# Developing an Engaged Institution: South Dakota State University's 2+2+2 Project and American Indian Students

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#### Abstract

The authors examine South Dakota's 2+2+2 Project, a collaborative effort between South Dakota State University (SDSU) and the state's tribal colleges designed to enhance educational opportunities for American Indians, through the W. K. Kellogg Foundation's indicators of an engaged institution. Indicators include responsiveness, respect for partners, academic neutrality, accessibility, integration, coordination, and resource partnerships. Through this project SDSU aims to address expressed needs by attracting and retaining American Indian high school students and offering them opportunities to become familiar with careers in food science, early childhood education, natural resources, and agriculture. Program components, evaluation, mutual benefits, challenges, and broader implications are discussed.

Any 1862 land-grant universities are re-examining their mission statements in response to the Kellogg Commission's (1999a) recommendation that these universities "return to their roots" by addressing the needs of citizens in surrounding regions and communities in a more direct and immediate way. The plea for academics to contribute to an improved quality of life for the common citizen is not new. Lynd (1939) was one of the first to pose the question, Knowledge for What? In recent years the same message has resurfaced in the work of Mary Walshok (1995), of Scott Peters (1997), who urges land-grant universities to do more "public scholarship," and in the theme for the American Association of Higher Education 2002 meeting on faculty standards. One new development is the recent focus on more effective collaboration with communities.

American Indian communities in South Dakota suffer from high levels of poverty, unemployment, diabetes, and infant mortality. Their lack of development of some types of human capital, which could provide solutions to many of these problems, is perpetuated by the underrepresentation of American Indians at institutions of higher education in South Dakota. On the other hand, many of these communities have rich cultural, environmental, and

social capital (Flora, Sharp, and Flora 1997; Putnam 2000) that could enrich both their own communities and the wider society if they were linked with universities within the state and region in mutually reinforcing networks. The four tribal colleges in the state provide essential services to their home communities and are thus fulfilling their landgrant mission (Boyer 1990), though they are constrained by inadequate financial resources, overworked faculty, serious transportation challenges, and inadequate infrastructure.

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The question then is, how can the traditional land-grant institutions best serve the American Indian communities, whether through linkages with tribal colleges, or independently. While many mainstream faculty and administrators have sincere intentions to work with American

Indian communities, there is limited documentation of feasible models of collaborating with American Indian communities and with tribal college faculty and administrators. Documented models for universities working collaboratively with communities deal primarily with urban universities and urban communities, one example being the Nyden et al. (1997) volume. Champagne and Stauss (2002) deal with collaboration with indigenous nations, though their focus is on enriching Native American studies offerings. This article provides a model for working with rural American Indian communities with the aim of facilitating access to a university education and a wide range of higher education curriculum choices for their students. It does so by examining South Dakota State University's 2+2+2 Project in light of the Kellogg Commission's seven criteria for an engaged university.

Origin of the 2+2+2 Project

Ideally, all students should consider a university education as a realistic objective and, once admitted, feel welcome at their chosen higher education institution. In reality, many minority students do not feel welcome or adequate to the challenge of completing an education at these institutions. It is also essential to know what social and moral traits the student's home community values (so as to better design curricula and educational experiences) and to know what educational specializations would most directly meet the needs of the community. For American Indian students, success may not be merely individual, material success. Career goals that separate

the student from his or her home community are not likely to be very attractive. If universities strive to be engaged institutions, they must develop recruitment and retention strategies and make campus climate changes in order to ensure that empowerment and success of American Indian students on their campuses occurs on their own terms.

The 2+2+2 Summer Internships and Summer Institute mirrored American Indian priorities for specific types of career training. Over time new majors and career tracks were identified—those that had the potential to revitalize American Indian communities instead of draining the youngest, most educated members away. Thus, 2+2+2 affirms that these American Indian students deserve an equal chance at a higher education of their own making.

# Kellogg's Seven-Part Test for an Engaged Institution

Kellogg's Third Report (1999b) on the Future of State and Land-Grant Universities defines engaged universities as those "that have redesigned their teaching, research, and extension and service functions that are sympathetically and productively involved with their communities . . . however community may be defined" (27). An engaged institution must "respond to the needs of today's students" (28) and "put its critical resources . . . to work on the problems the communities it serves face" (28). Seven criteria were developed to assess whether an institution was engaged.

