THE UNITED STATES “LAND GRANT” AGRICULTURAL UNIVERSITY SYSTEM

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The United States has one “land grant” university in each state that focuses on agricultural teaching and research. Land grant universities were made possible by federal grants of land that could be sold to finance the building and operation of a university. However, once established, states had the financial responsibility for funding them. Initially, most states appropriated funds from taxes each year to pay for costs of operating the universities. More recently, however, as state revenues supporting universities have declined, student tuition has become very important. In modern times, land grant universities are still expected to serve the needs of the people of the state, but sources of revenue have changed a great deal. Across the United States, the percentage of revenue supplied by the states has been dropping, while other sources of revenue have been rising. Tuition, which used to bring in only a small amount of money, now brings in almost as much revenue to Iowa State University as revenue from the state. Federal grants for research have become critically important to funding the university’s research operations. And wealthy graduates of the university and other donor agencies now provide substantial amounts of money and even endow professorships. For example, a recent gift to the university of $ 2.5 million for an endowed professorship means the university can hire a professor and pay them out of money earned by the endowment without needing any money from the state or tuition. Iowa State University hopes to have 15 of these endowed professorships by 2015.

АМЕРИКАНСКАЯ СИСТЕМА «УНИВЕРСИТЕТОВ С ВЫДЕЛЕННЫМИ ЗЕМЕЛЬНЫМИ УЧАСТКАМИ ДЛЯ ПОДГОТОВКИ СПЕЦИАЛИСТОВ СЕЛЬСКОГО ХОЗЯЙСТВА»

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В Соединенных Штатах в каждом штате есть один «университет с выделенным земельным участком», который сосредотачивается на преподавании и исследованиях в области сельского хозяйства. Появление таких университетов стало возможно благодаря безвозмездной передаче государственной земли, которая могла быть продана для финансирования строительства зданий и эксплуатации университетов. Однако, после того, как университеты были учреждены, правительство каждого штата должно было обеспечить их финансирование. Изначально большинство штатов обеспечивали финансирование государственных университетов за счет поступлений от налогов. Однако в последнее время доходы штатов на поддержание университетов снижаются, и плата за обучение студентами стала очень важной. В наше время «университеты с выделенным земельным участком» по-прежнему обязаны удовлетворять потребности населения штата, но структура финансирования значительно изменилась. Во всех штатах доля финансирования из бюджета штата сократилась, и увеличились доля других источников финансирования. Плата за обучение, которая должна была составлять лишь небольшую часть бюджета Университет штата Айова, теперь является почти равной объемом финансирования из бюджета штата. Федеральные гранты на исследования стали критически важным финансированием научно-исследовательских работ университета. Богатые выпускники университета и другие спонсоры в настоящее время обеспечивают значительные поступления в бюджет университета и даже оплачивают заработную плату профессоров. Например, недавнее пожертвование университету 2,5 млн долларов для материального обеспечения преподавательского состава означает, что университет может нанять профессора и платить ему из денег, полученных в качестве пожертвований, и нет необходимости брать деньги от штата или из платы за обучение. Университет штата Айова надеется, что к 2015 г. таких позиций профессоров будет 15.

Положительная рецензия представлена Б. А. Ворониным, доктором юридических наук, профессором, проректором по научной работе и инновациям Уральского государственного аграрного университета.
Public universities in the United States, like those in Russia, have been undergoing significant changes in the way they are financed, and these changes have important impacts on the types of students who attend, classes taught, research conducted, and services provided to the state.

Public universities in the United States are mainly the responsibility of states (oblasts), and not the federal government. Each state determines what universities it has, and plays a key role in financing and regulating the universities, including establishing curricula and granting degrees. The federal government played an important role in the creation of only one type of public university — the so-called “land grant” universities that were established beginning in the 1860s. By federal law, each state was able to use federal dollars to buy land that could then be sold to finance the establishment of a university. These “land grant” universities were distinctive in that they tended to focus on agricultural and technological issues of concern to the development of each state, were established to provide training for people of all social class levels, and were mandated to serve the states in which they were located. However, after their creation, it has been the states that have run them and financed them.

Iowa State University is the “land grant” university that was established in the state of Iowa in 1858. At first, all students were expected to learn in part by working on the agricultural lands owned by the university. Although this is no longer required of every student, “science with practice” has continued as an important principle guiding the educational curriculum. Although classes are now the main method of education, many programs require internships with companies, laboratory work, and hands-on applications of knowledge. By the 1890s, it was recognized that research needed to be conducted in order to advance agriculture and other areas of science and technology, and federal dollars were made available each year to each land grant university for this purpose. By the 1920s, an Extension service was created in order to pass along research results and recommendations to citizens of each state. These three functions — teaching, research and extension — became the trademarks of land grant universities.

Land Grant Universities at first were funded by tax revenues appropriated by the state legislatures of each state. The idea was that since these units provided development assistance to the state, they should be supported by state funds. As time passed, a decision was made to charge students tuition to attend, but the tuition cost was well below the real cost of education, and most of the cost continued to be paid by citizens of the state.

In modern times, land grant universities are still expected to serve the needs of the people of the state, but sources of revenue have changed a great deal. Across the United States, the percentage of revenue supplied by the states has been dropping, while other sources of revenue have been rising. Tuition, which used to bring in only a small amount of money, now brings in almost as much revenue to Iowa State University as revenue from the state (Table 1). Federal grants for research have become critically important to funding the university’s research operations. And wealthy graduates of the university and other donor agencies now provide substantial amounts of money and even endowed professorships. During Iowa State University’s recent fund-raising campaign, a total of $735 million has been pledged to the university by graduates and other donors (including businesses and organizations). For example, a gift to the university of $2.5 million for an endowed professorship means the university can hire a professor and pay them out of money earned by the endowment without needing any money from the state or tuition. The university hopes to have 15 of these endowed professorships by the end of its current fund-raising campaign. Such gifts give the university flexibility to offer programs or provide funds when state or tuition dollars are not sufficient.

