

NEW UTRECHT HIGH SCHOOL

PROJECT BITEC

Spring 1987

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O.E.A. Evaluation Section Report

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NEW UTRECHT HIGH SCHOOL

PROJECT BITEC

Spring 1987

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A SUMMARY OF THE REPORT

In June 1987, Project BITEC (Bilingual Innovative Technological Education for Careers), at New Utrecht High School in Brooklyn, completed one semester of extension using New York State discretionary funds.

The project originally had been funded for three years (from September 1983 to September 1986) under Title VII of the Elementary and Secondary School Education Act, after which its costs were to have been defrayed by tax-levy and other monies. However, the school administration was unable to retain all the staff members and cover the other costs needed to keep Project BITEC in operation. A grant of New York State discretionary funds enabled the former project director to hire the secretary, three paraprofessionals, and two family assistants needed to restart the project in the spring 1987 semester.

Project BITEC served approximately 256 students of limited English proficiency (LEP) from Latin America (21 percent), China (46 percent), Italy (12 percent), Haiti (12 percent), and Vietnam (10 percent). Its chief goal was to enable students to develop sufficient English proficiency to participate in mainstream (English-language) instruction while they continued progressing in the content areas via courses taught bilingually. To this end, it provided instruction in native language arts (Chinese, Spanish, and Italian), and bilingual courses in mathematics, science, and social studies.

In addition to these activities, Project BITEC initiated a course on travel and tourism, which was open to mainstream as well as project students; provided bilingual paraprofessionals to assist in those content-area courses which were taught by English-speaking teachers (because bilingual teachers were unavailable); and provided guidance and other support services to the its target population.

As in previous years, the project stressed parental involvement as a major non-curricular objective, with family assistants functioning as the key link between the school and students' families.

Project BITEC promoted students' pride in their native cultures by organizing ethnic celebrations, an inter-ethnic magazine, parties, and trips.

In addition to delivering the services it had proposed, the project staff, in cooperation with the school administration, surveyed LEP students to determine their educational goals and needs. The principal was reported to be using the results of this survey to guide his efforts to recruit additional bilingual teachers.

Program objectives were assessed in the areas of native

language arts (teacher-developed examinations in Chinese, Spanish, Italian, and Vietnamese); mathematics, science, social studies, and travel and tourism (teacher-developed examinations); and parental contact (program records). Quantitative analysis of student achievement data indicates that:

- The proposed objective that program students would pass native language arts classes was achieved and surpassed.
- Hispanic students achieved the 65 percent passing criterion in four of six content-area subjects. Chinese students achieved the passing criterion in all seven content-area courses.
- Since passing rates for students in travel and tourism courses were not provided, the proposed objective in this area could not be evaluated.
- Family assistants contacted parents a minimum of three times during the semester, thereby surpassing the proposed objective.

Since Project BITEC appeared to be meeting important educational needs and its extension funds lasted only one semester, it is recommended that the school administration and project staff make every effort to seek the funds needed to reinstitute this project. It is also recommended that the school continue to seek bilingual teachers or paraprofessional personnel to help Asian students adapt culturally and educationally to American society.

ACKNOWLEDGEMENTS

The production of this report, as of all Office of Educational Assessment Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of regular staff and consultants. In addition to those whose names appear on the cover, Arthur Lopatin has edited the manuscripts. Margaret Scorza has reviewed and corrected reports, and has coordinated the editing and production process. Martin Kohli has spent many hours, creating, correcting, and maintaining data files. Maria Grazia Asselle, Rosalyn Alvarez, Donna Plotkin, and Milton Vickerman have interpreted student achievement and integrated their findings into reports. Finally, Betty Morales has worked intensively to produce, duplicate, and disseminate the completed documents. Without their able and faithful participation, the unit could not have handled such a large volume of work and still have produced quality evaluation reports.