Kellogg's first criterion for an engaged institution is *responsiveness*, or the extent to which university faculty and administrators are effectively communicating with their constituencies or communities so as to truly understand community concerns. The second criterion, *respect for partners*, means that an engaged institution should involve the community in identifying the "problems, solutions, and success" and that university professionals have much to learn from communities. This criterion and the next are those that fit most closely with the Campus Compact (1999 and 2000) guidelines for campus-community partnerships.

Academic neutrality, the third criterion, primarily means that the university acts as a "neutral facilitator" rather than taking strong political stances in controversial public policy decisions. The next criterion, accessibility, refers to finding "ways to help inexperienced potential partners negotiate this (university) complex structure so that what (universities) have to offer is more readily available" (Kellogg Commission 1999b, 12). This criterion is particularly relevant to the inclusion of the needs of diverse constituencies.

Criterion five, *integration*, deals largely with the faculty reward structure. The basic idea is that traditional scholarship should be linked to outreach and service missions, and that rewards should be commensurate with this new type of integration. This criterion parallels the reassessment of the criteria of scholarship by Ernest Boyer (1990).

Coordination addresses the issue of interorganizational communication, that is, communication within the higher education institution. Are students, faculty, administrators, different departments, and different colleges rather fully apprised of the engagement efforts being made by others in the institution?

Finally, the seventh criterion, *resource partnerships*, considers the problem of generation of resources for sustainability of engagement efforts. Strategic partnerships with businesses and nonprofit organizations, funding sources, and new fee structures are important in continuing the engagement process.

# 2+2+2 Project History

2+2+2 started in 1995 as a direct response to a request from a faculty member from Oglala Lakota College on South Dakota's Pine Ridge reservation "to provide Lakota tribal college students with a program that allowed them to complete their baccalaureate degrees in agriculture." With this request in hand, South Dakota State University (SDSU) faculty traveled to other tribal colleges in South Dakota to test the idea, and gain input from the state's American Indian communities. A grant was written and submitted to the United States Department of Agriculture's Higher Education Challenge Grants Program, and funded for some \$85,000 over three years. The 2+2+2 Project aimed to support the progression of American Indian students from the last two years of high school, through two years of tribal college, and finally through the last two years at South Dakota State University. The 2+2+2 project had four goals:

- 1. Develop articulation agreements between all participating institutions;
- 2. Sponsor a faculty immersion program with the goal of creating greater cultural awareness and refining course and degree options to better meet the needs of American Indians;
- 3. Support an experiential learning program for American Indians;
- 4. Build a system that motivates, supports, and empowers students through completion of their baccalaureate degrees.

An evaluation of the 2+2+2 Project was conducted in 1998-1999. It consisted of interviews with faculty from SDSU, and with administrators from SDSU and Sisseton Wahpeton Community College; focus groups with faculty from American Indian high schools, and with students attending the Summer Institute and the Apprenticeship Program; analysis of available data from the program; and attendance at a number of planning retreats and course workshops. Much of the information in this article comes from this evaluation.

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Those colleges and departments from South Dakota State University most involved with the 2+2+2 Project were the College of Family and Consumer Sciences; College of Agriculture and Biological Sciences; Biology and Microbiology; Human Development, Consumer and Family Sciences; Nutrition and Food Science; Animal and Range Sciences; Horticulture, Forestry, Landscape, and Parks; Veterinary Science; and Economics. Faculty from these departments

and colleges became mentors for the Apprenticeship Program, session organizers for the Summer Institute, and instructors for distance and other courses.

