

Virtual U 1.0 Product Manual

Congratulations! You've just been appointed as President of a prestigious liberal arts institution by a unanimous vote of the Board of Trustees. It's the appointment you have been working toward since graduate school and now it's time to sit back, relax, and watch your kingdom grow. Right?

Not really. Rather, it's time to start learning how to run an organization as complex as any multinational corporation. But in this case, your "business" consists of faculty members who are often overworked and underpaid, students who feel beleaguered by an administration that is not sufficiently politically active, a staff that wants to unionize, and a losing football team (there go the donors' contributions!).

Twenty years ago you would have been on your own. Today you have Virtual U — the first fully interactive tool that simulates the management of a university system, from the quality of students admitted, to the building of new physical facilities — in short, every facet of administrative life. Using this simulation, which is based on real-life data, you can actually practice being the chancellor or president of an institution of higher learning.

What does Virtual U do?

1. Virtual U motivates and guides participants through common scenarios and problems that college and university administrators face on a daily basis.
2. Virtual U takes place in real time. You do everything from hire and fire faculty and change teaching loads, to adjust the allocation of funds to campus departments. And when the Virtual U school year is over so are you. Your evaluation for the year arrives in a letter from the Board of Trustees.
3. Virtual U allows you to access financial and operational reports at any time and make the adjustments necessary to keep your institution afloat (and avoid bankruptcy).
4. Virtual U allows you to choose from several scenarios or construct your own, similar to the institution you manage, attend, or care about generally.
5. Virtual U allows you to make admissions decisions down to the level of who gets admitted, why, and even their attitude toward the University.

Virtual U is based on an underlying model that mimics actual conditions in real universities across the United States and was conceived and designed by Dr. William F. Massy, former Stanford University professor and vice president for finance and current president of the Jackson Hole Higher Education Group. Enlight Software of Hong Kong, a leading simulation software developer, contributed its expertise on creating a holistic simulation design and did all of the hands-on programming, artwork, and software construction. Dr. Massy's extensive use of mathematical models in building the Virtual U simulation, combined with real data gleaned from thousands of colleges and universities and Enlight's ability to create entertaining and realistic simulation software, makes Virtual U more than a simulation. It is realistic in its approach and entertaining in its design. The result is an environment that effectively teaches and helps administrators sharpen their skills.

Who Should Use Virtual U?

Virtual U is for anyone who needs to experience the complexities involved in managing an institution of higher learning — anyone with an interest in how colleges and universities work as a dynamic system. More specifically, this includes:

university administrators and their staffs who want to simulate and practice the management of

an institution of higher learning,

faculty, especially those involved in administrative positions such as department chairs or division heads,
trustees and members of Regents and oversight boards,
policymakers and other gatekeepers within a university system,
graduate students who aspire to work in college administration, and
anyone interested in a fun and challenging interactive experience.

How Virtual U Works

In the creation of Virtual U, Dr. Massy set out to create as real a simulation as possible. In order to accomplish this, he used data from the IPEDS (Integrated Postsecondary Education Data System), the College Board, and the High School and Beyond survey as a basis for the mathematical models that drive the variables you work with in Virtual U. For example, rather than just creating a hypothetical relationship between variables such as school characteristics and school applications, the underlying relationship between these variables in Virtual U is based on the real data compiled from hundreds of institutions similar to the one that you are emulating. Players set, monitor, and modify a variety of institutional parameters and policies, allocate resources as they see fit, and watch as results continually unfold. The game provides an opportunity to experiment and succeed or fail in a safe and entertaining environment. While Virtual U is not real academic life, it is grounded in authentic data and provides serious lessons in higher education that focuses on the following five broad areas:

- academic operations and faculty management,
- enrollment management,
- resource allocation and finance,
- physical plant activities, and
- performance indicators.

Each of these areas consists of separate variables that can be manipulated. These areas and their associated variables are described in great detail in Virtual U: The Strategy and Technical Guide (included in the Administrator version of Virtual U or available separately). The relationship between these variables provides the foundation for the consequences of your actions as head administrator.

Additional Documentation and Learning Aids

This manual is not only the tool you have at your disposal for learning about, playing, and mastering Virtual U. It is a basic introductory part of a series of initiatives that the Virtual U development team has taken to provide you with help in learning the ins and outs of this complex simulation system. Here are the other available tools and options.

Virtual U: The Strategy and Technical Guide: This book by Terese Rainwater, Neil Salkind, Ben Sawyer and Dr. William Massy dives deeply into the inner workings of the Virtual U system and provides hands-on training and strategies that make you a better Virtual U president. With information derived directly from Virtual U's creator, you can gain insight not available anywhere else. This guide is included with the Administrator version of Virtual U, and is available separately for users of the Game version or users and students using site-licensed versions of the software.

Virtual U Multimedia Tutorial: This Macromedia Flash based multimedia tutorial, which is included on your CD-ROM and featured on www.virtual-u.org, provides an audio-visual overview of the most important aspects of Virtual U. Divided into key sections that cover how various

components of the program are used, it provides a way to get quickly up to speed with Virtual U.

www.virtual-u.org: The centerpiece of the Virtual U user community is our Web site, which features many learning tools for Virtual U. With manual updates, a knowledge base, and access to user discussions, www.virtual-u.org is the place to go to improve and trade your knowledge of Virtual U management techniques. The Web site will feature a directory of approved trainers for hands-on training with Virtual U. When software updates are published, www.virtual-u.org will be the place to find those updates and the requisite updated documentation.

Getting Ready to Play

After installing Virtual U (see your installation instructions) and running it, you will see a brief introduction with credits. The introduction will then transition to the opening Campus screen (Figure 1).

Figure 1: The Virtual U Campus screen.

The Virtual U Opening Screen Options

When Virtual U begins, you can select either a New Scenario Game or a New Custom Game (see Figure 1). For the first time Virtual U user, the New Scenario Game option is the best place to start since many of the variables are already well defined and the basic parameters set. In New Custom Game (the focus of *Virtual U: The Strategy and Technical Guide*), the player customizes Virtual U according to his or her interests. In the custom option, you can choose among three customizable options: Basic Options, Advanced Options I, or Advanced Options II. Or you can choose the pre-configured Express Games.

Note:

Only the Administrator version lets you play the custom game longer than the first two Virtual U years.

Designing your own custom institution game is more challenging and requires more familiarity with the game and the influences that variables have upon one another. For information about custom institution factors, see *Virtual U: The Strategy and Technical Guide*.

New Scenario Game

New Scenario Game is the primary option that this guide will cover. We'll review how, in general, a scenario is selected and played. The objective of a scenario-based game is to accomplish an objective such as hiring more minority faculty before you use all your available resources. You accomplish an objective by adjusting certain related policies that you will encounter during the simulation.

New Custom Game

When you want to play a custom game, click the New Custom Game button on the opening screen shown in Figure 1. This will allow you to define custom attributes for your university at the outset of Virtual U. You can define attributes such as whether the University is public or private, big or small, rural or urban. For the most part, you can tailor your custom university to simulate many types of institutions. By clicking on the Express Game tab, you can quickly load several common university types.

Tip:

A more complete discussion of these variables and their relationship to other variables is included in the *Virtual U: The Strategy and Technical Guide*.

The objective of a custom game (which is only found in its fullest form in the Administrator version of Virtual U) is to stay financially solvent for as long as possible while improving every aspect of your university (as opposed to one or two specific goals in the scenario games). This means working with and manipulating variables as you move toward a better functioning institution.

Load a Saved Game

Click the Load A Saved Game button on the opening screen when you want to load a game that was previously played and saved. This option allows you to play Virtual U and then rejoin a game if you have stopped for other activities, such as actually running a university!

The Hall of Fame

Click the Hall Of Fame button on the opening screen when you want to see who has reached his or her goal (such as the completion of a scenario) and the number of points they have been awarded.

Credits

Click the Credits button if you want to learn about the creative and hard-working people who brought you Virtual U.

Quitting Virtual U

When you want to quit Virtual U and return to Windows, click the Quit button. If you are in the middle of a Virtual U game, Virtual U will ask you if you want to save the game. This is your last chance to do so. If you quit without saving, everything you have done in the current game will be lost.

Getting Started with a New Scenario Game

To teach the basics of Virtual U — whether it is the Administrator or the Game version — we will start by focusing on launching a scenario game. Scenario games are featured in both versions of Virtual U and provide the quickest and most focused way of experiencing the product.

Using an already existing scenario is the best place for first-time Virtual U users to begin. The variables are clearly spelled out in the scenario and a plan for considering the overall goal is much easier to formulate than with an open-ended custom game.

OK, you should be ready to go. Put on your power clothes, get a cup of coffee, and let's get started. Appendix A shows you a list of all the scenarios used in Virtual U as well as the welcome letter from the Board that accompanies each scenario.

Setting Up a New Scenario Game

Figure 2: Click the Select Scenario button to start a Virtual U scenario.

To start a new scenario game:

1. Click the New Scenario Game button.
2. Highlight the scenario you want to select by clicking on the scenario once. As you can see in Figure 2, which shows one such scenario (Teach Better), each of the scenarios is accompanied by a formal explanation of what the scenario entails and the nature of the specific challenge to you as an administrator at the institution.

For example, in Figure 2, you can see that your challenge is to improve the overall quality of teaching without jeopardizing other aspects of the institution's functioning. You will try to accomplish this by concentrating on those variables that can affect teaching while minimizing the effects that these changes have on other variables.

Based on the type of institution that is selected, the scenarios change slightly. As a function of the game's design, Virtual U automatically inserts text and numbers (represented in bold in each of the scenarios) based on its internal database.

3. Click the Select Scenario button.

Scenario Achievements tell you exactly what you have to do to reach a certain level of performance.

Each of these three different elements provides you with all the information you need to pursue the goal in that scenario of Virtual U.

Setting Up an Institution

Once you have selected a scenario, the next screen (as shown in **Figure 3**), will enable you to:

- select the appropriate institution logo (click on one of the triangles to cycle through the choices)
- name the institution
- provide your name, and
- select the type of institution to be simulated.

Figure 3: Setting up the institution is one of the first steps in a Virtual U simulation.