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Project BITEC

(Bilingual Innovative Technological Education for Careers)

New Utrecht High School

Location: 1601 80th Street
Brooklyn, New York 11214

Year of Operation: Spring 87, First Semester
Extension

Target Languages: Italian, Chinese, Vietnamese,
Spanish, Haitian Creole*

Number of Students Served: 256

Principal: Allen G. Leibowitz

Project Coordinator: Aldo Iemma

I. OVERVIEW

In the spring of 1987 Project BITEC provided bilingual instruction and supportive services to 256 limited English-proficient (LEP) students from Italian, Chinese, Vietnamese, Haitian, and Latin American backgrounds attending New Utrecht High School in Brooklyn's Bensonhurst area.

The school has a long history of bilingual education, having offered the first high school bilingual program for Italian immigrants to the United States. Project BITEC helped New Utrecht expand its bilingual program to include native speakers of Chinese, Vietnamese, and Spanish -- language groups represented in ever-growing numbers in Bensonhurst and surrounding areas.

The central aim of Project BITEC was to enable its target

*Although the original proposal did not include Haitian students, those scoring below the twenty-first percentile on the Language Assessment Battery (LAB) examination were considered eligible for program services.

population to master the English language as quickly as possible while continuing to progress in the content areas through courses taught bilingually. The project also attempted to provide vocational training to enhance the students' ability to compete in the job market.

In order to meet these goals, BITEC offered courses in English as a second language (E.S.L.), native language arts (N.L.A.), bilingual mathematics, science, and social studies, and courses in several vocational subjects. In addition, Project BITEC initiated a course on travel and tourism, which was open to mainstream as well as project students; provided bilingual paraprofessionals for content-area courses taught by English-speaking teachers (in cases where bilingual teachers were unavailable); and provided guidance and other support services to its target population.

As in previous years, the project stressed parental involvement as a major non-curricular objective, with family assistants functioning as the key link between the school and the students' families.

Project BITEC promoted students' pride in their native cultures and their understanding of their fellow students' cultures by organizing ethnic celebrations, an inter-ethnic magazine, parties, and trips. In addition to delivering the services it had proposed, the project staff, in cooperation with the school administration, surveyed LEP students to determine their educational goals and needs. The principal was reported to

be using the results of this survey to guide his efforts to recruit additional bilingual teachers.

The original Title VII project was designed to function in three yearly phases: implementation, development, and evaluation. After the third year, project costs were to have been defrayed by the school using tax-levy and other monies. However, although New Utrecht retained a Chinese teacher previously funded by Title VII and continued funding bilingual teachers and a bilingual counselor, it lacked the funds needed to keep Project BITEC in operation. In particular, it could not pay the salaries of the project's secretary, three paraprofessionals, and two family assistants.

Fortunately, New York State discretionary funds were allocated to pay these staff members' salaries for one semester. Since these funds were allocated late in the fall 1987 semester, Project BITEC could not resume operation until the spring 1987 semester. The project's one-semester hiatus made it necessary for the project staff to devote considerable effort to reassembling its target population, which had been dispersed to mainstream classes in the fall. Moreover, lack of funds necessitated the incorporation of a proposed bilingual course on travel and tourism into the mainstream curriculum.

The project director was supervised by the assistant principal (A.P.) for foreign languages, a former Title VII project coordinator. They communicated well, had a genuinely collaborative relationship, and had similar views on project

goals and performance. The project director also had an excellent relationship with New Utrecht's principal, who gave the project his full support.

COMMUNITY AND SCHOOL SETTING

New Utrecht is located in the Bensonhurst section of Brooklyn, a residential, working-class area containing one- and two-family houses and several commercial strips. The houses are well preserved and most have well-kept yards and gardens. The immediate neighborhood has a large concentration of Italian-Americans. However, because of the school's convenient location, its reputation for safety, and its success in integrating students from different ethnic groups, it attracts large numbers of Asian and Latin American students from the adjacent Sunset Park area, which has had the option of sending students out of district. With this option scheduled to end in the fall of 1987, several Sunset Park high schools were planning to establish their own Chinese-language programs. As a result, fewer Chinese students were expected to enroll in New Utrecht in the future.

