutions located in gaming industry markets such as:
 - a. Atlantic City, New Jersey
 - b. Reno/Lake Tahoe, Nevada
 - c. Hobart, Tasmania, Australia
2. A survey should be conducted among Southern Nevada casino managers, technicians, and workers to identify and classify potential part-time gaming instructors for Clark County Community College.
3. Instruments used to determine the knowledge level and competence of potential gaming instructors should be developed and field tested.
4. A survey should be conducted among the graduates of Clark County Community College's Casino Management degree and certificate programs to detect strengths and weaknesses within the gaming curriculum in light of the graduates' actual industry experience.
5. A study should be undertaken in gaming markets worldwide, to identify institutions of higher learning within these markets, who potentially could implement gaming education programs.
6. A casino curriculum model for four-year institutions of higher learning should be developed.
7. A study of long-term trends in gaming employment should be carried out.

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

1. Atlantic Community College. Casino Career Institute Bulletin.
Atlantic City, New Jersey: Atlantic Community College 1980.
2. Anson, Robert S. "Land of the Big Casino." NEXT, February, 1981,
pp. 80-89.
3. Beckner, Weldon, and Joe D. Cornett. The Secondary School Curriculum:
Content and Structure. Scranton, Pennsylvania: International
Textbook Company, 1972.
4. Bellack, Arno A., and Herbert M. Kliebard, eds. Curriculum and
Evaluation. Berkeley: McCutchan Publishing Company, 1977.
5. Bloom, Benjamin S. Taxonomy of Educational Objectives. New York:
David McKay Company Inc., 1956. (mimeographed)
6. Bohan, Danny, Original School of Dealing. Las Vegas, Nevada:
Original School of Dealing, 1981.
7. Carnegie Foundation for the Advancement of Teaching. Missions of the
College Curriculum. San Francisco: Jossey-Bass Publishers,
1977.
8. Carroll, David. Playboy's Illustrated Treasury of Gambling. New
York: Crown Publishers Inc., 1977.
9. Chancellor's Office, The California Community Colleges. Community
College Occupational Programs Evaluation System. U.S.,
Educational Resources Information Center, ERIC Document ED 162
079, 1977.
10. Chickering, Arthur W., and others. Developing the College Curriculum
A Handbook for Faculty and Administrators. Washington, D.C.:
Council for the Advancement of Small Colleges, 1977.
11. Clark County Community College. 1978 Fall Class Schedule. North Las
Vegas, Nevada: Clark County Community College, 1978.
12. _____. 1980/81 Catalogue and Course Descriptions. North Las
Vegas, Nevada: Clark County Community College, 1980.
13. _____. Master Plan, 1981-1985. North Las Vegas, Nevada: Clark
County Community College, 1981.
14. _____. 1982/83 Catalog. North Las Vegas, Nevada: Clark County
Community College, 1982.
15. _____. Resort Occupations. North Las Vegas, Nevada: Clark
County Community College, 1982.

16. "Clark County Hits the Jackpot." Community and Junior College Journal, September, 1981, p. 46.
17. Donnelly, Brian. Implementation Plans and Schedule: Center for Urban-Metropolitan Development. U.S., Educational Resources Information Center, ERIC Document ED 187 374, 1979.
18. Friedman, Bill. Average Win Per Unit. Las Vegas, Nevada: Castaways Hotel and Casino, 1980. (mimeographed)
19. "Gaming Education." Sands of Time, 1:3:7, September/October, 1981.
20. Gillie, Angelo C., Sr. Principles of Post-Secondary Vocational Education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1973.
21. Golden Gate University. 1977-1978 Bulletin. San Francisco: Golden Gate University, 1977.
22. Goldstein, Irwin I. Training: Program Development and Evaluation. Monterey, California: Brooks/Cole, 1974.
23. Goren, Charles H. Goren's Hoyle Encyclopedia of Games. New York: Greystone Press, 1961.
24. Greater Las Vegas Chamber of Commerce. Las Vegas 1979. Las Vegas, Nevada: Greater Las Vegas Chamber of Commerce, 1979.
25. _____. Very Important Persons. Las Vegas, Nevada: Greater Las Vegas Chamber of Commerce, 1981.
26. Harris, Norman C. Technical Education in the Junior College/New Programs for New Jobs. Washington, D. C.: American Association of Junior Colleges, 1964.
27. Hass, Glenn, Joseph Bondi, and Jon Wiles, eds. Curriculum Planning: A New Approach. Boston: Allyn and Bacon, Inc., 1974.
28. Herman, Robert D. Gambling. New York: Harper and Row, 1967.
29. Kalani, Henry. Curriculum Guide for Hospitality Education, Part I. U.S., Educational Resources Information Center, ERIC Document ED 150 287, 1975.
30. _____. Curriculum Guide for Hospitality Education, Part II. U.S., Educational Resources Information Center, ERIC Document ED 150 333, 1976.
31. Keppel, Francis. "Education in the Eighties." Harvard Educational Review, 50:2:149-153, May, 1980.
32. Kolar, Frank. "Playing the Calculated Risk." Gambling Times, August, 1979, pp. 50-51, 93.

