

## THE HARVARD PROJECT ON AMERICAN INDIAN ECONOMIC DEVELOPMENT

John F. Kennedy School of Government • Harvard University

**HONORING NATIONS: 2000 HONOREE** 

Two Plus Two Program
Hopi Junior/Senior High School, Hopi Nation

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The Two Plus Two Plus Two college transition program is a partnership between Hopi Jr./Sr. High School, Northland Pioneer College and Northern Arizona University that enrolls senior high school students in classes offering concurrent college level credits. Upon graduation, students can earn up to 30 transferable credits to any accredited state college or university. The Program is helping Hopi students attain advanced educational degrees and, in doing so, is empowering

them with technological and academic skills that they can bring back to the rural reservation.

By the late twentieth century, the increasing influence of Western society and, in particular, the transition to a wage-based economy, posed a serious threat to the time-honored traditions and heritage of Hopi society. Many Hopi citizens confronted the difficult choice of either staying geographically and culturally connected to their traditional way of life or relocating somewhere off-reservation where opportunities for education and employment were more plentiful. Even when technical and well-paying jobs were created on the reservation, they were often filled by outsiders who better met the positions' high educational and experience qualifications. While it was not universally the case, a pattern had developed in which promising Hopi students either graduated from college and did not return to the reservation, or dropped out of college and returned to the reservation with undeveloped skills. In sum, necessary educational choices and their resultant employment patterns chipped away at the fabric of Hopi culture.

A critical case in point was the opening of a new Hopi health care center. The facility offered many new positions for doctors, nurses and other healthcare professionals, but most of these jobs were eventually filled by non-Hopi applicants. Indeed, the health center's staffing pattern was clear proof that more needed to be done to ensure that Hopi youth received top-notch educational and professional training, and applied that training in the community. When Hopi tribal leaders, school administrators and staff met to discuss possible programmatic solutions, they expressed several key goals: expanding opportunities for Hopi high school students to attend post-secondary schools, easing students' transition from high school to college, helping students maintain close ties to their Native culture, and making it possible for young Hopi professionals to secure positions within the Hopi community. Fortunately, with their exceptional Hopi Junior/Senior High School – which the Nation took over from BIA management in 1995 – the Hopi were institutionally capable of satisfying these goals. Perhaps more importantly, the group recognized that all of the goals could be achieved at once, through a program it developed and named Two-Plus-Two-Plus-Two.

Launched in 1997, Two-Plus-Two-Plus-Two is a college transition program that involves two years of high school, two years of post-secondary education leading to an Associate degree, and two additional years of college leading to a Bachelor degree. Organizationally, it is an alliance between Hopi Junior/Senior High School (HJSHS), Northland Pioneer College (NPC, an Arizona

community college) and Northern Arizona University (NAU). Operationally, Two-Plus-Two-Plus-Two is a concurrent credit program, which means that students who are enrolled in the Program earn college credits toward an Associate or Bachelor degree while taking qualified classes at HJSHS. Credit-conferring classes are taught on-site by HJSHS faculty certified to teach at the community college level and by NPC faculty and also off-site via interactive educational television. Credits earned are transferable to any accredited state college or university.

As noted, the Program's ultimate goal is to increase the number of skilled Hopi professionals on the reservation. To reach it, Two-Plus-Two-Plus-Two takes a creative approach to the preliminary problem – keeping families together at home while simultaneously enabling youth to seek post-secondary credit that helps pave the way toward a college degree. While they are still in the familiar, supportive and traditional atmosphere of the Hopi Reservation, Two-Plus-Two-Plus-Two familiarizes students with the demands of college-level curricula through direct experience, thus increasing their skills, confidence and chances of educational success. With its focus on science and math, the Program's curriculum is appropriate to the Hopi community's needs and is economically meaningful. And, through collaboration with existing programs, such as NAU's Upward Bound program and Educational Talent Search and the University of Arizona's Health Careers Pathway Program, Two-Plus-Two-Plus-Two is able to provide Hopi students with top-notch career development services and guidance. Thus, the Program fosters a link between home and higher education that could be the difference between leaving the reservation forever or returning to vital reservation-based jobs and the Hopi way of life.

The distance learning component of the Two-Plus-Two-Plus-Two Program deserves special attention, as it is not simply a group of high school students watching a pre-taped university lecture. The Program has incorporated the latest interactive technology, including T-100 Internet capability and an advanced interactive satellite teleconference system, so that students can participate in real time with off-site classes. Remarkably, they can even raise their hands and be called on by off-site professors! Other evidence of the effective implementation of the distance learning model is that HJSHS faculty are able to teach cooperatively with the faculty of NPC and NAU. For example, while the Two-Plus-Two-Plus-Two Program's "pre-med" chemistry class is taught primarily over interactive television by a NAU professor, the HJSHS chemistry teacher conducts labs and offers tutorials.