2+2+2 included these components, which will be discussed in detail relative to the Kellogg criteria: student apprenticeships with faculty mentors at SDSU, the SDSU Summer Institute (a four-day on-campus workshop with experiential college learning experiences), small scholarships to attend SDSU, mini-grants for faculty, support structures for students enrolled at SDSU, distance education, faculty visits to reservation high schools and tribal colleges, collaborative planning retreats, and development of articulation agreements. As of May 2000, 2+2+2 had had two students graduate from SDSU, 42 apprentices, 112 participants at the Summer Institutes, 300 students who had attended the annual Indian History Conference, and more than 150 students who had participated in various courses and other educational experiences. What is important in terms of project outcomes is that students complete the last two years at SDSU or another university, and do so in an environment that facilitates their empowerment.

## 2+2+2 as a Model of the Engaged Institution

While some of the 2+2+2 components could be discussed as relevant to several of the seven Kellogg criteria for an engaged institution, each component is considered under the single criterion within which it fits most closely. Some of the components of this project, which will be discussed here, include the Student Apprenticeship program, the Summer Institute, course modification, joint planning efforts, and community outcomes.

**Responsiveness:** What had been originally conceived of as a one-institution cooperative agreement in agriculture broadened, based on expressed needs, to include five tribal colleges and more than twenty-five academic programs in SDSU's Colleges of Agriculture and Biological Sciences and Family and Consumer Sciences.

The student apprenticeships best illustrate Kellogg's criterion of responsiveness. A total of forty-two students from 1996 to 1999 were given the opportunity to participate in a variety of one- to two-week apprenticeship experiences. Apprenticeships were con-

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ducted during the summer on the SDSU campus and were based on student preferences for certain types of professional experiences. Students did laboratory work, visited work locations, and collected data from field sites, in the areas of early childhood education, animal and range sciences, environmental management, and nutrition and food science.

In general, the faculty supervisors of the apprentices thought that this experience was rich in benefits for the American Indian students. It gave the students confidence to go on to higher education; familiarized them with professional academic or research environments; gave them practical job experiences; and sometimes provided contacts for future employment.

What was particularly helpful in 1998 was that one of the American Indian students from SDSU who worked with students in the Summer Institute continued to meet informally with the apprentices (the apprenticeship started right after the Summer Institute). This gave the high school students continuity from the workshop and companionship. One of the apprenticeship supervisors and several

of the high school teachers noted that some of the younger students need host families or other types of social support so that they feel less isolated during their two-week stay at SDSU. This supervisor suggested that local families, particularly American Indian ones, could provide some of that social support. Several people mentioned the need for American Indian spiritual activities or a spiritual advisor to talk to the students occasionally.

Unexpected benefits of the program also illustrate responsiveness. Specifically, 2+2+2 had indirect impacts on American Indian communities within several years of the project's start. Two of the nutrition apprentices in 1998 were nontraditional students working in reservation communities but hoping to get their certification through SDSU. While the 2+2+2 program did not target nontraditional students, it

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became clear that there was a need to include this category of students. One of these students works with Sisseton Wahpeton Community College and is also an elementary and secondary school food service manager. The other, from Oglala Lakota College, coordinates an organic gardening curriculum and is working with extension staff at SDSU to develop additional projects.

A third student completed his master's degree at SDSU and currently teaches nutrition courses at a tribal college in the state. He also started a community garden project, which brought elders and youth closer together. The elders became more inclined to see higher education as having a value for the community rather than being a divisive force.

A small business project organized by a faculty member from the SDSU Department of Economics was highly praised by several tribal college faculty members. The faculty members approached the evaluator during a planning retreat, asking if they could have more projects of a similar nature at their campuses. This project involved American Indian and other students from a business class at SDSU developing plans for businesses on the Rosebud Reservation. It resulted in excellent cross-cultural exposure for non-Indian students and faculty, and also fulfilled an essential economic development need for the American Indian community.

**Respect for Partners:** The criterion of respect for partners is largely concerned with the community becoming involved in defining "problems, solutions, and success." There are a number of examples of this type of engagement in the 2+2+2 Project.

Planning retreats have been the major forum for connecting SDSU faculty, tribal college faculty, reservation high school teachers, selected Indian and non-Indian students, and representatives from

government departments and private foundations. The retreats typically lasted two days and were held at reservation sites after the first two years. A general invitation was issued to faculty in departments in the two colleges involved in the program, to other faculty concerned with American Indian issues at SDSU, to teachers at tribal high schools, to faculty at tribal colleges, to selected 2+2+2 students, and to college administrators.