33. Krathwohl, David R., Benjamin S. Bloom, and Bertram B. Masia.
Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, Inc., 1956.
34. Lamar, Carl S., ed. Comprehensive Planning for Vocational Education. Arlington, VA: American Vocational Association, Inc., 1978.
35. Las Vegas Review Journal, May 5, 1982.
36. Las Vegas SMSA. Nevada Area Labor Review. Las Vegas, Nevada: Las Vegas SMSA, 1981.
37. Las Vegas Sun, June 20, 1980.
38. Levine, Arthur. Handbook on Undergraduate Curriculum. San Francisco: Jossey-Bass Publishers, 1978.
39. List, Robert. "The State of Gaming." Nevada, 41:2, March/April, 1981, p. 8.
40. Lovejoy, Clarence E. Lovejoy's College Guide. New York: Simon and Schuster, 1981.
41. "Management in Transition." Gaming Business, September, 1981, pp. 14-16.
42. MGM Grand Hotel. Craps Dealer Training. Las Vegas, Nevada: MGM Grand Hotel, 1977.
43. Molnar, Alex, and John A. Zahorik, eds. Curriculum Theory. Washington, D. C.: Association for Supervision and Curriculum Development, 1977.
44. Monroe, Charles R. Profile of the Community College. San Francisco: Jossey-Bass Publishers, 1975.
45. Moore, Thomas. "Atlantic City's Biggest Winner." Fortune, April, 1982, pp. 1-8.
46. Nevada Employment Security Department. Gaming and Related Occupations. Carson City, Nevada: Nevada Employment Security Department, 1980.
47. _____. Nevada Occupational Training Directory. Carson City, Nevada: Nevada Employment Security Department, 1981.
48. Nevada Southern University. General Catalog 1968-69. Las Vegas, Nevada: Nevada Southern University, 1968.
49. North Las Vegas Sun, January 6, 1982.
50. Pincus, Fred L. "The False Promises of Community Colleges: Class Conflict and Vocational Education." Harvard Educational Review, 50:3:332-361, August 1980.

51. Reynolds, James W. The Comprehensive Junior College Curriculum. Berkeley: McCutchan Publishing Company, 1969.
52. Riegel, Carl D., and Ronald W. Hoenninger. "Occupational Programs for the Restaurant/Hotel Business." Community College Review, 6:1:36-39, Summer 1978.
53. Riendeau, Albert J. The Role of the Advisory Committee in Occupational Education. Washington, D. C.: American Association of Junior Colleges, 1967.
54. Salak, John S. Dictionary of Gambling. New York: Philosophical Library, 1961.
55. Saylor, J. Galen, and William M. Alexander. Planning Curriculum for Schools. New York: Holt, Rinehart and Winston, Inc., 1974.
56. Scarne, John. Scarne's New Complete Guide to Gambling. New York: Simon and Schuster, 1974.
57. Schneid, Daniel L. "Job Targeting in the Business College." Collegiate News and Views, 31:3:21-24, Spring, 1978.
58. Simpson, Elizabeth, J. "Classification of Educational Objectives, Psychomotor Domain." Illinois Teacher of Home Economics, 10:4:1-8, Winter, 1966-67. (mimeographed)
59. Skolnick, Jerome H. House of Cards. Boston: Little, Brown and Company, 1978.
60. Stadt, Ronald W., and others. Managing Career Education Programs. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973.
61. State Gaming Control Board. Nonrestricted Gaming License Application. Carson City, Nevada: State Gaming Control Board, 1981.
62. Stevick, Arlo D. Model for Small Business Management Programs in North Dakota Post Secondary Institutions. U.S., Educational Resources Information Center, ERIC Document ED 162 122, 1978.
63. Strong, Merle E., and Carl J. Schaefer. Introduction to Trade, Industrial, and Technical Education. Columbus Ohio: Charles E. Merrill Publishing Company, 1975.
64. Taba, Hilda. Curriculum Development: Theory and Practice. San Francisco: Harcourt, Brace and World, Inc., 1962.
65. Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: The University of Chicago Press, 1949.
66. _____. Basic Principles of Curriculum Development. Chicago: The University of Chicago Press, 1950.