The Program is young, but there are early indications that Two-Plus-Two-Plus-Two is successful. Since the Program's creation, there has been a growing demand for math and science courses at Hopi Junior/Senior High School, and students are clearly being prepared to excel in even the most rigorous college environments. For example, approximately 50 percent of the NAU students enrolled in the pre-med chemistry class mentioned above drop out, but in the 1999-2000 academic year, all eight of the Hopi high school students taking the class completed it successfully. In fact, a HJSHS student earned the highest grade in the class overall. Also since the inception of Two-Plus-Two-Plus-Two, a substantially increased number of Hopi Junior/Senior High School students have enrolled in college. A full 45 percent of the 2001 graduating class will attend two- or four-year institutions of higher education, with three-quarters of those accruing concurrent credit through the Two-Plus-Two-Plus-Two Program. Indeed, interest in higher education has increased so much that both NAU and NPC have made physical investments at Hopi – NAU built a distance learning center at HJSHS, and NPC built a branch building on the HJSHS campus, where it offers nursing training courses. Finally, while no firm data are yet available, it appears that increasing numbers of Hopi students are staying in college. As the Program's first graduates move toward graduation from college and university, even more conclusive indicators of the Program's success will become evident, in reservation return rates, for example, and changing staffing patterns at employment centers like the new health care facility at First Mesa.

Perhaps the most important reason for the Two-Plus-Two-Plus-Two Program's success is its

institutional base at Hopi Junior/Senior High School. Once a BIA-controlled school, at which low student achievement, outdated curricula, poorly maintained facilities, and high teacher and staff turnover were the norm, HJSHS has been a fully tribally controlled school since 1995. (The school operates as a P.L. 100-297 Federal Grant School.) Recognizing the major problems caused by a lack of self-governance over education, tribal members and the tribal government worked together to achieve this autonomy and strengthen the Hopi educational system – an investment of effort that has reaped tremendous awards. Student achievement has risen, facilities have been improved dramatically and teacher turnover is low as compared not only to tribal, but also to state-funded public schools. In addition to community and government support, a significant contributing factor in this remarkable turnaround is the school's capable and goal-oriented local School Board. The five-member Board insists on hiring the best teachers, administrators and staff, and they have created a rewarding environment that promotes employee retention and innovation. In sum, because Hopi Junior/Senior High School is a strong institution – it competes with the best schools found anywhere – it is capable of initiating, supervising and following through on bold plans for change, such as the Two-Plus-Two-Plus-Two-Program.

A specific example of this point is the financial stability that HJSHS enjoys, which helps ensure the sustainability of Two-Plus-Two-Plus-Two. Under BIA management, the high school operated with budget deficits; since the Hopi Nation assumed control, the school has maintained fiscal health, without any significant increases in federal funding. This financial security means that HJSHS is able to pay tuition and fees for university courses that the Two-Plus-Two-Plus-Two Program participants enroll in, which is a substantial incentive both to participate in the Program and to stay in college.

The Two-Plus-Two Program is remarkable for its ambitious and creative approach to addressing specific educational challenges at the Hopi Nation. When faced with a real educational, demographic and economic crisis, tribal leaders were intent on not giving in to the forces that made it difficult for young tribal members to seek higher education and, if they did so, to be comfortable returning to the reservation. Instead, Hopi's leaders made a commitment to enrich, strengthen and encourage Hopi youth to fulfill their educational aspirations, with the understanding that investing in their children's education was also an investment in the Nation's economy, social development and ability to self-govern. They created a program that encourages and prepares greater numbers of Hopi high school students to pursue college, while also making it possible for those students to spend less time away from home. The Two-Plus-Two-Plus-Two Program already has been a major contributing force behind the positive change in secondary and post-secondary achievement among Hopi youth. By all indications, the Program also will accomplish its most lofty goal: inspiring students to attain educational excellence while remaining active participants in their culture.

## Lessons:

- Tribes that assert control over their educational systems have the independence and flexibility to create innovative programs that are appropriate for meeting their communities' cultural and economic needs.
- When faced with low student achievement and high post-secondary drop out rates, tribes
  can increase student success by creating college transition programs. Local institutions of
  higher education can be effective partners in supporting and preparing Native high school
  students.
- Interactive distance learning can increase students' access to technically advanced subjects and even allow them to remain on the reservation while obtaining college credit.