Students from Iowa pay about $6,300 per year for tuition, while students from other states or countries pay about $14,500. In effect, the state provides a subsidy for Iowa students to attend its state universities. Students typically must either be in the top half of their high school graduating class or receive a high score on a standardized entrance examination to become students at public universities. In addition to tuition, students must pay housing, food, health and book costs. This often brings the cost of a university education to $14,000 per year for a student from Iowa, and much more for students from other states. As tuition costs have risen, universities such as Iowa State have established financial aid offices to help students pay the tuition costs. At Iowa State University, two-thirds of students borrow money to pay the cost of tuition, room and food, and the average debt upon graduation for an Iowa State University student who borrowed money is more than $28,000 per student. Students who have borrowed money begin paying back their loans within a year after they graduate.

The salaries of professors and departmental operating budgets are paid for out of a combination of state funds, tuition, and research monies. When a professor teaches a class, a portion of the students’ tuition money is credited to the professor’s college. Thus, the more students and classes taught by professors in a college, the more tuition revenue their unit earns. Under the budget model, a portion of each student’s tuition goes to support central functions of the university, such as the library, central administration, building upkeep, utilities, etc. The remainder goes to pay for classroom instruction. Students are charged extra lab fees for courses that require laboratory expenses, and they also pay a computer fee each term for upkeep and staffing of computer labs. Under the budget model, departments have an incentive to create large lecture classes with hundreds of students, because the tuition revenue per student is the same whether the class has 100 students or 10. Small classes, in turn, can be offered only if they are balanced by revenues from larger classes.

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<th>Sources of Revenue for Iowa State University: Fiscal Year 2010</th>
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<td>State appropriations</td>
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<td>Tuition and fees from students</td>
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<td>Federal government research funds</td>
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Faculty teaching loads are also adjusted depending on research assignments. A faculty member who brings in $250,000 or more of federal research money each year often teaches only one course per semester (two courses per year). Faculty members who are conducting substantial research but don’t bring in significant federal research money may teach two courses per semester, or four per year. And faculty who are not contributing substantially to research may teach three or more courses per semester. Departmental chairs make decisions about teaching assignments.

The majority of faculty at most large public universities are either “tenured” or “tenure-track”. When they are hired, expectations for their teaching and research activities are specified. In their sixth year, a faculty committee conducts a national review of their performance, and determines whether or not they should receive “tenure”. This depends on them demonstrating that they are developing a national or international reputation in their field, plus being a good teacher and providing service to the people of the state. If the review is positive, they receive tenure, which is a life-long employment guarantee that protects them from being fired for making unpopular statements. However, they continue to be reviewed by university peers, and must continue carrying out their assigned duties in a competent manner. Those who do not pass the sixth year review must leave the university within one year following the review.

Iowa State University and other public universities offer three levels of degrees. A bachelor’s degree is typically awarded after four years of study in a particular major. Students pursuing a bachelor’s degree are usually referred to as “undergraduate students”. A master’s degree is typically a two-year degree that follows the bachelor’s degree, and often requires completion of a thesis. The Ph. D. degree is the highest degree awarded, and commonly takes three years or more after the master’s degree. Original research published as a dissertation is required for this degree. Students pursuing a master’s or Ph. D. degree are referred to as “graduate students”. Most universities also offer post-doctoral research opportunities, especially for students in the sciences. Students with a Ph. D. may need to complete one or more post-doctoral experiences before they can successfully apply for a faculty position at a university.

Bachelor degree students who are admitted to Iowa State University and other public universities often declare a major area of study when they arrive (such as forestry, journalism, economics, electrical engineering, etc.). The coursework they take and the flexibility they have in their program depends in part on their major. In Engineering, for example, there are few elective courses, and most students take a standard list of required courses to complete their program. In Journalism, on the other hand, students have substantial freedom to select courses. Although they must complete a list of required courses in their major area, they may select an area of concentration from anywhere in the university as an area of specialization. Many students change majors at least once during their time at the university.

In order to receive a bachelor’s degree, students must complete certain specified courses in their major, and earn a minimum total of credits. Each course they take is worth a certain number of credits, usually three. One credit in a lecture course means 15 hours of instruction, so a three-credit course typically means 45 hours of instruction in class. For laboratory courses, one credit hour means 30 hours of laboratory experience. Student requirements are often expressed in terms of credits. For example, students in journalism must complete 12 credits in courses in social sciences (psychology, economics, sociology, anthropology, etc.). That usually means four 3-credit courses. But the student gets to select the courses taken from a list rather than being assigned to a particular course or section. This means that students get the opportunity to customize their programs of study and take courses in many different areas. As noted earlier, departments receive revenues in proportion to the number of students selecting their courses. For the bachelor’s degree, students must often earn a total of between 120 and 127 credits.

Not all the 28,000 students enrolled at Iowa State University graduate. By the end of the first year, 16.5% of those who first enrolled either received failing grades or chose to leave. About two-thirds of those who originally enroll complete their programs. While a four-year program is standard, many students actually take longer to graduate because they change majors at some point (which requires taking more courses in the new major), take off-campus internship or travel opportunities, or find that they must wait for openings to take required courses they need.