We'll begin our simulation by being Central State University, run by President Lewis Harvey (if your name is Lewis Harvey), who has been in office for four years.

To accomplish these four things, follow these steps.

1. Using the up-and-down triangle above the institution logo, click until you find a logo that you want to use.
2. Select the words "Player University" under Institution name and then type in the name of your institution. Type carefully because once you are finished setting up your institution, you'll not be able to change anything on this screen. In our example, we're using Central State University.

Tip:

You are probably used to selecting items on your screen by dragging the mouse over them. It's the same process with Virtual U, except the selected items are underlined, not highlighted.

3. Select the word "Player" under "Player first name" and type in your first name or the first name of the person using Virtual U. Do the same for whatever last name is being used.
4. Click the type of institution you want as a focus. Select the type of university you manage or attend if you want to make the simulation similar to your own situation without starting a custom simulation.

Tip:

To move from field to field within a Virtual U screen, use the Tab key.

There are four types of institutions from which you can select (as shown in **Figure 3**).

- o Private Research University
- o Liberal Arts College
- o Public Research University
- o Comprehensive University

In this example, Central State University is represented as a Public Research University.

5. Click the Start scenario button. Virtual U generates the game simulation in which you will participate.

Once Virtual U has started, the specific welcoming scenario (see Figure 4) letter appears. These welcoming letters are shown in Appendix A.

Once your institution is well established and a Virtual U game generated, you're in business. Read the opening letter carefully so you know exactly what is expected of you. Be sure to use the Prev. page and Next page buttons so you can read the entire letter.

Figure 4: Each scenario has its own welcome letter.

Tip:

Just as a real university administrator might get a call in the middle of the night regarding the fifth time this year that laundry soap has been placed in the Chi Omega fountain, there will be other surprises throughout Virtual U. These are presented to you at random and can be everything from a certificate of appreciation to the suspicion that a crime has been committed on campus.

Once you've read through the opening letter, you can click the Proceed button on your Scenario Welcome Letter screen. You will see the Virtual U Campus screen as shown in Figure 5.

The Campus Screen

The focus of this guide is to familiarize you with all of the major in-game menus for Virtual U and the pre-designed scenarios.

This should start by focusing on the main elements found on the Campus screen you see in Figure 5.

Figure 5: The Virtual U Campus screen.

The first thing you may notice on the Campus screen is a set of six graphs, each of which reflects some important parameter in the administration of an institution of higher learning. These are “Quick Takes” on your institution’s current health and you will learn later on in this manual and in the *Virtual U: The Strategy and Technical Guide* how to work with these. If you do not want to have these on the Campus screen, just click the small close box above the Institutional prestige graph.

The In Game menu consists of a series of buttons along the upper left corner of the Campus screen. It allows you to monitor the status of important variables as well as to set some new values as you create your own policies. The areas in which you can check the status of the University and also set different policies are:

- Campus
- Faculty
- Students
- Courses
- Performance
- Finance
- Score

The Monetary Balance Board shows the total amount of money that your university has available. When the total is written in green, it means that your balance is positive. If it appears in red, it shows that you are operating in a deficit. The Monetary Balance Board shows the total amount of money that your university has available. When the total is written in green, it means that your balance is positive. If it appears in red, it shows that you are operating in a deficit. A red balance at the end of the year subtracts from the operating reserve (on the balance sheet). If the operating reserve becomes negative, you can still play until the university’s line of credit is exhausted and you go bankrupt.

The Trustee Evaluation Value is the number to the right of the thumb icon. The thumb icon, shown in either an up or down position, shows the direction of change in the number over the past year. This score will fluctuate between 0-100, although it’s hard to imagine you’ll be around long enough to see it hit rock bottom. The ultimate score is shown to the right of the trophy cup icon. This ultimate score is based in part upon the trustee evaluation. Your score can reach into the thousands if you’re able to last a long time. Longevity is a key aspect of your overall score. Note that due to the available screen space, if your score goes over 1,000 the on-screen score will turn over and start again. However, the Score screen (see later) will show your complete score.

The large arrows directly below the ultimate score will cycle you through all of the departments in your university. The small arrows, when clicked, will take you to a list of departments from which you can select. To return to the Campus screen when viewing a list of departments, click on the small campus map in the lower right corner of the Department List screen.

Tip:

You can get to any department on campus by clicking on the building that houses that department on the main campus map. You can see the title of the building by placing the cursor over the building on the campus map and then reading the building name at the bottom of the map.

The Calendar shows the month, day, semester and year. You will notice the calendar moves day-by-day, as would any calendar. The faster it moves (game speed), the faster the everyday functioning of the university takes place. Also, as the calendar changes dates, Virtual U can slow

down as the simulation completes its calculations so it can provide a final analysis and score.

The Menu button in the upper right hand corner of the screen allows you to adjust the aspects of the Virtual U experience you see in **Figure 6**.

Figure 6: Setting particular simulation characteristics on the Menu.

- Sound Effects Volume, Music Volume, and Game Speed - To set the desired levels of Sound Effects and Game Speed, click your cursor on the bar next to each area and then slide it left or right until the desired level is set. To turn Music Volume on or off, click the appropriate button.

Tip:

Many of the changes in Virtual U settings are done by using the mouse and dragging the slide (such as the one for Sound Effects in Figure 6) to the left or the right.

- With Annual Report set to On, your game will automatically pause at the end of every academic year. You will then be presented with the Year-End Report. With the Annual Report set to Off, your game will not automatically pause at the end of the academic year. It is recommended that you keep it on to give yourself a break and reset yourself for the coming fiscal and academic years.

Tip:

In Virtual U, a dimmed button means a selected button. If the button is not dimmed, it means that whatever operation that button performs is not in force.

- To save a game, click on the Save Game button. You may then enter the name under which you wish to save the game, or you may click on the name of one of the previously saved games and overwrite it with your present game. Be careful of doing the latter, since the latest game you created and are trying to save will replace what you have done before. If you wish to delete a previously saved game, click on its name and then on the Delete button. That game will then be erased from the memory.
- To load a game that you have already started and want to resume, click the Load Game button on the Game Menu screen and click on the name of the file that represents the game you want to load. You will be asked to make a department active and can then begin the simulation.
- You can retire any time by clicking the Retire button on the Game Menu. You'll get your final score, maybe a gold watch, and your last game will be placed in the Hall of Fame. Whereas retiring in real life means lots of time to do what you want, retiring in Virtual U is akin to surrender and the admission of defeat.
- The Quit to Main Menu button will take you back to the Virtual U Game Setup screen.
- The Quit to Windows button will return you to Windows. The game will not be automatically saved, so if you wish to save make sure that you do so before quitting. Virtual U will not warn you that the current Virtual U session has not been saved.
- To continue the current game, click Continue Game, which returns you to the game.

As we continue to move around the opening screen, there's a Small Campus Map in the lower right corner of the opening screen which allows you to move quickly and navigate the entire campus. Clicking on the target area in the small map will center the Main screen on that spot. You may also navigate the main map by simply holding your cursor at the far

edges of the Main screen. The large map will scroll in the direction of your cursor. And when you want to visit a specific building, just double-click on the large or small campus map.

- Underneath the Menu button on the campus map is a ?, which represents Virtual U Help. Click this icon to get help on any aspect of the simulation.
- To the left of the small campus map is the Blackboard, where there are three areas where text can appear as follows.

M = Messages

O = Objective

Log = See old messages

- Zooming can be done through the use of the magnifying glass shown at the bottom of the opening screen.
- The printer icon directly below the magnifying glass icon and to the left of the Blackboard allows you to print the contents of the Virtual U screen, depending upon what is on the screen. For example, if you are looking at a report, Virtual U can print the current screen, a departmental report by department, or an institutional report.
- Game Speed can also be set by clicking the ventilation grate icon, which is located to the left of the magnifying glass and printer icons. You may then slide your cursor left and right on this grate. The game will run fastest when the color indicators completely fill the grate. The game will be paused when you slide your cursor all the way to the left and no colors are visible. You can also pause the same by pressing the P key, which acts as a toggle switch to Pause and Continue the game.

Tip:

If you want to set the speed of the game using the keyboard, press 0 to pause the game and press 1 through 9 to set the speed, with 9 being fastest. In fact, the best way to play Virtual U is to pause and think through changes. Put the changes into effect then turn the game clock back on to let the changes run for a while. Then stop it to make additional changes or run through to the end of the year.

- Finally, the envelope icon represents the Trustees' year-end report. Otherwise, the contents of the envelope contain the scenario describing the situation you are trying to accommodate. Any time that it appears, you can open it and read the contents.

Hotkey commands

Instead of clicking away with your mouse, try the various available hotkey commands as shown in Table 1. Here are the hotkey commands with the corresponding actions. Some Virtual U users find these hotkeys very fast and prefer to use them rather than the mouse. Your quick-reference card also contains these and other shortcut actions for Virtual U.

Table 1: Virtual U Hotkeys

Function (and other key(s))	What it does
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F1	Campus map
F2	Faculty
F3	Student
F4	Courses
F5	Performance
F6	Finance
F7	Score
F8	Print Menu
F9	Administration and Help Topics
F10	Game Menu
Z	Toggle zoom mode

Then there are the set of keys that correspond to the reports that you can generate about the University's status. Table 2 lists the corresponding function keys and the reports they produce.

Table 2: Virtual U Function Keys

Key	Report it produces
A	Student Admissions Statistics and Targets
T	Athletics Programs
D	Development and Alumni Affairs
F	Operations and Maintenance Expenditure
L	Libraries and Information Technology
I	Asset Allocation
C	Crime Report
K	Parking Report
W	Scenario Acievements

P	Pause/unpause the game
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Getting Help

Figure 7: Getting Virtual U help from a list of topics.

Virtual U provides extensive help, which is indicated by the presence of a question mark in certain screens and through the F9 hotkey. To get to the Help index, follow these steps.

1. Press the F9 function key or click the question mark icon that appears on a variety of screens.
2. Click the Help Topics button. You'll see an extensive list of help topic as shown in Figure 7.
3. Double click on the topic on which you want assistance such as Administration (G&A).
4. Click the Close button when you are ready to return to the simulation.