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At these retreats everyone in attendance participated in planning for the next phase of the project. The 2+2+2 Project directors were models of the criterion of respect, particularly in terms of provision of numerous opportunities for dialogue, a shared decision-making model, and a conscious attempt to listen to the concerns of every individual. The planning retreats updated faculty on the 2+2+2 program and connected the faculty with representatives from government departments and private foundations as well as with private citizens. These retreats also allowed faculty to assess the progress of the 2+2+2 Project and facilitated interaction among faculty from reservation high schools, tribal colleges, and SDSU.

The 1998 planning retreat took place on the Lower Brule Reservation. It included a pre-retreat program on the history of the Lower Brule Reservation and on the local bison project. One of the most powerful indicators of respect is the incorporation of these cultural history overviews into the agenda at the beginning of the planning retreat.

The majority of persons who wrote evaluations of the meetings rated the planning retreats as "very effective" in both updating participants on the 2+2+2 program and in providing opportunities for networking. Some even noted that at the retreat they had learned

about resources within their own communities of which they were previously unaware. Many thought that the retreats were very effective for facilitating mini-grant development.

A smaller, but particularly impressive, example of respect for partners was the Seven Council Fires Food Guide Pyramid, which illustrates how a component of the traditional land-grant university curricula can be adapted to American Indian social needs and cultural beliefs. Rather than merely educating American Indians about the standard nutrition food pyramid, a culturally relevant pyramid was developed through one of the mini-grants and was used by tribal nutrition educators in a youth diabetes program. This pyramid traces the history of American Indian nutrition in South Dakota from pre-contact foods, to contact foods, to modern healthy alternatives. The pyramid integrated colonial history with real-life reservation health problems and recommended practical solutions.

An additional example of respect for partners is reflected in the planning process for the annual Summer Institute. Rather than have the event designed solely by SDSU faculty, each year several tribal college and reservation high school teachers and students serve as paid staff members for the event. Their input, ranging from recruitment of participants, to development, implementation, and evaluation of program content, has been invaluable to the project's success.

Academic Neutrality: There is no single 2+2+2 component that best fits this criterion wherein the university acts as a "neutral facilitator and source of information when public policy issues, particularly contentious ones, are at stake" (Kellogg Commission 1997, 12). Cultural differences are now becoming less of an obstacle and more of a resource in the working relationships between American Indian partners (high school and tribal college faculty in particular) and SDSU's representatives. 2+2+2 has led to a reduction in the stereotypes about or ignorance of American Indian people among SDSU faculty, administrators, and students and to an increase in the tribal people's trust of SDSU representatives. Both sides have been able to move gradually beyond potentially divisive issues, based on historical patterns of injustices, and to focus more determinedly on educating American Indian students.

Another example of academic neutrality is the modification of course content to include material culturally relevant to American Indians. At SDSU the courses modified under mini-grants included: Biology, Soils, Family Relations, Human Development, and Crop Production.

Accessibility: The most outstanding example of accessibility is the Summer Institute for high school students, which was the primary means for implementing the third goal of 2+2+2, experiential education. Each summer, an average of twenty-eight students came to SDSU for four days for this institute experience. The assumption underlying the use of experiential techniques is that they would spark an interest in American Indian students to study the subject matter covered at the university level.

Students evaluated very positively (an average of 3.52 on a four-point scale, with 4 as excellent) the keynote speakers, hands-on

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workshops, and small group meetings. Hands-on experiences that were rated from average to excellent were the intergenerational experience, plant biotechnology, plants of the prairie, environmental education at Oak Lake Field Station, and veterinary clinical pathology.