In the spring of 1987, New Utrecht's enrollment totalled 3,065, of whom 50 percent were white, 20 percent were Hispanic, 17 percent were black, and 10 percent were Asian. Twenty-nine percent of New Utrecht's students were of low economic status as evidenced by their eligibility for free lunch.

The school building, dating from 1925, was being renovated: new windows had been installed and painting was due to begin in July 1987.

II. STUDENT CHARACTERISTICS

During the semester under review, Project BITEC served 256 students from the following cultural backgrounds: Chinese (46 percent), Hispanic (21 percent), Italian (12 percent), Vietnamese (10 percent), and Haitian (10 percent). This represented a substantial shift from 1985-86, when Hispanic students comprised 36 percent and Chinese students 39 percent of the project's population. From a longer-term perspective, the number of Asian students had grown to comprise well over half the project's population; the number of Haitians also had grown; and the number of Italians had declined.

The criteria for selecting students for the program were a score below the twenty-first percentile on the English version of the Language Assessment Battery (LAB) examination and interviews with students and their parents. A small number of Asian students who scored above the twenty-first percentile on the LAB were admitted to the project because they had encountered difficulties in content-area courses taught in English. Although these students could read English, they were deficient in aural and verbal ability.

According to staff members, students who came from Taiwan had a better educational background (including some exposure to English) than those who came from the mainland. Because Vietnamese as well as mainland Chinese students lacked prior exposure, both groups experienced more phonetic difficulties in learning English than did the Taiwanese. Many Vietnamese and

Cambodian students had spent only a few years in school before fleeing their homelands and had little or no opportunity to continue their education during the years they spent as refugees in Southeast Asia. It often was extremely difficult for such students to adjust to the high school environment. Nevertheless, the project director noted that, regardless of home country, nearly all the Asian students were very achievement oriented. As evidence, he cited the fact that the two students placing highest on New Utrecht's honor roll had been BITEC students.

Although BITEC's Hispanic students were predominantly from the Dominican Republic and Puerto Rico, the project director noted that the proportion of Central American students was growing. He said that the Central American students seemed highly motivated and better prepared than their Dominican and Puerto Rican counterparts. He also noted that students from rural areas, particularly those from the Dominican Republic, experienced great difficulty in adjusting to New Utrecht's academic environment.

III. FINDINGS

The evaluation findings for the spring semester include objectives measurable by final course results, and those assessed on the basis of an examination of program records, site visits, classroom observations, and interviews with school personnel. Below are the program objectives formulated for the semester under review, as proposed by the project and accepted by the Bureau of State Aided Programs, Division of Educational Finance of the New York State Education Department.

ENGLISH AS A SECOND LANGUAGE

Although the program did not propose an objective in this area, three levels of E.S.L. instruction were offered to participating students. These classes, which lasted one period a day, sought to develop students' English-language, speaking, reading, and writing abilities. In addition, three levels of speech-lab classes were available in both fall and spring semesters. These labs sought to develop fluency, accent, intonation, and pronunciation.

A transitional E.S.L. class was observed by a member of the evaluation team. This was the most advanced E.S.L. class which students took before entering mainstream English. Some members of the class were reading the roles from A Raisin in the Sun, a play by Lorraine Hansberry. The other students followed their classmates' readings attentively. Some requested an explanation whenever unfamiliar words were encountered. The teacher

explained the meaning of these words and often asked students to explain metaphorical and slang expressions in their own words.

Most of the students were from Asia, although some were from Italy, Central America, and Haiti. Although the students who were reading appeared to have difficulties with pronunciation, they read fluently. When interviewed, the teacher said that although the students' comprehension was generally good, and in some cases they had developed large vocabularies, their writing was very poor. She explained that their problems in this area differed. For example, she pointed out that since verb tenses do not exist in their native tongue, Chinese students tended to omit them in English.