Tip:

You can see Virtual U term definitions by placing the cursor on top of a screen term and leaving it there until a definition appears.

Virtual U: Playing the Simulation

The purpose of Virtual U is to familiarize the user with the complexity of how a university works and how changes in one variable can have an impact on many others. During a Custom game, the player explores the consequences of the choices he or she makes in real time. For example,

- if the percentage of on-campus students is raised, the demand for facilities and the need for more money is increased as well,
- selecting high intensity for sponsored research creates more activity and also more associated expenses,
- selecting Public rather than Private for Institutional Control means the institution will receive a state appropriation, incurring other obligations and consequences, and
- selecting Urban for Campus environment affects the applications and admission of students.

Approaching Management within Virtual U

As designed, Virtual U gives you two routes toward improving the university and any specific goal within your institution. You can improve an institutional attribute that will have trickle-down effects. For example, expanding the budget for plant and facilities will help several areas of your university including research performance, educational quality, and student and faculty morale. The second approach is a "bottom-up" approach that involves improving individual departments in order to improve the university as a whole. For example, to improve your university's overall research performance, you must improve each individual department's research performance. One of the most critical aspects of managing Virtual U is understanding which problems are best solved with a "top-down" approach and which are improved by a "bottom-up" approach.

In many cases it will take a combination of approaches to reach your goal. For example, a university that is sagging in academic performance may need to add professors (a top-down

approach that starts with allocating more money for new faculty) and tweak several departments' hiring targets to balance teacher-student ratios. Together these should help increase key teacher-student ratios and, therefore, academic performance.

You shouldn't expect immediate or dramatic returns on investments. It may take several years of gradually increased budgets and adjusted department variables to bring about a sustained positive trend. This is one of the many ways in which Virtual U operates just like a real institution of higher learning.

The In Game Menu

Much of what takes place in Virtual U takes place within the In Game menu.

The top part of the screen shown in Figure 8, shows a list of the following menus: Campus, Faculty, Students, Courses, Performance, Finance, and Score. Each of these individual buttons reveals extensive information about the status of your university, its policies, and the mechanisms you can use to change such policies. Some other items are not accessible through this menu but are pulled up by clicking on the associated buildings in the game. First we will move through the major menus represented at the top of the screen, then describe the additional departments you access by clicking on the appropriate building on the game screen.

For the most part, these individual menus do one of two things - they allow you to:

1. access information so you know the value of a certain variable (such as the number of beds occupied in on-campus housing), and
2. set certain values as part of your administrative duties for both departments (of your choice) or for the institution as a whole and in effect, make policy decisions.

Each of the separate In Game menus shows you a variety of choices at the department level or at the institutional level. For each of the options on the In Game menu, you will see be able to see the current status of a particular variable and also see what can be done to affect that status. Both of these are shown for each in the table that accompanies the description of each In Game menu option in the following sections.

Campus

The Main Campus screen (which you see when you click the Campus button) shows you a particular section of your campus. Each one of the buildings on campus is "live" in that it can be double-clicked to learn more about that building and to work with the various variables that are represented. For example, if you double-click on the building titled Residence Hall (on the campus map), you will be shown information about Student Housing (Figure 8), including available and occupied beds.

Figure 8: Clicking on a particular building in Virtual U results in information about that campus unit.

To find out what a particular building is used for, place the cursor over that building. The name of the campus unit department housed in that building will be displayed immediately above the black board at the bottom of the screen. Many of the buildings on the Virtual U Campus screen will remain the same no matter which version, scenario, or custom game you launch. However, depending on the mix of departments you choose (and the number of departments), the South

East section of the Campus screen, which contains the cluster of department buildings, may appear different from previous Virtual U games to reflect the different mix of departments you may now be using. Only the map will change to reflect your mix of departments. Items like the Old Main building, Student Union, and the Admissions and Financial Aid Office will remain the same.

Tip:

Many of the screens in Virtual U can be arrived at through multiple methods. For example, when you double-click on a department’s building on the main map, you will bring up the performance statistics for that aspect of the university or academic department. You can also reach the Faculty screens by clicking on the Faculty button and then scrolling through the list of departments, or by hitting the appropriate hotkey. See your reference card for more help in moving to and through various sections of Virtual U.

Faculty

Figure 9: Information about the faculty and its distribution by rank.

Clicking on the Faculty button (F2) provides you with the information you need to assess the status of the faculty (titled Faculty Activities) along an extensive number of dimensions. Once you are inside the Faculty area, as you see in Figure 9 (which shows the distribution of faculty by rank), you can then cycle through the different departments of your university by clicking on the up or down arrow buttons located just to the right of the department name. To do this, the Profile button for Department at the bottom of the Faculty screen must be selected.

Table 3 is a summary of what each button at the bottom on the main Faculty screen produces when clicked for any department or for the entire institution.

As the table documents, there is a lot of information available in these various sections of the faculty area. In fact, you will spend a large percentage of your Virtual U time adjusting the various policies for faculty in each department.

Table 3: Faculty Screen Buttons

Button	Purpose	Department Level	Institutional Level	What variables can be manipulated?
Ranks	Shows faculty distribution by rank.	<ul style="list-style-type: none"> Assistant Professor (number and %) Associate Professor (number and %) Full Professor (number and %) Long-term adjunct (number and %) Short-term adjunct (number and %) Total (number and %) 	Same as department level, but for institution as a whole.	None
Profiles	Shows faculty distribution by gender and ethnicity.	<ul style="list-style-type: none"> Male nonminority (number and %) Female nonminority (number and %) 	Same as department level, but for institution as a whole.	None

		<ul style="list-style-type: none"> (number and %) Female minority (number and %) Total (number and %) 		
Activities	Lets you observe and set faculty activities on department level.	<ul style="list-style-type: none"> Talent and performance in the areas of teaching, scholarship and research Faculty morale Normal teaching load Course preparation Out-of-class student contact Educational development Research Scholarship Institutional and public service 	Same as department level, but for institution as a whole	<p>On a department-by-department basis you can set priorities for the following activities:</p> <ul style="list-style-type: none"> Teaching Load Course preparation Out-of-class student contact Educational development Research Scholarship Institutional and public service
Research	Sponsored Research	<ul style="list-style-type: none"> \$ proposal outstanding, \$ rejected, and \$ accepted monthly or annually Total sponsored research expenditures for the current month Total direct sponsored research expenditures for the current month % of regular faculty with sponsored research 	Same as department level, but for institution as a whole.	None
Directory	Faculty Directory	<ul style="list-style-type: none"> Name Gender/ethnicity Age Rank Salary Time in rank Off-duty trimester Satisfaction index 	Not applicable	None
Directory	Faculty Directory (detail view)	<p>All of those listed above, plus</p> <ul style="list-style-type: none"> Normal teaching load Course preparation 	Not applicable	None

		<ul style="list-style-type: none"> • Out-of-class student contact • Educational development • Research • Scholarship • Institutional and public service • Total • Talent: Teaching • Talent: Scholarship • Talent: Research • Performance: Teaching • Performance: Scholarship • Performance: Research • Satisfaction index • Sponsored research project, status and months to status change • Total projects • Total monthly expenditures 		
Hiring	Faculty hiring priorities	<ul style="list-style-type: none"> • New blood • Leadership • Coast containment • Long-term adjunct • Short-term adjunct • Minority • Female • Teaching talent • Scholarship talent • Research talent 	Not applicable	Every variable can be manipulated. You may set priorities for the hiring – and should do so early in the game in order to begin building a faculty population that reflects your values.
Salary	Faculty salaries	Not applicable	<ul style="list-style-type: none"> • Departmental salary increase by department • Departmental salary increase by rank and experience • Teaching performance • Scholarship performance • Research performance • Gender and ethnic equity 	This section lets you set how salary raises should be determined. You can manipulate all the variables to design a policy that affects all raises.
Promotion	Promotion and tenure	Not applicable	<ul style="list-style-type: none"> • Importance 	In order to solidify a

			of salary as reflected in promotion <ul style="list-style-type: none"> • Difficulty of promotion to tenure 	want, you need to set promotion and tenure policies. These variables let you determine how often a member will be given long-term status for a given department, and how their status will be reflected in salary and thus the cost for faculty at your University.
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If you want to know about any one faculty member in greater detail, click the Directory button in the Faculty screen, then click on the faculty member of interest. Clicking the Detail button will allow you to learn everything from the amount of money received for research activities to the number of hours the faculty member meets with students outside of class. You can see an example of this for Fred Tilchin in Figure 10.

Figure 10: A detailed view of a faculty member.

You may initially wonder why looking at the various faculty detail charts serves any purpose in Virtual U. However, by looking at the details of a given department’s faculty, you can more accurately determine the strengths and weaknesses of that department. You might then adjust any number of faculty policies for that department in order to improve it. In the early stages of your experience with Virtual U, this level of play will be difficult. As you master other areas of the simulation, you may want to begin to drill down to the faculty detail screens in order to get that extra level of insight that might make you a better president.

Students

Students are the reason for the institution’s existence and the variables located within this general area describe the associated demographics, student talent and performance, and tuition and housing status.

The last two screens don’t pertain to students, per se, but rather to things relating to students outside the academic areas. “Finance” provides information on total tuition revenue and on expenditures on student life. “Residence hall” provides information about the number of students that can be and are housed on campus, and also about the University’s tuition rate. Table 4 is a general summary of profiles and other general characteristics.