67. University of Nevada, Las Vegas. 1977-1978 Bulletin. Las Vegas, Nevada: University of Nevada, Las Vegas, 1977.
68. _____. Fall 1981 Schedule of Classes. Las Vegas, Nevada: University of Nevada, Las Vegas, 1981.
69. _____. Spring 1982 Schedule of Classes. Las Vegas, Nevada: University of Nevada, Las Vegas, 1981.
70. University of Nevada, Reno. Catalog 1975-76. Reno, Nevada: University of Nevada, Reno, 1975.
71. _____. General Catalog 1978-79. Reno, Nevada: University of Nevada, Reno, 1978.
72. _____. General Catalog 1981-82. Reno, Nevada: University of Nevada, Reno, 1981.
73. Valley School of Gaming. Baccarat. Las Vegas, Nevada: Valley School of Gaming, 1982.
74. _____. Blackjack. Las Vegas, Nevada: Valley School of Gaming, 1982.
75. _____. Craps. Las Vegas, Nevada: Valley School of Gaming, 1982.
76. _____. Poker. Las Vegas, Nevada: Valley School of Gaming, 1982.
77. _____. Roulette. Las Vegas, Nevada: Valley School of Gaming, 1982.
76. The Valley Times, July 28, 1980.
77. Vickrey, Vic. Gaming in Atlantic City. Las Vegas, Nevada: Benihana Hotel, 1979.
78. Warren Wilson College. Guide to the Warren Wilson College Work Program. Swannanoa, North Carolina: Warren Wilson College, 1977.
79. Wentline, Tim L., and Tom E. Lawson. Evaluating Occupational Education and Training Programs. Boston: Allyn and Bacon, Inc., 1975.

APPENDICES

APPENDIX A

GAMING CURRICULUM QUESTIONNAIRE

FORM 1A

(X) CHECK THE BEST RESPONSE ACCORDING TO THE FOLLOWING SCALE:

- 1 HIGH IMPORTANCE
- 2 MEDIUM IMPORTANCE
- 3 LOW IMPORTANCE
- 4 LITTLE OR NO IMPORTANCE

THE GRADUATE OF A TWO-YEAR GAMING PROGRAM SHOULD HAVE KNOWLEDGE OF:

A. THE GAME OF "21."	<u>142</u>	1	<u>83</u>	2	<u>5</u>	3	<u>0</u>	4
B. THE GAME OF CRAPS.	<u>138</u>	1	<u>82</u>	2	<u>10</u>	3	<u>0</u>	4
C. THE GAME OF ROULETTE.	<u>94</u>	1	<u>63</u>	2	<u>69</u>	3	<u>4</u>	4
D. THE GAME OF BACCARAT.	<u>86</u>	1	<u>65</u>	2	<u>72</u>	3	<u>7</u>	4
E. THE GAME OF POKER.	<u>98</u>	1	<u>102</u>	2	<u>27</u>	3	<u>3</u>	4
F. THE GAME OF KENO.	<u>73</u>	1	<u>71</u>	2	<u>57</u>	3	<u>29</u>	4
G. THE GAME OF BINGO.	<u>49</u>	1	<u>30</u>	2	<u>26</u>	3	<u>25</u>	4
H. SLOTS MANAGEMENT.	<u>159</u>	1	<u>41</u>	2	<u>27</u>	3	<u>3</u>	4
I. CAGE MANAGEMENT.	<u>170</u>	1	<u>40</u>	2	<u>17</u>	3	<u>0</u>	4
J. ACCOUNTING AND FINANCIAL MANAGEMENT.	<u>103</u>	1	<u>79</u>	2	<u>39</u>	3	<u>9</u>	4
K. DEALING ONE OR MORE TABLE GAMES.	<u>195</u>	1	<u>22</u>	2	<u>11</u>	3	<u>2</u>	4
L. CASINO MARKETING AND PROMOTIONS.	<u>59</u>	1	<u>113</u>	2	<u>44</u>	3	<u>14</u>	4
M. CASINO CREDIT AND COLLECTIONS.	<u>171</u>	1	<u>41</u>	2	<u>17</u>	3	<u>1</u>	4
N. GENERAL MANAGEMENT PRINCIPLES.	<u>109</u>	1	<u>78</u>	2	<u>33</u>	3	<u>10</u>	4
O. GAMING SECURITY AND SURVEILLANCE.	<u>192</u>	1	<u>17</u>	2	<u>21</u>	3	<u>0</u>	4