Accessibility could be further improved by implementing the suggestions of one tribal college faculty—that there be tribal college faculty serving as staff members at the Summer Institute and that part of the program involve a visit to a tribal college. Student scholarships, invitations to visit SDSU issued specifically to American Indian high school students, faculty immersion, interactive television courses, and support systems at SDSU are other examples of accessibility. Student scholarships made it possible for twelve students to have all of their expenses covered for their two years at SDSU; some twenty students received smaller amounts of financial assistance from the 2+2+2 program. SDSU faculty immersion was realized through sessions on cultural history at the planning retreat, presentations by American Indian leaders, mentoring relationships, and grants for course modification. Eight faculty were highly immersed through these strategies. Support systems at SDSU involved concentrated individual attention to American Indian students in order to help them register for courses, negotiate financial aid, get work-study assistance, and access on-campus day care. There is also a Native American Club at SDSU, which has added to the success of the 2+2+2 Project.

*Integration:* Many faculty have fully integrated what they have learned from 2+2+2 into their work. One of the professors in biology is now focusing more on ethnobotany, and has completely revamped

one of his courses, adding a full section on traditional foods. Another professor in nutrition totally changed her research program from traditional research on niacin to Type II diabetes in the Native American population.

Most of the high school and college faculty involved in the 2+2+2 efforts did so as an overload, meaning they did not get any release time for these efforts. While the heads of departments and deans from both colleges were generally accommodating to the extra load this involvement entailed for faculty, most of the faculty did not realize any merit reward or formal recognition for their work, and did not see any likelihood of an alteration in faculty reward structure at SDSU, tribal colleges, or high schools. There was

a need, expressed in focus groups, for some sort of recognition by their superiors that the work they were doing was significant. In the long term, consideration for these efforts must be built into the reward structure. Expectations for research, teaching, and service at the respective institutions must be modified accordingly in order for similar programs to succeed.

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#### Coordination

Local communication on the 2+2+2 Project was excellent. Dissemination of information about the 2+2+2 Project started out on a secure foundation with newsletters right from the start. A Web site was also available very early in the project's formation. The newsletters offered an informal chronology of the main components of the project. Newsletters included both qualitative data, such as details on the experiences of specific apprentices, and quantitative data, such as numbers of students coming to SDSU for the Summer Institute and the Apprenticeship Program. A suggestion from the first evaluation (in 1997) led to the creation of an e-mail discussion list as a way of reminding faculty of project goals, keeping everyone up to date on 2+2+2 activities, informing members of resources on the internet, and offering faculty a means for instant feedback on questions. The 2+2+2 brochures and traveling poster board were part of every school visit and planning retreat, and were excellent tools for communicating information about the project. Especially meaningful in the school visits were the pictures (on the poster board) of American Indian students who had participated in 2+2+2 experiences.

### Resource Partnerships

While catalyzed by substantial funding from the United States Department of Agriculture and U.S. Department of Education's Fund for Improvement of Post-Secondary Education, a variety of other resource partnerships have contributed to the program's viability and sustainability. South Dakota State University and the participating high schools and tribal colleges have invested significant financial and human resources. The W. K. Kellogg Foundation's Visions for Change Project and private funding from the DuPont Corporation have also provided supplemental funding for targeted program features. New funding sources have been attracted for a variety of "spin-off" initiatives, such as collaborative faculty research.

### Access to a More Diverse Student Population

The introduction to the final report of the Kellogg Commission on the Future of State and Land-Grant Universities, *Renewing the Covenant: Learning, Discovery and Engagement in a New Age and Different World (2000a)*, states that the public university of the future will:

truly be a new kind of public institution, one that is as much a first-rate student university as it is a first-rate research university, one that provides *access to success* to a much more diverse student population as easily as it reaches out to "engage" the larger community. . . . It will have reinvented its organizational structures and re-examined its cultural norms in pursuit of a learning society. (10)

This overview of the 2+2+2 Project provides practical strategies for the public university to "reinvent its organizational structures and re-examine its cultural norms" and thus become this new kind of public institution.

Furthermore, this engagement effort offers SDSU students and faculty the opportunity to broaden their understanding of diverse cultures and thus learn through what Aronowitz and Giroux (1991) call border pedagogy. Through this postmodern type of education, learning occurs through the use of multiple perspectives and the discounting of any notion of privileged knowledge. As O'Sullivan (2001, 238–39) puts it, "an education attuned to quality of life must be based on the foundation of authentic human needs. . . . We are now being driven, by necessity to devise new patterns of living in order to survive in a manner that gives us a sustainable quality of life."

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