Table 4: Student Profiles

Button	Purpose	Department Level	Institutional Level	What Variables can be manipulated?
Levels	Shows student distribution by student level.	<ul style="list-style-type: none"> • Undergraduate traditional (number and %) • Undergraduate nontraditional (number and %) • Master’s students (number and %) • Doctoral students (number and %) 	Same as department, but for the institution as a whole.	None

		<ul style="list-style-type: none"> (number and %) Total (number and %) 		
Profiles	Shows student distribution by gender and ethnicity group	<ul style="list-style-type: none"> Nonminority male (number and %) Nonminority female (number and %) Minority male (number and %) Minority female (number and %) Total (number and %) 	Same as department, but for the institution as a whole.	None
Activities	Shows student performance and activities	<p>For undergraduates, master's and doctoral students, the following information</p> <ul style="list-style-type: none"> Academic talent Academic performance Number of degrees awarded Time in years to degree Number of dropouts 	Same as department, but for the institution as a whole.	None
Undergraduates	Shows satisfaction level and attributes for undergraduates	Not applicable	<ul style="list-style-type: none"> Undergraduate talent in the academic, extracurricular and athletic areas Undergraduate satisfaction in the academic, student life, and athletics General overall satisfaction 	None
Finance	Shows tuition and student life related statistics.	Not applicable	<ul style="list-style-type: none"> Gross tuition income Student life spending Student life satisfaction Change in tuition rate Change in student life 	<ul style="list-style-type: none"> change in tuition rate change budget spent on student life <p>Note also that these variables can be changed during end of the year budget planning as well.</p>

Residence hall	Shows and lets you set student housing attributes.	Not applicable	<ul style="list-style-type: none"> • Available beds • Occupied beds • Tuition rate • Room & board rate • Ratio of occupied beds to available beds • Percentage of traditional undergraduate students in residence halls 	<ul style="list-style-type: none"> • Sets percentage of traditional undergraduate students in residence halls
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Courses

An essential part of managing any institution of higher education is being aware of what types of courses (Courses on the In Game menu) are offered and their respective enrollments. The goal of this section of Virtual U is to allow you to design the course mix of each department to ensure a strong teacher-to-student ratio while not breaking your budget or overworking the faculty. See Table 5.

Figure 11: The options available under the Courses item on the In Game menu.

The following set of options (shown in Figure 11) reflects variables related to such outcomes.

Table 5: Courses Options

Button	Purpose	Department Level	Institutional Level	What Variables can be manipulated?
Overview	Lets you see the basic statistics concerning class mix, size, enrollment, and performance.	<ul style="list-style-type: none"> • Class Type • Number of sections • Enrollment • Average class size • Class size deviation from norm • Students denied entrance to course • % of Students failing courses • Overall average class size 	Same as departmental, but for the institution as a whole.	None
Class types	Lets you set the percentage distribution among three basic styles (and sizes) of class type on a department-by-department basis.	Current and target fractions for seminars, general classes and classes with breakout sessions	Not applicable	Target fractions for seminars, general class and classes with breakout sessions
Summer teaching and technology	Lets you set institutional policies concerning technology use for classes and summer	Not applicable	<ul style="list-style-type: none"> • Percent of courses using information technology. 	Set the level of emphasis on summer course taking.

	enrollment.		<ul style="list-style-type: none"> Emphasis on summer course taking. 	
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Performance

Figure 12: Looking at institutional performance.

This screen (**Figure 12**) allows you to quickly access how the institution is performing on a variety of different variables. More detail can be gleaned for some indicators, though not all of them by clicking the Detail button associated with certain departmental performance charts. This will show individual performance statistics broken down by academic department. The information provided is the same for both departments and the institution as a whole. The performance breakdown shows each department's rank for the six variables noted below. None of these variables can be adjusted — they are only performance indicators. However, they can help you pinpoint areas that need improvement. By noting which departments are the laggards in any performance area, you can focus on improving them in your attempt to improve the University's overall performance. Table 6 shows the performance variables you can track and the details provided.

Table 6: Institutional Variables

Variable	Detail
Educational quality	<p>Current value, weight and last trimester change for</p> <ul style="list-style-type: none"> Faculty teaching performance rating Faculty educational development time Faculty scholarship performance Faculty research performance Technology utilization in teaching Deviation of class size from its norm (%) Deviation of teaching method mix from this target (%)
Prestige	<p>Current value, weight, last trimester year change and trend for</p> <ul style="list-style-type: none"> Faculty research performance Sponsored research Quality rating for doctoral students Number of doctoral students per regular faculty members
Student morale	No further details available
Faculty research performance	No further details available
Faculty morale	No further details available
Faculty diversity index	No further details available

Tip:

Many faculty performance graphs are also shown on the department Faculty screens as well. In the case of Prestige, the institutional value starts with the average of the departmental values and then adds information about the undergraduate application and yield rates, and the performance of the athletics teams.

Score

The final summation of your performance as President or Chancellor is shown in the score area of Virtual U (**Figure 19**).

Figure 19: Final scores on the President’s performance.

The score is an element meant to give you a cumulative summary of your performance in running your university. It also provides some insight into some of the adjustments that can potentially improve in your university.

The Virtual U scoring system is weighted by how many years you have kept the University solvent and running. While overall performance may not be stellar on a year-to-year basis, you can still improve your score. Virtual U rewards longevity. Score variables are shown in Table 8. For more on scoring issues in Virtual U, see How Virtual U Keeps Score: The End of Another Year and Where You and Your University Stand later in this manual.

Table 8: Score Variables

Button	Variable
Overall	Current value, weight and last trimester change for <ul style="list-style-type: none">• Current trustee evaluation• Last month change• Trustee evaluation at the beginning of the game• Number of gaming years• Total bonus points• Game score
Outputs	Current value, weight and last month change for <ul style="list-style-type: none">• Degrees granted• Sponsored research activity
Performance Indicators	Current value, weight and last month change for <ul style="list-style-type: none">• Prestige• Educational quality• Scholarship, broadly defined• Student diversity• Faculty diversity

	<ul style="list-style-type: none"> Percent of alumni who have donated during past five years
Rank	Rank among similar universities
Attitude toward the institution	<p>Current value, weight and last month change for</p> <ul style="list-style-type: none"> Faculty morale Student morale Staff morale
Financial indicators	<p>Current value, weight and last month change for</p> <ul style="list-style-type: none"> Current surplus (deficit) as a percent of expenditure Smoothed surplus (deficit) as a percent of expenditure Endowment payout rate relative to equilibrium payout rate Deferred maintenance backlog

Additional Virtual U Departments

Not every item in Virtual U is accessible through the top-level menu system. For some management reports and administrative options you need to click directly on a campus building and take action on the resulting screens. These can include such important functions as the library and IT Center, the athletics department, and the Development and Alumni Affairs office.

Old Main

The Old Main building provides you with a key aspect of your University's financial planning. This is where you plan the investment strategy for the University's endowment as shown in Figure 20 and outlined in detail in Table 9.

Figure 20: One of the main screens in the Old Main building of your university lets you set the current endowment asset allocation.

Table 9: Investment Strategy

Button	Purpose	What variables can be manipulated?	Notes
Overview 1	See current endowment asset allocation and set endowment investment philosophy.	You can change the asset allocation for the university endowment by changing the mix between large-cap stocks, small-cap stocks, and bonds.	Virtual U follows basic portfolio theory and therefore abnormal investment plans will generally perform poorly, as they would in the real market.
Overview 2	Shows the budget items that relate to endowment spending and graphs the projected minimum,	You can change the endowment smoothing policy and implement a percentage change in the current level of endowment spending.	The endowment spending variable can also be set during the year-end budget planning phase.

	average spending.		
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Libraries and Information Technology

A key aspect of any university is the fundamental underpinnings that enable access to the information that creates the opportunity to learn. In Virtual U, the decisions relating to information management are found in the Library and Information Technology Center (Figure 21).

Figure 21: The Overview screen of the Library and Information Technology Center shows you just how much of a role information infrastructure affects the University. In addition, you can assess the quality of the ever-important Internet connection, which stands as a surrogate for all your IT activities.

Table 10: Libraries and Information Technology

Button	Purpose	What variables can be manipulated?	Notes
Overview	Assess quality of information infrastructure and makes changes in use policies.	Change faculty incentive for educational development.	Many colleges start up with poor Internet connections – be sure to check the status information screen when starting a new game.
Finance	Shows budget information related to library and IT spending.	You can increase or decrease current budget levels related to expenditures for libraries or IT infrastructure for the university.	Use of information technology is a key component of the educational quality level attribute on a department-by-department basis in Virtual U and thus increased spending here can help directly raise educational quality in the university.

Figure 22: In the Facilities Management Office, you can set the debt rules for new construction. This determines the percentage of new construction that is funded by debt as well as the University's absolute debt limit.

Facilities Management Office

Keep your buildings from crumbling and your campus roads pothole-free by visiting and setting policy in the University's Facilities Management Office. Here you will find four screens that let you assess the space needs of the University and the financial instruments devoted toward funding new construction and upkeep for the University (Figure 22).

Table 11: Facilities Management

Button	Purpose	What variables can be manipulated?	Notes
O&M	See status of operations and maintenance work and budget as well as O&M staff morale. Also set budget policies.	You can change the budget line for O&M expenditures.	O&M budget changes can also be set at the end of the year finance phase.

Space in use	Check status of facilities space. Lets you see current use, future needs and the norm needed to realize full use of University space	Nothing can be changed.	
Capital reserve	Shows capital reserve budget information including gifts and other income related to capital expenditures.	Lets you change budget line that controls how much money is transferred to the University's capital reserve.	
Debt	Shows report on university's debt status and lets you change policies relating to debt and new facility construction.	Lets you change percent of new construction that is funded by debt as well as the University's absolute debt limit.	

Development and Alumni Affairs

Your Development and Alumni Affairs Office is where you try to improve your finances by obtaining donations from past students. It is also where you can help direct incoming donations not only to the all-important endowment, but also to two other critical financial areas — the current use budget and the facilities and construction budget. (Figure 23). The department is composed of two screens as outlined in Table 12.

Figure 23: One of the most crucial roles of the Development and Alumni Affairs Office is determining how incoming donations will be directed for use at your University. Funds can be sent to the endowment, used to support the current year's budget or added to the facilities construction budget.

Table 12: Alumni Affairs

Button	Purpose	What variables can be manipulated?	Notes
Uses of gifts	Shows current status and lets you set use of alumni gift. Also shows number of alumni who gave last year and alumni morale.	Set allocation of incoming donations as it relates to proportion sent to endowment, spent on current use and spent on facilities.	If debt load on facilities is rising too high, use this allocation screen to send more money from alumni donations to relieve debt funding of university construction.
Finance	Shows budget information related to alumni gifts and fund-raising.	You can raise or lower the current level of spending allocated to fund-raising activities.	Fund-raising budget can also be resolved during end-of-year budget phase.