NATIVE LANGUAGE ARTS

-- At least 70 percent of the students enrolled in native language arts courses will score at or above the 65 percent passing criterion.

According to the project proposal, the aims of native language instruction were to foster pride in the students' culture and to increase their chances for success in the business and/or professional worlds, where bilingual skills are increasingly in demand.

The number and mix of N.L.A. courses offered during the spring semester appeared to be a function of the availability of teachers and the ethnic distribution of the project's students. The project offered two courses in Chinese native language arts, two in Spanish, and two in Italian. Because a certified teacher was unavailable, Vietnamese N.L.A. could not be offered.

An advanced Spanish native language class was observed by a member of the evaluation team. The text used was Literatura moderna hispánica, a compilation of short stories edited by J.R. Gonzalez.

Because the students were initially restless and uninterested, the teacher had to devote the beginning of the class to imposing discipline. After the class had finally settled down, they reviewed and answered the teacher's questions about "El matrimonio de Dona Brigida," by E. Labarta, which they had been assigned to read as homework. Afterwards, to prepare for their next short-story assignment, the students read a brief essay on the life of Unamuno. While some students seemed able to handle this material with ease and appeared to be enjoying the class, most appeared distracted and unable or unwilling to follow the content. When interviewed after the class, the teacher said that the students differed in their level of preparedness and in their ability to handle the high level of abstract reasoning required to analyze a literary text.

Student Achievement in Native Language Arts

In accordance with the proposed objective, passing rates were examined for students enrolled in Chinese, Spanish, and Italian N.L.A. courses. The project objective, that 70 percent of the students would pass their courses, was achieved and surpassed. Specifically, of the 50 students enrolled in Chinese N.L.A., 43 (86 percent) scored at or above the 65 percent passing criterion.

In Italian N.L.A. classes 11 out of 15 students (73 percent) achieved or exceeded the passing criterion.

Finally, in Spanish N.L.A. classes 73 percent (16 out of 22) of the students met the 65 percent passing rate.

CONTENT-AREA SUBJECTS

-- Students participating in the program will score at or above the 65 percent passing criterion in social studies, mathematics, and science, at a rate that is equal to or greater than that of similar non-program students.

The project was able to fill some of its instructional needs in the content areas by recruiting mainstream teachers who were fluent in Italian or Spanish. Chinese language arts and science were taught by a licensed Chinese teacher, and a temporary per diem (T.P.D.) teacher was hired to teach social studies in Chinese. But the project did not have all the bilingual content-area teachers it needed. For example, there were no bilingual math teachers for any of the project's target languages. Whenever bilingual teachers were unavailable, bilingual paraprofessionals were assigned to monolingual classes and tutorial assistance was provided through the resource lab. Both the project staff and the school administration said they were committed to locating and hiring additional bilingual teachers as quickly as possible.

A field evaluator observed a bilingual biology class for Spanish-speaking students and a bilingual social studies class for Chinese-speaking students. The subject of the biology class was evolution. Although the classroom faced a heavily

trafficked, hence very noisy, street, hot weather made it necessary to keep the windows open. Despite the din this caused in the classroom, the students were attentive and orderly; their interest was manifest in the large numbers who asked questions and volunteered to write answers on the blackboard. The class was conducted mainly in English, with the teacher using Spanish to praise students, explain difficult concepts and new terms, and make sure that everyone understood new material. Although the students generally used English to ask questions, they sometimes switched to Spanish for complicated ones. The teacher made skillful use of the similarity between Latin biological terms (such as homo sapiens and homo erectus) and their Spanish cognates to facilitate students' understanding.

Migration was the subject of the social studies class that was observed. The aim of the class was to determine whether the experience of immigrants to America could be described as bitter or sweet. The class included Chinese, Vietnamese, Korean, and Burmese students. The class was conducted mainly in English, although the teacher translated questions into Chinese and asked students to write important concepts on the blackboard in Vietnamese. In some instances, the teacher was told that there was no Vietnamese equivalent for an English term -- "migration," for example. Neither the teacher nor the evaluator could determine if this really was the case.