APPENDIX B

GAMING CURRICULUM QUESTIONNAIRE

FORM 1B

YOUR POSITION OR JOB TITLE _____

CHECK THE BEST RESPONSE

1. GAMING CURRICULUM SHOULD CONCENTRATE BASICALLY ON THE CASINO GAMES.
173 YES 52 NO 5 NO OPINION
2. GAMING EDUCATION SHOULD PRODUCE A STUDENT THAT CAN ACTUALLY DEAL ONE OR MORE TABLE GAMES.
186 YES 29 NO 15 NO OPINION
3. GAMING CURRICULUM SHOULD INCLUDE FINANCIAL AND ACCOUNTING SKILLS.
133 YES 91 NO 6 NO OPINION
4. GAMING CURRICULUM SHOULD INCLUDE MARKETING AND PROMOTIONAL SKILLS.
128 YES 78 NO 24 NO OPINION
5. GAMING CURRICULUM SHOULD INCLUDE CASINO CAGE, COUNT AND CREDIT SKILLS.
185 YES 39 NO 6 NO OPINION
6. GAMING CURRICULUM SHOULD INCLUDE SLOTS MANAGEMENT.
197 YES 18 NO 15 NO OPINION
7. GAMING CURRICULUM SHOULD INCLUDE BASIC MANAGEMENT AND SUPERVISORY SKILLS.
167 YES 33 NO 30 NO OPINION
8. GAMING CURRICULUM SHOULD INCLUDE GAMING LAWS AND REGULATIONS.
199 YES 19 NO 12 NO OPINION
9. GAMING PROGRAMS SHOULD REQUIRE THE STUDENT TO HAVE A CERTAIN AMOUNT OF ACTUAL GAMBLING INDUSTRY EXPERIENCE PRIOR TO GRADUATION.
206 YES 9 NO 15 NO OPINION
10. GAMING PROGRAMS SHOULD PREPARE THE STUDENT FOR A SPECIFIC PLACE IN THE GAMBLING INDUSTRY SUCH AS CRAPS FLOORMAN, CAGE SUPERVISOR OR CASINO CREDIT MANAGER.
158 YES 40 NO 32 NO OPINION
11. GAMING PROGRAMS SHOULD GIVE THE STUDENT A GOOD OVERALL PREPARATION FOR THE GAMBLING INDUSTRY.
139 YES 75 NO 16 NO OPINION

APPENDIX C

GAMING CURRICULUM PERSONAL INTERVIEW FORM

1. RANK THE VARIOUS CASINO TABLE GAMES IN ORDER OF THEIR IMPORTANCE.
2. RANK THE BASIC CASNIO SKILLS IN ORDER OF THEIR IMPORTANCE.
3. WHAT DO YOU CONSIDER THE GREATEST EDUCATIONAL/TRAINING NEED IN THE GAMING INDUSTRY?
4. HOW CAN A TWO-YEAR COLLEGE BEST SERVE THE NEEDS OF THE GAMING INDUSTRY?
5. HOW WOULD YOU SEQUENCE GAMING COURSES?
6. WHO SHOULD DETERMINE THE CONTENT OF A TWO-YEAR COLLEGE GAMING CURRICULUM?
7. WHO SHOULD TEACH TWO-YEAR COLLEGE CASINO COURSES?
8. WHAT TEACHING METHODS WOULD YOU USE IN A TWO-YEAR COLLEGE CASINO PROGRAM?