Admissions and Financial Aid Office

The Admissions and Financial Aid Office lets you define many aspects of the admissions process, including how exclusive your admissions policies are and what talents incoming students must possess. You can also focus the University on affirmative action issues and issues dealing with athletic recruitment.

Figure 24: The Overview screen of the Admissions office provides a colorful assessment of the

actual admissions the University made in its previous year.

The Admissions and Financial Aid Office contains four screens, many of them with items that can be set as outlined in Table 13. Figure 24 shows the Overview screen of the Admissions and Financial Aid Office, which lets you set the basic admission goals for number of students accepted for the upcoming year.

Table 13: Admissions Office

Button	Purpose	What variables can be manipulated?	Notes
Overview	Provides statistics of admissions by student type and lets you set target admission population for the coming year.	There are five student types shown. For each, except Doctoral students, which are derived from the various departments' need for teaching and research assistants, you can drag the brown bar to increase or decrease the admission goal for the coming student year.	Note the structure of the information provided, which shows you the number of applicants, admissions and matriculated students plus your admit and yield rate. Admitting more students if class sizes, space and other variables will cover it can help raise money for your institution.
Trends	Shows a series of history graphs which detail the recent life-span of your admissions process and what talents each degree type population possesses	None	Worth checking in on from time to time to ensure that priorities about student population outlined as problems by the board are trending in the right direction.
Priorities	Allows you to set the priorities for admission by skillset for incoming students as well as set special admissions policies for athletes and minorities.	<ul style="list-style-type: none"> • Priorities for Academic performance, extracurricular performance and athletic performance on a scale of 0 – 10. • Special admission for underrepresented minorities for all students levels (None-High) • Special admission for athletes (None-High) 	<p>Special admission for athletes is also available as a setting in the Athletics Department.</p> <p>If you intend to give priorities to any of the three skill types, make sure they aren't set at the same level otherwise no real priorities will be given emphasis.</p>
Financial Aid	Lets you set all policies relevant to financial aid to incoming students as well as special aid to certain types of incoming students.	<ul style="list-style-type: none"> • Percentage of traditional undergraduates financial need the University agrees to pay • (the percentage of) Traditional undergraduates to be offered merit aid • (the percentage of) Nontraditional students to be offered financial aid • Do you give special financial aid to treatment to minorities for all student levels? (None-High) • Do you give special financial aid to athletes for all traditional undergraduates? (None-High) 	Raising financial aid requirements will result in larger budget outlays and reduce income from tuition. It will also raise the number of and type of matriculating students in some cases.

Tip:

The Admissions and Financial Aid Office will automatically adjust its target for entering traditional undergraduate student to take account of the previous year's graduation and dropout rates. For example, if dropouts have been greater than expected the office will increase the target intake in

an effort to maintain your desired total student numbers. Of course, random variations in the percentage of admitted students who actually show up (the “yield rate”) will cause actual student numbers to deviate from the target.

Tip:

One of the first things to do when beginning a new tenure as president of Virtual U is to set incoming student attributes and priorities so your incoming population of students begins to trend in the desired direction. Remember also that it will take several years for a series of incoming classes to fully populate the school with students admitted under your priority settings, so plan ahead or be aggressive about incoming student population sizes.

Athletics Department

Every university has some level of commitment to athletics as well as academics. Some compete in Division I, a level of competition at the peak of the national level. Success on this level can bring in millions to the university and raise applications. It also can be a budget drain if the teams don't win and alumni are disheartened. Virtual U tries to simulate issues concerning athletics by giving you control over some basic budget and policy issues regarding athletics. The University also features two teams that are representative of the overall range of athletic programs a typical university offers. In the fall, your men's football team takes to the field and compiles a win-loss record you hope to be proud of. In the spring semester, the women's basketball team competes and tries to make it into the season-ending tournament.

As president you can check in on the status of your teams, and set policies as outlined in Table 14. You may click on either the football or basketball stadiums to reach the department screens.

Table 14: Athletics Variables

Button	Purpose	What variables can be manipulated?	Notes
Overview	Shows current status of teams and University policy toward athletics and lets you set those basic policies.	<ul style="list-style-type: none"> • Current intercollegiate level of competition • Special admissions treatment for top athletes • Special financial aid treatment for top athletes 	<p>At the top of this screen the number of current top athletes admitted to university is displayed.</p> <p>You must click on the buttons to the side of the graph to switch the view between win-loss records for each team.</p> <p>The special admissions and financial aid variables can also be found in the admissions department screens.</p>
Finance	Shows budget statistics and gaps for the athletic program.	Change in athletic expenditure budget.	The change in athletic expenditure can be taken care of during the budgeting phase but you may lock it in or note a change for next year here. A winning team won't necessarily turn your athletics program into a money-maker. It will take a sustained program to begin making money. However, donations may rise, and applications may rise, which will have other positive effects on your finances.

Tower

The top of the tower is a place to reflect and thus is another route in Virtual U to pull up your Game Score screen and assess your tenure as president.

Figure 25: Virtual U's parking report shows if there is enough space on campus for all its drivers.

Parking lots

Clicking on any of the campus parking lots will display the parking report (Figure 25). There is no ability to directly affect the tumultuous issue that is campus parking. However, if the report indicates a need for more parking you may want to increase your facilities budget.

Police Station

As with the parking lots, the campus Police Station only displays a report — the crime report. You cannot directly focus on campus crime problems at Virtual U. But if crime continues to rise, it may be indicative of the need to spend more money on administration and non-faculty personnel salaries so more and better police and security officers are hired.

President's Mansion

Clicking on the President's Mansion is not the way to retire to the comfort of a warm fire and today's newspaper. Instead, it allows you to check on your yearly board memo and reacquaint yourself with the goals and problems the board cites for you.

Chapel

Clicking on this may bring hopes of divine intervention for help in your job, but most likely you'll be left to your own devices.

What administrator doesn't need to turn to this "bottom line" summary of how his or her institution is doing? The three-year financial projections (Figure 13) provide a detailed account of revenue and expenditures across all areas of institutional activity. This section of Virtual U, as with a real institution, requires a lot of study and attention. The majority of Finance screens are available and active during the entire school year. However, most of the main budget planning can only be handled during the annual budget-setting exercise, which takes place at the end of each school year.

Figure 13: The Financial Projections screen provides a detailed accounting of your past and present spending and income.

The Finance and Resource Allocation Screens

The finance and budget phase (also known as Resource Allocation) of Virtual U is perhaps the most important and difficult section of the simulation to master. Since budgeting involves so many critical decisions that affect the university, it can be the key to affecting the maximum change you are trying to obtain during your tenure as president. Additionally, the interface and the way the entire budget phase works are a bit more complex than other parts of the Virtual U software.

Tip:

The budget portion of Virtual U may take several games to understand completely. It has a multitude of possibilities so be patient and eventually you can master the budgeting phase like a real pro.

The Premise of Virtual U's Finance Phase

Before you can really begin to master the budget and finance interface of Virtual U, you must understand the design premise behind it. The Virtual U budget process simulates the traditional give and take between a president who outlines priorities (some of which may be absolute and some relative) and a budget office that has to reconcile priorities and budget requests against the overall framework of the budget plan and balance sheet. In each of Virtual U's actionable Budget and Finance screens, you first will set the desired budget increases or decreases. This will include setting a target value plus the upper and lower end of the acceptable range for the budget variable. Then you will set priorities for each budget element. Once this has been completed, you submit that outline to your "budget wizards" by clicking the optimize button that accompanies each screen. The budget department will check all the numbers and report back the approach that best meets your specifications.

As you will see, what you outline and what they deem possible will not be the same. You can accept their results and move on, or adjust the priorities and change items to induce the budget department to get closer to your pet priorities (while knowingly sacrificing other objectives).

While this process gives you less exacting control over the budget than you might like, the approach is similar to the real negotiation and priority setting that a true university budgeting process has to endure. With this description as a backdrop, you can better understand how to work directly with the budgeting interface.

Using the Finance Phase's Interface

The finance section of Virtual U is entered in one of two ways. At any time during play you can click on the Finance menu and enter any and all of the screens related to finance (Figure 14). In addition, at the end of the fiscal year (August 30 for Virtual U) the board will always come calling (unless you have turned off the year-end financial report on the Menu screen, which we recommend not doing). This mandates that you run through the budget and set priorities for the coming fiscal year. Thus, whether you want to or not, you will be forced to look at these screens at least once a year. You may look at the screens anytime, but the main focus is at the yearly review.

Figure 14: When entering the financial section during normal course of play, you'll find a menu at the bottom of each screen that makes it easy to move around the entire finance system of Virtual U.

When the yearly review occurs you will be greeted with a telephone ring and presented with a letter summarizing the board's view of your management for the previous year. After reading through the letter you will automatically be shifted into the budget phase of Virtual U.

The first few screens of the budget phase will display the previous year's budget vs. actual spending and balance sheets. This gives you a chance to review where spending levels have been and how they actually worked out over the previous year. Keep in mind as you look at this what the new year's board letter outlined as your problem areas and priorities. (Hopefully you wrote them down or printed the letter out, although you can always go back and look at the letter once play resumes.)

Tip:

During each school year and as you examine the resulting Budget screens, you may want to keep good notes about areas you want to improve. If not, you may be left making poor decisions about the investment priorities in your budget. Which departments need more teachers than others? How much more money must you spend for a winning athletic program? Notes made during the year will play a big role in your year-end budgeting. Finally, use the budget adjustment features that are attached to specific departments of Virtual U that you encounter during play. By using the “promise for next year” or “consider for next year” functions, you can effectively embed desired changes in the budget ahead of time as you note them during the previous year’s time.

Once you are through looking at the reports, you will enter into the Resource Allocation for the Fiscal Year. This is the crux of your budget planning for the year. The budget planning process is broken down into three distinct sections:

- Revenue and expenditure
- Allocations
- Faculty hiring

The planning process follows this order. The result of the first section influences the decisions that can be made in the following sections. This plays out in that the amount you grow or shrink the budget overall determines how much money there is to allocate for all the basic functions of the university. After that, the amount you put into faculty expenses in the Allocations budgeting section determines how much money there will be for the Faculty hires, which determines how many new hires overall you can allocate in the final phase of budgeting.