APPENDIX D

GAMING CURRICULUM PERSONAL INTERVIEW FORM RESULTS

QUESTION 1

RANKINGS:

1. "21"
2. CRAPS
3. ROULETTE
4. POKER
5. BACCARAT
6. BIG SIX

QUESTION 2

RANKINGS:

1. DEALING
2. SLOTS
3. MARKETING AND PROMOTIONS
4. CASINO CAGE
5. SURVEILLANCE
6. GAMES PROTECTION
7. SUPERVISION
8. ACCOUNTING
9. CASINO CREDIT
10. COLLECTIONS
11. BINGO/KENO

QUESTION 3

RANKINGS:

1. GAMES PROTECTION
2. ELECTRONIC SLOTS REPAIR
3. SUPERVISION
4. DEALING
5. COMPUTER TRAINING
6. PROMOTIONS AND MARKETING
7. ACCOUNTING

QUESTION 4

RANKINGS:

1. VOCATIONAL/TECHNICAL TRAINING
2. SPECIALIZED TRAINING
3. MANAGERIAL TRAINING

QUESTION 5

SEQUENCE:

1. DEALING
2. GAMES PROTECTION
3. PIT SUPERVISION/MANAGEMENT
4. CASINO CAGE
5. SLOTS
6. MARKETING/PROMOTIONS
7. ACCOUNTING
8. GAMING LAW
9. GAMING STATISTICS/MATHEMATICS
10. CASINO CREDIT
11. COLLECTIONS

QUESTION 6

RANKINGS:

1. GAMING MANAGERS
2. GAMING EMPLOYEES
3. GAMING STUDENTS
4. GAMING/CASINO OWNERS

QUESTION 7

RANKINGS:

1. GAMING MANAGERS
2. DEALERS
3. GAMING SUPERVISORS
4. GAMING TECHNICIANS
5. GAMING STAFF PROFESSIONALS
(LAWYERS, ACCOUNTANTS, CONSULTANTS, ETC.)

QUESTION 8

RANKINGS:

1. INTERNSHIPS/PRACTICUMS
2. LABS AND WORK SIMULATIONS
3. ON-THE-JOB TRAINING
4. LECTURES
5. TUTORS
6. INDEPENDENT STUDY

APPENDIX E

EXAMPLE SYLLABUS (ROULETTE)

ROULETTE
LESSON PLAN I.ORIENTATION:

- I. Student Equipment - (Required)
 - a. Checks - 50-60
 - b. Practice Board - 18" x 18" felt covered
 - c. Text - "Facts of Roulette" - Walter Nolan
- II. Student's Guidelines
 - a. Grades - classwork, mid-term and final exam; quizzes
 - b. Cuts
 - c. Live Training
- III. Course Outline

History, Glossary of terms, layout and wheel description, basic game, single bet payoffs, dealers' dress and behavior, dealers' procedures, betting possibilities, multiple bet payoffs, percentages, check cutting, making changes, sweeping the layout, pushing the chips, mucking, paying winning bets, conversions, cashouts, marking chip values, currency and call bets, table limits, spinning the ball and wheel, wheel sections, game protection, cheating, european wheel, actual pay conditions.
- IV. History
 - a. Roman Shields
 - b. Blais Pascal (19th century) - Perpetual motion
 - c. French (1800)
 - d. Anecdote - Man who went to prison
- V. Glossary of Terms
 - a. Pages 44-48 in text
 - b. Casino Personnel - Bill Friedman
- VI. Layout and Wheel
 - a. 38 slots - 2 green - 18 black, 18 red - 30' Spindal
 - b. Even bets - 1-18, 19-36, even odd, red, black
 - c. Column and Dozen - 2 to 1
 - d. 38 spaces - 2 green - 19 black - 19 red
 - e. Cashbox - paddle - change hole
- VII. Basic Game
 - a. Players buy chips
 - b. Ball is spun, lands in slot
 - c. Place as many bets (to house limit)
 - d. Wins or loses (Dependent on slot landed in)

VIII. PayoffsSingle

1.	Straight Up	35 to 1	-	38 combinations
2.	Split	17 to 1	-	62 combinations
3.	3 Numbers	11 to 1	-	15 combinations

ROULETTE
LESSON PLAN II

I. DEALERS DRESS AND BEHAVIOR (DEMONSTRATED)

- a. Clothing - neat and pressed, shoes shined, tie, apron.
- b. Hair - neat, away from face.
- c. Nails - manicured, short.
- d. Showered, teeth brushed, mouth spray.
- e. Courteous, friendly, helpful, professional, sympathetic.
- f. Punctual, arriving and breaks; absences.
- g. No idle chatter (house sets this policy).
- h. No action - arms folded, attention in front, no conversation between tables, table cleaned.
- i. Hand clap leaving the table, entering table.
- j. Tokens, no hustling, what to do with them - token bets.
- k. Entering and leaving the pit, no smoking, no talking.
- l. Communication with floorperson, respect, law.

II. DEALERS PROCEDURES

- a. Spin the ball
- b. Watch layout
- c. Mark and announce number and color
- d. Sweep layout
- e. Pay winners
- f. Muck chips
- g. Spin the ball - finish mucking while watching layout, etc.

III. BETTING POSSIBILITIES

Demonstrate various bets that are and can be placed by the same player on the same number, from straight up to sixline bets.

IV. MULTIPLE BET PAYOFFS

- a. 2, 3 & 4 corners
- b. 2, 3 & 4 splits
- c. Straight up with 4 corners
- d. Straight up with 4 splits
- e. 4 corners with 4 splits
- f. Straight up with 4 corners and 4 splits
- g. Classwork: Have students do all multiples of corners and splits - (1 corner and 1 split, 1 corner and 2 splits, etc., - 16 combinations)
- h. Keys - 1 cor. + 1 split = 25
 4 cor. + 4 split = 100
 1st + 4 cor. + 4 split = 135
 1st + 1 cor. + 1 split = 60
 Sixline key over 10 chips - put the sum in the middle

HOMEWORK - Memorize all keys and learn all above combinations
 Quiz - 5 minutes - 5 questions - single bet payoffs

ROULETTE
LESSON PLAN III

I. PERCENTAGES

- a. All bets other than the five number bet is 5.26% in favor of the house
- b. Five number bet is 7.89% for the house

II. CHIPS

- a. Different colors for player identification
- b. No value - all chips have table minimum value unless marked
- c. Minimum value varies from 10¢ and up
- d. Some houses allow players to bet 1 (one) chip, others require a minimum bet (e.g., 50¢ - five 10¢ chips)
- e. Stacks of 20 chips - usually 300 each color
- f. 10¢ = \$2; 25¢ = \$5; 50¢ = \$10; 75¢ = \$15
- g. Most houses require 1 (one) stack minimum buy-in
- h. Increase of chip value by putting the players same colored chip on the rim surrounding the wheel and capping it with a marker, check or coin indicating its value - done at buy-in or conversion before the chips are given to the player

III. CHECK CUTTING

- a. Fingers in pillar position, elbows close to sides
- b. Hold by pinky, ring finger and thumb
- c. Cut by index finger, bends to proper height
- d. Check each student hand and finger position
- e. Cut five, cut four - front, not side
- f. Check sizing - move thumb and pinky back
- g. Stack cut into five, short stack - 10¢, \$1, \$5, \$100, \$1,000 into five, all others into four
- h. Proofing
- i. Always in front, not on side
- j. Practice, practice, practice
- k. Checking and correcting

HOMEWORK - More Practice

Quiz - Five minutes, five questions - multiple bet payoff

ROULETTE
LESSON PLAN IV

I. MAKING CHANGE

- a. Have customer put bill(s) on table and you announce change only
- b. Pick up the bill(s) and check both sides using 2 (two) fingers
- c. Put it on rim of wheel
- d. Cut checks or chips on apron in front of you
- e. Highest denomination on top and place change in front of customer on apron
- f. Do not hand it to him - No hand-to-hand contact EVER
- g. Place money in drop box
- h. Remember to mark higher than minimum chip value before passing the money

II. CURRENCY AND CALL BETS

- a. Try to convert any bills on layout to chips
- b. If Player refuses, spread money and get verbal clarification of the bet and announce Money plays, \$10 straight up or whatever the bet amount is
- c. If it loses, take it off the layout and put it on the apron in front of you and then sweep the layout
- d. While ball is spinning a player may throw down currency, wanting some of it to play and the rest in change - call out the bet and the change; e.g., 50¢ on even, 25¢ on number 5, \$4.25 is change.
- e. Try to give change in chips, but if player insists, give him checks
- f. Call bets - verbal, not supported by money
- g. Many casinos will not accept call bets
- h. All right only if okayed by floorperson
- i. Tell customer immediately that you will have to get an okay by floorperson and then call same