With the exceptions noted later, each of the three main Budget screens works in an identical fashion from the standpoint of the user interface. A slider control (an example of which is shown in Figure 15) is associated with each budget element. This slider contains a green vertical “crossbar” that lets you move it to represent the desired setting you’d love to have. Meanwhile, each slider also contains a horizontal yellow bar that is the part of the control that lets you define the upper and lower boundaries that you would accept during the optimization process (this bar only allows for an upper-end definition in the faculty hires screen).

Figure 15: The slider control used in Virtual U’s budgeting screens.

To slide the slider, click and drag the green crossbar to the desired location on the slider bar — a number that is close to the crossbar will change to highlight in text the setting you are choosing. To define upper and lower boundaries, click on the ends of the yellow bar and drag them left or right as needed to define your limits. When the mouse is properly positioned on the end of the yellow bar, the end will flash and change color - this will help you grab the correct part in order to make the change.

Note:

You can never slide a boundary above or below the setting of the green crossbar. You must move the crossbar left or right to obtain further room for your boundary setting.

To the right of each budget item are the priority buttons, labeled 1, 2, 3, and R. Click on each one for each item to define relative priorities for your budget office.

Note:

If you set all budget priorities to the same level, they will all be treated as equals no matter how high or low priority you set them as a group — thus it is important that you vary your priorities as much as possible in order to achieve maximum direction to your priorities when you click optimization.

Pressing R denotes an item as a restricted priority. That means that the optimization process will treat your budget directions for that budget line as nearly immovable. When you set a priority to R, it locks itself in. To change a priority to a number from an R setting, you must first deselect the R priority (by clicking on "R") and then select a numbered priority. Once you are satisfied with your budget outline, click on the Optimize button at the bottom of the screen. The budget office will go to work and try to fulfill your plan. When the budget office returns with its results, you can click Next to accept them or you can further tweak your priorities and settings. Each time you change one variable after doing an optimization, you must then re-optimize to get a resulting budget closer to your goal and enable moving on to the next screen.

Tip:

Experiment with the budget interface the first time you play Virtual U. Learn how to set boundaries, settings, and priorities that result in emphasis on different budget decisions you most want made. The more you learn how to manipulate the budget interface, the easier you will find it to get the office to do what you want. As in real life, you need to know how to work things to your advantage during budget time.

Figure 16: The Budget Policies screen lets you set many macro-financial attributes for the University.

Completing the budgeting process requires moving through the three main Budget screens. Each item line on each screen has associated help, which can be accessed by pressing the corresponding ? icon located to the left of the budget line item. You may also hold the cursor over individual elements and context sensitive pop-up help will be display. Set each item and optimize as just instructed. When you are satisfied with the results, hit Next. The first screen — Budget Policies (Figure 16) — lets you set many macro-attributes for the University, including growth of tuition rate, financial aid, faculty salaries, and the real operating budget growth.

The next screen in the budget process is the Budget Allocation screen (Figure 17). It allocates the real operating budget growth (or reduction) among the various functions of the University. This gives you quite a bit of direct control over ten distinct areas of the college, from faculty expenses to the student life budget to the amount spent on general administration, that you will want to influence.

Figure 17: The Budget Allocation screen lets you make or break the budget for ten distinct sections of the University in the coming year.

The final screen in the budget process is the Faculty Hiring screen (Figure 18). This screen lets you disperse the total number of faculty your new budget lets you afford across all the active departments in your University. At the bottom of this screen is a slider that lets you increase the number of faculty you will hire beyond the default that was allowed by the previous budgeting process. This allows you to add some last-second hires as you try to eliminated understaffing problems in any departments. Note, however, that adding faculty may put your budget into deficit.

Figure 18: This Faculty Hiring screen allows you to disperse the total new faculty hires in your budget across all academic departments in your University. In case you need to add more faculty at the last second, a slider at the bottom of the screen lets you do so.

As you see, the financial modeling capabilities of Virtual U are both broad and deep. It takes some time to master their capabilities, but once you do you will find yourself a much better player. Table 7 provides a quick overview of all the finance screens and options in Virtual U.

Once you are complete with your faculty hiring and department allocations, you can click Next to return to play.

Note:

The Preference buttons have been removed from the Faculty Hiring screen. Virtual U sets the departmental priorities automatically, but you can affect the hiring pattern by changing the targets and limits.

Tip:

Upon returning to play in your university, it's a good idea to stop the clock and check out all your graphs and set priorities before you get too far into the new year.

Table 7: Finance Variables

Button	Purpose	Variable	Notes
Budget vs. Actual (Standard)	Shows the budget vs. actual spending in various years.	<p>Three-year financial projects for revenue as</p> <ul style="list-style-type: none"> • Gross tuition income • Financial aid • Net tuition income • Sponsored research • Gifts • Endowment spending • Intercollegiate athletics • Other operating income • Interest earned or paid on operating reserve • State appropriation • Total sources of funds <p>Three-year financial projects for expenditures as</p> <ul style="list-style-type: none"> • Academic departments • Sponsored research • Libraries resources • Information technology resources • Student life • Athletics • Development and alumni affairs • Administration • Operations and maintenance • Enrollment management • Total operating expenditures • Service on general plan debt • Transfer to capital reserve • Total uses of funds • Surplus (deficit) 	None of the variables shown in this screen can be changed. However, it's important that you take notes or print these screens if you want to make a more careful analysis for changes in the subsequent actionable budget screens of Virtual U.
Balance Sheet (Standard)	Three-year balance sheets	<p>Three-year balance sheets for assets as</p> <ul style="list-style-type: none"> • Operating reserve • Capital revenue • Endowment at market value • Academic plant replacement values 	The most important role of the balance sheet is to help you determine whether you are carrying too much debt for the University and whether the size of reserves and the endowment keep you solvent. If at any point the

		<ul style="list-style-type: none"> • Residence halls • Total assets <p>Three-year balance sheets for liabilities including</p> <ul style="list-style-type: none"> • General plant debt • Residence hall debt • Total liabilities • Fund balance • Total liabilities and fund balance 	University can't cover its debts, the simulation will end.
Budget Plan	Lets you set all facets of budget by increasing or decreasing last year's budget +/- 0-5%	<ul style="list-style-type: none"> • Real growth of tuition rate • Real financial aid growth • Endowment spending rate • Indirect cost rate • Real faculty salary growth • Real staff salary growth • Real operating budget growth • Transfer to plant • Surplus or deficit 	The basic Budget Plan screen lets you set many macro financial attributes for your University. Be sure to use this screen to increase income and lower overall costs if your University is having problems balancing its books. In addition, you can use it to spur growth in the University, especially faculty growth, which can help you subsequently get individual departments the extra faculty and investment they need to improve themselves and the University as a whole.
Functions	Lets you spread and focus increases or decreases in the budget among various aspects of the University.	For allocation of net budget change <ul style="list-style-type: none"> • Faculty expense • Nonfaculty departmental expense • Libraries • Information technology • Student life • Athletics • Development and alumni affairs • Administration (G&A) • Operations and maintenance (O&M) • Enrollment management 	
Faculty hiring	Lets you set exactly which departments get new hires and how many.	<ul style="list-style-type: none"> • Existing faculty, salary and target hires by department • Number of new budgeted faculty positions • Sum of departmental hiring targets • Total number of faculty to be hired 	New hires will grow departments and provide them (hopefully) with improved talents and results. Before you hire a large number of new professors, be sure that you've used the hiring priorities section of the Faculty screens to push on the university to hire new staff in line with your University vision.

Setting Goals and Policies

By this time, you should have some familiarity with how to start the Virtual U simulation and what's contained in the opening screen as well as on the individual menus. You might even have a good idea how to participate in this simulation.

Now it's time to take a brief look at the essence of what Virtual U represents; a dynamic system where changes in one factor or variable have an impact upon others. But make no mistake; the relationship between the many different variables that make up Virtual U is a complex one that will take a good deal of exploration and experience on your part to fully understand.

In fact, your job as a Virtual U user is to experiment with those variables. There are no hard and fast rules to Virtual U, and if anything, the name of this game is one of trying different scenarios (like the ones that come pre-designed) and examining the consequences of your actions — just like a real university president!

There are four general areas that the Virtual U user should look to for setting goals and policies — that is, examining and using the relationships between certain factors in order to achieve success. What follows is the most important part of this manual, because from the relationships you see defined in the following discussions, you can learn how to change certain parameters by the manipulation of other variables. These four general areas are:

- Outputs
- Performance indicators
- Attitudes toward the institution
- Financial indicators

Each area includes a number of variables. For example, "Outputs" includes the number of "degrees granted" and "sponsored research activity."

In general, you change the value of the variables that are discussed within each of these areas and look to the various indicators to see the outcomes that resulted from the changes. The dynamic nature of Virtual U makes these changes interesting and they are instructive in that you can better understand what outcomes result from what types of changes in different policy areas.

Tip:

You can really only master Virtual U by actually participating in the many different areas of managing a university campus. Just knowing about these variables and their relationships with other variables is not enough - get in there and change different variables as described below and examine the consequences. Sometimes you'll create more problems than you solve, but you'll learn along the way. That's what really counts.

This section of the manual does not cover every item that you can change while managing your University. However, these primary functions do serve as excellent examples of how you can effect change in your University by setting priorities in various departments.

Tip:

Virtual U: The Strategy and Technical Guide covers in much more depth the entire range of items you can change as a Virtual U user. In addition on www.virtual-u.org you will find a vibrant community of users who through the site's discussion boards and mailing lists, will provide further clues into management techniques you can employ in Virtual U.

Outputs: Number of Degrees Granted

The Board of Trustees looks favorably upon increases in this area since it represents one of the institution's main purposes. It also is a quantitative variable that is clear and easy to assess.

The two ways that number of degrees granted can be affected is by:

- increasing student intake

- improving the graduation rate.

Figure 26: Checking how many degrees have been awarded.

To find current information about the number of degrees granted, follow these steps.

- Click Students.
- Click Activities under Institution. You can then see what the number of degrees granted is, as shown in Figure 26.

Increase Student Admissions

Table 15 shows variables related to student admissions.