III. CHECK CUTTING PRACTICE

Student Practice

IV. PUSHING THE CHIPS

- a. Demonstration - Drawing on blackboard (have students copy)
 1. One, two, three stacks
 2. Hand position for each hand on table
 3. Check each student for each stack
 4. Four, five, six stacks
 5. Repeat above steps
 6. Seven, eight, nine stacks

7. Repeat above steps
8. Practice, practice, practice
9. Check and correct

HOMEWORK - More Practice

Quiz - five minutes, five questions - multiple bet payoffs

ROULETTE
LESSON PLAN V

I. TABLE LIMITS

- a. Reasons
 - 1. To increase financial security of casino
 - 2. To discourage "negative progressive bettors"
- b. Upper and lower limits
- c. Two minimum bets, outside and inside
- d. Maximum bets, different per casino
 - 1. Even money bets (e.g., \$500)
 - 2. Two to one bets (e.g., \$100)
 - 3. Inside bets (e.g., \$25)
 - 4. Aggregate limit (e.g., \$500 - Maximum win on one spin inside)
- e. Less than minimum
 - 1. Noticed - Inform player to bring bet up
 - 2. Unnoticed - Pay, and then inform
- f. Higher than maximum
 - 1. Noticed - Informed players bets to pay to table limit
 - 2. Unnoticed - Take or pay to table limit and return excess bet

II. MUCKING

- a. Outside of hand flat on table
- b. Use index and thumb to pick up chips
- c. Middle finger snaps chips into place
- d. Chips held by ring finger, helped by middle finger
- e. Ten chips in each hand, both then joined = twenty
- f. Timing - before and then after ball is spun
- g. Speed of essence
- h. Drills to increase speed
 - 1. At home - use watch
 - 2. Class - to spin of ball (by Instructor)
- i. Practice - Check and correct

III. PAYING WINNING BETS

- a. All bets paid from outside in
- b. From bottom of layout to wheel
- c. Size in to outside bets - should be separated
- d. Pay inside bets, six, five three corners, splits straight up
- e. If one player has more than one winning bet, total his

payoffs (with furthest out inside bet and tell player its total payoff)

- f. If different customers on same bet, pay from top down
- g. If bet excessively large, pay separately from furthest out in
- h. Large stack staggered in five

IV. CONVERSIONS

- a. Player wants to go up or down in value
- b. Bring all chips in front of you
- c. Stack into twenty - adjust stack amount
- d. Mark chip value or remove value marker
- e. Demonstrate
- f. Give examples, have student practice
- g. If chips of one color are almost exhausted, convert winning bet into checks or checks plus chips
- h. Each stack value times amount of stacks you are substituting for, e.g., 10¢ = \$2, etc.

V. CHECK HANDLING PRACTICE

- VI. QUIZ - Five minutes, five problems - multiple bet payoffs
Oral questions

ROULETTE
LESSON PLAN VI

I. CASHING OUT

- a. Chips, no value at cage
- b. Prevent players (tactfully), from carrying chips away, players like souvenirs
- c. Finish work and clear area in front of you
- d. Bring chips across layout (two hands), to cleared apron area
- e. Count out chips into stacks of twenty, same formation as when pushing
- f. Prove one stack into five, short stack into four or five depending on chip value or house procedure
- g. Announce color change
- h. Prove all checks to be given out, as per procedure, review procedure
- i. Push or hand off checks to apron area in front of player.

II. SPINNING THE BALL AND WHEEL

- a. Ball, wheel head (30 inches), spindle
- b. Manually turned counter-clockwise, no faster that it is possible to read the numbers
- c. Ball, ivory or plastic, different sizes, spun in clock-wise direction
- d. Ball held by middle finger against top groove in bowl
- e. Spun by using a snapping of the fingers moverment, should go around bowl ten times, to give time to muck
- f. Well-timed, so no one is hurried or has to wait
- g. When ball starts to fall, no more betting allowed
- h. When ball lands in slot, mark number, and announce, "One, red" (best shot at players past posting)
- i. Watch layout when ball is spinning, especially outside and higher numbers
- j. When looking at number, use peripheral vision to observe layout
- k. Find best body position to observe wheel and layout
- l. Allow each student so spin the wheel and ball, have them push chips

III. WHEEL SECTIONS

- a. 0 - Right Side - from bottom: 2 14 35 23 4 16 33 21 6
- b. 00 - Left Side - from bottom: 27 10 25 29 12 8 19 31 18
- c. 0 - Left Side - from bottom: 28 9 26 30 11 7 20 32 17
- d. 00 - Right Side - from bottom: 1 13 36 24 3 15 34 22 5
- e. Right and left side = Half of wheel
- f. System players like to play sections

ROULETTE
LESSON PLAN VII

I. SWEEPING THE LAYOUT

- a. After ball has dropped, mark and announce number and color
- b. Remove all outside bets from column in, both hands
- c. Move all losing bets away from winning number
- d. With the hand furthest from the wheel, starting at the column bets, sweep losing bets toward the middle
- e. With the other hand, starting from the outside, sweep all losing bets toward the middle
- f. Now sweep all losing bets to the part of the apron where the table bends away
- g. Large stacks may be lifted rather than swept
- h. After making payoffs, spread chips on apron so they can be mucked
- i. Second dealer - prepares payoffs and mucks chips, security

II. EUROPEAN WHEEL

- a. Only one zero, percentage cut to 2.70%
- b. Wheel and layout different
- c. Even bets not lost if zero comes up
- d. Put "in prison" if bet loses on next roll, bet is lost, others placed back in action

III. GAME PROTECTION AND CHEATING

- a. Late shots or past posting, outside and higher numbers
- b. Two man ploy
- c. Late cash bets
- d. In between bets
- e. Wheel Tampering
- f. One sided bills
- g. Wheel or ball at different speeds, different size ball
- h. Bust out house, shoot for section or color, superstitions, pay wrong amounts

IV. MID-TERM REVIEW

- a. Demonstrate entire process
- b. Review multiple bet payoff
- c. Answer all questions
- d. Explain examination again - 75 questions

ROULETTE
LESSON PLAN VIII

I. MID-TERM EXAMINATION

75 question examination (90 minutes)

1. Layout
2. Payoffs
3. Terminology
4. Wheel Sections
5. Conversions
6. History
7. European Wheel
8. Table Limits
9. Game Protection

II. ACTUAL PLAY CONDITIONS

Working Stations

1. Break class into four sections, with a team leader for each
 - a. Wheel and layout
 - b. Layout
 - c. Layout or felt covered plywood
 - d. Layout or felt covered plywood
2. a. and b. will key off call at wheel, one student at each station will act as dealer, others as players
3. c. will work at check and chip cutting
4. d. will work at chip pushing (this plan can be altered depending on actual amount of layouts available)
5. a. and b. will switch after $\frac{1}{4}$ of time available
6. c. and d. will switch after $\frac{1}{4}$ of time available
7. a. and b. will switch with c. and d. after $\frac{1}{2}$ of time available
8. & 9. Repeat 5. and 6., but make it $\frac{3}{4}$ of time

ROULETTE
LESSON PLANS IX THROUGH XV

I. ACTUAL PLAY CONDITIONS

A. Drills (home and classroom)

1. Outside sweeping and payoff drill
2. Moving stacks from home base (1, 2, 3, etc.)
3. Bring stacks in from players and replacing them at home base

B. Stations

Repeat Lesson Plan VIII

II. INDIVIDUAL COUNSELING

- A. Speak privately with each student when they are assigned to station c. or d.
- B. Go over strengths and weaknesses and assign practice program, to be done at home to rectify weaknesses

III. LIVE TRAINING

A. 10th Week

Have student submit paper showing what times and days they have available

B. 12th Week

1. Assign students to work in casinos (based on casino and students availability)
2. Assignments based on individual's ability
3. Explain employment opportunities at casinos and job hunting

IV. FINAL EXAM REVIEW

14th Week

1. Explain practical examination and grading
2. Ascertain which students can stay longer on final examination day and schedule them last

V. JOB HUNTING

15th Week

ROULETTE
LESSON PLAN XVI

FINAL EXAMINATION

- A. Practical examination (as audition)
- B. Three students as players
- C. One student taking examination as dealer
- D. Approximately ten minutes each

ROULETTE
RECOMMENDED EQUIPMENT

1. One Roulette wheel & table
2. Three layouts - attached to plywood boards (or one layout and two plain felt tops)
3. Two full sets of Roulette Chips
4. Two full sets of Practice Checks
5. Two sets of Roulette Balls
6. One small layout with attachable pieces (hangable or standing)
7. Number markers - amount dependent on number of layouts
8. Marker tokens
9. Play money
10. Movable chairs
11. Paddle
12. Large toy wheel(s) to be attached to layout