Table 15: Student Admissions Variables

Variable	How to view current status	What needs to be changed	How to change it
Student admissions	Press the A hotkey anywhere in Virtual U.	(Matriculations) Target Hire more faculty to start programs for students who are not currently served	Adjust variables as necessary. 1. Click Faculty 2. Click Hiring and change the policies and thus increase the number of applications based on the characteristics shown (see Figure 27).

Figure 27: Setting faculty hiring policies.

Improving Graduation Rate

Table 16 shows variables related to improving graduation rates.

Table 16: Graduation Rate Variables

Variable	How to view current status	What needs to be changed	How to change it
Graduation rate	To find current information about course denials and failures, follow these steps. 1. Click Courses 2. Click Overview for Institution.	Number of faculty members and teaching quality, which will speed progress toward graduation and reduce the dropout rate.	To change factors related to teaching such as setting a high priority for teaching contact and course preparation in different departments, follow these steps. 1. Click Faculty 2. Click the Activities button for the department or institution. 3. Adjust variables as necessary. To improve freshman qualifications, follow these steps. 1. Press the A hotkey to go to the Student Admissions Statistics and Targets.

			Academic performance slide.
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Sponsored Research Activity

There is a great deal of prestige associated with the awarding of research funds, especially when obtained from external agencies. That's one reason why the University and its administrators covet such activity. In addition, the award of external research funds is accompanied by the availability of overhead (ranging from 25% to 75% of the total award), that can be used at the university administrator's discretion.

Table 17: Sponsored Research Variables

Variable	How to view current Status	What needs to be changed	How to change it
Sponsored research activity	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Research 	Research and scholarship priority	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Activities for Department. 3. Adjust the Research (Priority) and Scholarship (Priority) slides as necessary.

The way to increase sponsored research activity is by adjusting the priority of the faculty towards this activity. See Table 17.

Performance Indicators

The following performance indicators can be used to evaluate the status of your University:

- Educational quality
- Departmental or institutional prestige
- Faculty research performance
- Faculty morale
- Student morale
- Faculty diversity

To find out the current status of any of these performance indicators, click Performance and you will see a value ranging from 0% to 100% for each of these as shown in Figure 28.

Figure 28: Check your performance.

Educational Quality

Educational quality, as demonstrated in Table 18, depends on many important factors in Virtual U, such as planning, funding and expenditures on other types of activities necessary to produce quality education.

Table 18: Educational Quality Variables

Variable	How to view current status	What needs to be changed	How to change it
Educational quality	<ol style="list-style-type: none"> 1. Click Performance 2. Click Department or Institution 3. View the educational quality graph 	Library and Information Technology Report	<ol style="list-style-type: none"> 1. Press the L hotkey. 2. Click Overview. 3. Adjust faculty incentive for educational development as necessary.
		Expenditures in educationally related activities	<ol style="list-style-type: none"> 1. Press the L hotkey. 2. Click Finance. 3. Adjust change in libraries expenditure budgeted as necessary.
		Priority for educational development	<ol style="list-style-type: none"> 1. Click Faculty. 2. Click Activities for Department 3. Adjust priority for educational development as necessary.

Table 19: Departmental and Institutional Prestige Variables

Variable	How to view current status	What needs to be changed	How to change it
Departmental prestige	<ol style="list-style-type: none"> 1. Click Performance 2. Click Department or Institution 3. View the prestige graph 	<ul style="list-style-type: none"> • The academic standing of departments, which in turn depends on faculty research performance and sponsored research funding • The quality of doctoral programs, which can be improved indirectly by hiring more faculty with research credentials • Level of athletic competition and win-loss record 	<ol style="list-style-type: none"> 1. Click Faculty 2. Click the Activities button for Department and adjust the variable as necessary. <ol style="list-style-type: none"> 1. Click the T hotkey in any Virtual U screen. 2. Click Overview. 3. Adjust special admission treatment for top athletes and special financial aid treatment for top athletes as necessary.

Faculty Research Performance and Scholarship

A central element of the University's activities, scholarship is often the first quality looked to by applicants and the higher education community in general.

Table 20: Faculty Research Performance and Scholarship Variables

Variable	How to view current Status	What needs to be changed	How to change it
Faculty scholarship	<ol style="list-style-type: none"> 1. Click Faculty 2. View research talent and performance 	Research and scholarship indicators	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Activities for the department or the institution

	and performance		3. Adjust the indicators for research or scholarship as necessary.
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Faculty Morale

A happy faculty is usually an effective one. When faculty members are unhappy and dissatisfied, it leads to attrition and below-expected performance.

Table 21: Faculty Morale Variables

Variable	How to view current Status	What needs to be changed	How to change it
Faculty morale	<ol style="list-style-type: none"> 1. Click Performance 2. View the faculty morale graph 	<ul style="list-style-type: none"> • Increase salaries • Decrease teaching loads 	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Salary 3. Adjust salary by department. <ol style="list-style-type: none"> 1. Click Faculty 2. Click Activities for Department 3. Adjust normal teaching load.

Student Morale

As with faculty morale, student morale is an important factor to consider when evaluating performance. Unhappy students not only don't return semester after semester, but also share their unhappy experiences with future students.

Tip:

You can quickly see a summary of scores for faculty, student, and staff morale by clicking Scores and then clicking Attitudes toward the institution. You can also get a summary of scores for prestige, educational quality, broadly defined scholarship, student diversity, faculty diversity, and percentage of alumni who have donated money, by clicking Scores and then clicking Performance indicators.

Table 22: Student Morale Variables

Variable	How to view current Status	What needs to be changed	How to change it
Student diversity	<ol style="list-style-type: none"> 1. Click Students 2. Click Undergraduates for Institution 	<ul style="list-style-type: none"> • Increase educational quality • Increase library spending • Reduce course denials by increasing faculty numbers 	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Activities for Department. 3. Adjust research and scholarship activities. <ol style="list-style-type: none"> 1. Press the L hotkey for libraries and information technology 2. Change the general ...

			<p>expenditures.</p> <ol style="list-style-type: none"> 1. Click Faculty 2. Click Hiring 3. Adjust desired priorities.
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Faculty Diversity

As with student diversity, faculty diversity plays a key role in the attraction of minority students and the possible attraction of outside funding.

Table 23: Faculty Diversity Variables

Variable	How to view current Status	What needs to be changed	How to change it
Faculty diversity	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Profile 2 for department or institution 	Percentage of students representing different minorities	<ol style="list-style-type: none"> 1. Click Faculty 2. Click Hiring 3. Adjust minority faculty hiring priorities as necessary.

Athletic Team Records

One other indirect indicator of success is athletic team performance. Army vs. Navy, University of Kansas vs. Kansas State, and UCLA vs. USC - annual battles to the finish and the alumni and donors love it when their alma mater crushes their rival. "Winning" universities win in scholarship, but on the playing field as well, which is why increasing the number of wins, increases donations and other measures of prestige.

Table 24: Athletic Performance Variables

Variable	How to view current Status	What needs to be changed	How to change it
Level of athletic competition and win-loss record	<ol style="list-style-type: none"> 1. Press T hotkey 	Spending on athletics	<ol style="list-style-type: none"> 1. Press T hotkey 2. Click Overview 3. Select special admission treatment for top athletes and special financial aid for top athletes and adjust as necessary. <ol style="list-style-type: none"> 1. Click Finance 2. Increase the expenditure in the athletic expenditure budget.
		Admission standards and financial aid for athletes	<ol style="list-style-type: none"> 1. Press the A hotkey. 2. Click Priorities 3. Adjust the indicator for

			necessary.
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Financial Indicators

Virtual U has four general financial indicators that influence score. None of these is set by any one or two particular variables as just discussed, but instead each of these indicators captures the essence of the complexity of this dynamic system. Players can determine the status of all of these by adjusting overall financial policies. Each of the following four can be examined by clicking Score on the In Game menu as you see in **Figure 29**.

Figure 29: The financial indicators.

The first indicator is current surplus (or deficit) as a percentage of expenditures. This is the degree to which the current budget augments or erodes the institution's financial viability and the player determines the current surplus or deficit by adjusting overall financial policies.

The second is smoothed surplus (or deficit) as a percentage of expenditures. This is the degree to which the budget trends augment or erode the institution's financial viability. The player determines the current surplus or deficit by adjusting overall financial policies as decided over a period of years.

The third is the endowment payout rate (relative to the equilibrium payout rate). This is only for institutions that have endowments. The rate indicates whether current financial policies will be viable over time.

The last financial indicator is deferred maintenance backlog (as a percentage of replacement value of plant). This indicator measures whether the institution has been spending sufficient sums on plant O&M.

How Virtual U Keeps Score:

The End of Another Year and Where You and Your University Stand

University presidents are the ones who usually give out lots of feedback, but rarely get it. With Virtual U, this is not the case. Each year an annual report is generated with large amounts of information that tell you how your institution has functioned. In addition, there are other reports that you can access at any time. We'll take a look at these other reports first.

One big difference between the following set of reports (which is always available) and the Trustees' report is that you can access reports other than the Trustees' at your convenience - you need not wait until the end of the academic year.

General Reports

Figure 30: The list of reports available in Virtual U.

Virtual U offers constant feedback on how your management strategy is affecting the University.

To see how specific areas are functioning, click on the More Reports button on the main Virtual U screen and you'll see a list of available reports as shown in Figure 30. Click on any one of these and you will get a real time report on the status of your finances in the area you selected. For example, a click on the Athletics report (or pressing the T key) in Figure 30 produces a report containing various types of information about the Athletics program.

With Virtual U installed and your enthusiasm building, you're ready to start playing a game that we hope you think is fun and is as close as you can get to the real thing without actually being in the hot seat. Have fun. Learn a lot.

Welcome to your new office. The last President left after only two years, but we are sure you will grow into the position.

The Scenario Descriptions and Welcome Letters

What follows are the letters you will see after a particular scenario is selected. Because Virtual U is based upon a dynamic model, some of the numbers and statements you see in the following descriptions will be different from those you see on the screen. However, the general content remains the same.

Scenario 1 -- Pay Better

Below market faculty salaries risk the erosion of morale and effectiveness and, eventually, the departure of key professors. Your challenge will be to increase salaries to match those at competing institutions without harming other aspects of University performance. You will be judged on the speed with which you can lift salaries and on overall institutional performance during a five-year period.

The Welcome Letter

The Board agrees with the concern you expressed about faculty salaries at our last meeting. At the meeting you convinced us that the salaries we offer are 14% below the market. Further, because competitive salaries are expected to remain constant, this means our salaries need to improve by 14%. We hope you can accomplish this within ten years, or in less time, if possible.

Scenario 2 -- Allocate New Money

New money provides an opportunity to improve academic quality and institutional prestige, but it is all too easy to disburse the funds ineffectively. Having just received a pledge for a major gift to endowment, you will be asked to allocate the extra income flow to one or more departments in a broad field specified by the donor. You will be judged by the increase in institutional prestige and by the institution's overall performance over a ten-year period.

The Welcome Letter

Congratulations. Juliet Rudnick has just pledged \$19,885 thousands to enhance the sciences and allied fields at our university. The pledge will raise next year's budget (for Yr. 2) by about \$994 thousand. (The name of the person and the size of the gift will vary from game to game.)

The donor gave to improve biology, chemistry, physics and computer science. How will you achieve the goal for which she gave so generously? You could concentrate big money on one or

two departments or spend a little on many. The number of students affected by an alternative represents one criterion for selection. Another criterion is how your allocation of resources affects non-science departments and such important facets of university life as the quality of teaching.

The Board will judge your success first in meeting the donor's expectations, which may encourage other donors, and then in lifting the prestige of our university.

Scenario 3 -- Teach Better

More schools are being criticized for lack of attention to educational quality. You will be confronted by an adverse accreditation report. The report indicates that resources are sufficient but cites discontinued courses, student demoralization, insufficient faculty time and attention devoted to education, and poor teaching generally. Your challenge will be to improve educational quality without undermining other aspects of institutional performance. You will be judged by the increase in educational quality and the institution's overall performance over a ten-year period.

The Welcome Letter

The recent report by the accreditation team alarms the Board. Our proud university should not be cited for poor teaching. Something must be done.

The team attributes our failure to inattention to education rather than to lack of resources. They cited discontinued courses, student demoralization, and insufficient faculty time and attention devoted to students. They cited poor teaching in the classroom. While some departments received a passing grade, most cry out for improvement.

In five rather than the usual ten years, the accreditation team will return. At that time, the Board expects the University's educational quality will be rated good. When the team comes in ten years for our next regular examination, we expect our teaching will be rated excellent.

Remembering the team's opinion that a lack of physical and financial resources did not cause our poor teaching, the Board does not expect a mere plea for more money to achieve accreditation. Rather, we expect a plan to put in our classrooms a faculty that loves to teach.

Scenario 4 -- Improve Research Performance

Most institutions view research and scholarship as essential elements of academic quality. You will be confronted with an adverse Faculty Senate report on research. The report indicates that University budgets are sufficient but cites excessive teaching loads, insufficient time on tasks related to research, low faculty morale, and low sponsored research support. Your challenge will be to improve the quality of research and scholarship without undermining other aspects of institutional performance. You will be judged by increases in the amount and quality of scholarly work and by the institution's overall performance over a ten-year period.

The Welcome Letter

At our last meeting you convinced the Board that faculty research and scholarship at our university are mediocre by national standards. Something must be done.

The Faculty Senate Research Committee attributes this condition to a lack of commitment by both faculty and administrators rather than a lack of resources. The committee blames excessive teaching loads and insufficient research support. They blame low faculty morale. Most

departments require improvement.

In five years, the Board and the Faculty Senate want the University's performance rating in scholarship to be strong. The rating reflects the scholarship of integration, application, and teaching as well as knowledge creation. Remembering that the University's lackluster research performance is not due to a lack of physical and financial resources, the Board expects more than a plea for money. Rather, we expect a plan to breathe life into our laboratories and to re-establish the University's preeminence as a center of scholarship and discovery.

Scenario 5 -- Win Games

A successful athletics program can energize alumni to donate, attract applicants, and boost institutional prestige. You will be confronted with an adverse Alumni Association report on athletics. The report cites too-stringent admissions standards and insufficient financial aid for athletes in addition to low athletic department budgets. Your challenge will be to improve football and basketball without undermining other aspects of institutional performance. You will be judged by increases in the teams' win-loss percentage, the NCAA level of competition, and the institution's overall performance over a four-year period.

The Welcome Letter

The Alumni Association has impressed upon the Board the mediocrity of our athletes. The Board agrees that our institution should win more games, thereby strengthening the loyalty of alumni and attracting new students to all our departments. Something must be done.

The Alumni Association criticizes our admissions standards as too high and our athletics budget as too low. We are faulted in particular for providing insufficient financial aid for athletes. The Alumni expect our inattention to athletes to be corrected without damaging the academic performance that, at bottom, represents the worth of our university.

In four years, the Board and the Alumni Association will review your progress as reflected in our teams' victories. By then, we want our teams to win more than 60% of their games. We would be especially pleased if they were then winning more than 60% in a higher NCAA Division. How will you achieve these goals and at what cost?

Scenario 6 - Reduce Tuition

Tuition escalation has become a pressing public policy issue in higher education. In this scenario, your Board informs you of a new policy that states tuition rates must decrease. The goal of the policy is to enhance financial discipline and attract more talented students to your institution. Your task in this scenario is to maintain institutional performance while decreasing tuition.

The Welcome Letter

The Board notes with alarm that our tuition has escalated at a real rate of 3% per year. Equal extravagance at other institutions does not relieve us of our responsibility to lessen the burden on our students and their parents. People will rebel if higher education continues to be seen as pushing aside their other needs.

Believing the time has come to take a stand, the Board notifies you of its firm policy that our tuition shall not rise. In fact, the board would like tuition to go down.

Until now the University has estimated the growth of nontuition revenue, funded new programs, salary increases, and other costs, and then closed the gap by raising tuition. You will now estimate tuition like other revenue and close the gap by disciplining expenditures. The new budgeting will strengthen internal financial discipline by forcing trade-offs among competing expenditures. Most important, tuition reductions will make us accessible to a larger pool of talented students, thus ensuring the worth and continuity of our university.

Scenario 7 - Respond to Enrollment Shifts

Your institution is experiencing changes in student priorities and academic interests. As a result, some departments have more capacity than they do students while other departments are struggling to meet demand. You are faced with disparities in teaching load and class size and some departments where large numbers of students are being denied access to courses. In this scenario, you have ten years to correct the imbalances brought on by enrollment shifts in order to maintain educational quality.

The Welcome Letter

Shifts of enrollment among departments have distorted course listings, overloaded some teachers and buildings, and left others idle. These shifts leave some courses half-filled while students are foreclosed from desired overfilled courses. Some departments have upped the proportion of lecture courses to accommodate increased student numbers.

Because the world has moved on and made a return to the previous pattern unlikely, the Board shares the concern you expressed at our last meeting. Going beyond describing misalignments, however, how will you restructure our academic programs and faculty resources to match today's needs?

By the second semester of year 11, the Board expects educational quality to increase, course denials to decrease, and average teaching load hours to rise substantially. What is your plan?

Scenario 8 -- Enroll More Minority Students

Boosting the number of qualified minority students represents an important goal for many institutions. You will be confronted with a relative scarcity of minorities in the student body. Your challenge will be to alleviate the scarcity without incurring budget deficits or undermining other aspects of institutional performance. You will be judged on increases in qualified minority enrollments and on overall institutional performance over a 10-year period.

The Welcome Letter

The Board shares your concern about the scarcity of minorities among our students. Further, because minorities are equally scarce among freshmen as among seniors, we see no evidence that time will cure the problem. Instead, you must act promptly to increase the number of minorities.

The Board sets your goal as boosting the number of minority students twofold in ten years, that is, from 9% to 18%. At the same time, we expect this will make us accessible to new pools of talented students, guaranteeing the worth and thus continuity of our university.

The Scenario 9 -- Hire More Minority Faculty Members

Boosting the number of minority and female professors represents an important goal for many institutions. You will be confronted with a relative scarcity of minorities and women on the faculty. Your challenge will be to alleviate the scarcity without incurring budget deficits or undermining other aspects of institutional performance. You will be judged on the growth of minorities and women in the professoriate and on overall institutional performance over a five-year period.

The Welcome Letter

At our last meeting, you told the Board your concern about the few minorities and women on the faculty. We agree heartily and expect the shortfall to be redressed promptly.

You told us that the University has about the same under-representation in all fields, and that minorities are even more underrepresented than women. The scarcity of minorities and women among young as well as old faculty shows the problem will not correct itself.

The Board sets your goal as boosting minority representation by 50% in five years. For women, the goal is a 25% increase in five years. We ask how you will accomplish these goals and with what change in budget and staff size. At the same time, we expect the enhanced representation of women and minorities on the faculty to enrich all aspects of university life. (Percentages shown above are examples. Actual percentages are created dynamically based on conditions in the generated game.)

Scenario 10 -- Balance the Budget

Large budget deficits require immediate corrective action to avoid depleting the University's financial reserves. You will be confronted with a significant revenue loss. Your challenge will be to cut the budget while minimizing adverse effects on academic quality and future financial and operating viability. You will be judged on the speed with which you achieve a balanced budget, on whether you can offset the original deficits with subsequent budget surpluses, and on overall institutional performance during a nine-year period.

The Welcome Letter

The budget deficit you project alarms the Board. Unexpected shortfalls in research grants, gifts, and other income have thrown the budget (\$5,711 thousands) into the red. Worse, hopes of more income anytime soon are vain. At our recent meeting, you disappointed the Board by advancing no remedy to cope with the new circumstances promptly. We are disturbed that you currently are targeting a 3 percent deficit for next year.

You must act immediately. Although some actions may require more than one year to phase in, you must balance the budget within three years from now. Furthermore, after achieving a balanced budget during years 4, 5, and 6, you should run surpluses for years 7, 8, and 9 or until reserves rise to their current level of \$9,000 thousand.

You must accomplish the above without diminishing the average "Performance indicators" and "Attitudes toward the institution" scores (listed on the "Score" screen.)