The teacher asked the students to describe their motives for emigrating, and their experiences as immigrants. Most of the

Chinese students asked questions and responded in their native language. Although the majority of students were very attentive, a small group of Vietnamese students conversed among themselves throughout the class. Interviewed after class, the teacher explained that the Vietnamese students had been having difficulty following her. The project director was aware of the need for bilingual content-area courses for Vietnamese students but explained that, because Vietnamese immigration to this country had been so sudden and so recent, it was extremely difficult to find qualified teachers. Italian- and Spanish-speaking paraprofessionals interviewed by a field evaluator said that project students' failure rate was highest in social studies. They said that many students said they could not understand the English-language textbook. The project director noted that both he and the A.P. of social studies were aware of this problem. According to the project director, the book had proven difficult even for native speakers. He said that a new textbook would be used in the fall.

Student Achievement in Content-Area Subjects

Passing rates were available for Hispanic students enrolled in social studies and science courses. Passing rates for Chinese students in social studies, science, and calculus were also provided.

As Table 1 indicates, Hispanic students achieved the 65 percent passing criterion in three out of four social studies courses. The rate at which these students passed American

Studies 2 and 3 was not significantly different than the passing rate of mainstream students. That is, program students are passing at rates similar to those of non-program students. However, a z-test indicated that Hispanic students passed American Studies 1 at a significantly greater rate than mainstream students (z = 2.9, $p < .05$). The only social studies course in which program students did not meet the passing criterion was Global Studies 2.

Hispanic program students did well in General Science. In addition to achieving the 65 percent passing criterion, the rate at which these students passed was significantly greater than that of mainstream students (z = 2.2, $p < .05$). However, the opposite pattern was found for the Biology 2 course. Whereas 94 percent of mainstream students passed, only 41 percent of the program students passed (z = -1.2, $p < .05$).

Chinese program students achieved the proposed criterion in each of the four social studies courses for which data were provided. In American Studies 2 and Global Studies 2, program students passed at a rate comparable to that of non-program students. Further, passing rates in American Studies 1 were significantly greater for Chinese students than mainstream students (z = 1.8, $p < .05$), and 100 percent of the Chinese students passed American Studies 3 whereas only 72 percent of the mainstream students passed (z = 2.9, $p < .05$).

This level of achievement was largely maintained by Chinese students enrolled in other content-area courses. In Calculus and

Biology 2, the 65 percent passing criterion was achieved, but significantly more mainstream students passed these courses than did program students.

Data for students in General Science indicate that 82 percent of the program students passed compared to 52 percent of the non-program students ($z = 3.7, p < .05$).

Overall, Hispanic program students achieved the passing criterion in four out of six content-area courses and Chinese students achieved the passing criterion in all seven courses. These data indicate that program students have learned a great deal. However, since the 65 percent passing rate was not achieved in two courses by Hispanic students, the proposed objective was only partially met.

TABLE 1

Passing Rates for Program and Mainstream Students in
Content-Area Courses

COURSE	Hispanic Program Students		Mainstream		z-test Value
	Number of Students	Percent Passing	Number of Students	Percent Passing	
American Studies 1	27	93	32	66	2.9*
American Studies 2	15	87	28	82	.50
American Studies 3	22	82	25	72	1.0
Global Studies 2	24	46	34	76	-3.4*
General Science	18	79	27	52	2.2*
Biology 2	29	41	32	94	-12.0*

	Chinese Program Students		Mainstream		
American Studies 1	32	81	32	66	1.8*
American Studies 2	29	86	28	82	.56
American Studies 3	21	100	25	72	2.9*
Global Studies 2	33	82	34	76	.81
Calculus	9	89	11	100	-1.7*
General Science	38	82	27	52	3.7*
Biology 2	55	75	32	94	-5.9*

*Statistically significant at the .05 level.

- Hispanic students met the program objective in four of six subjects.
- Asian students achieved the objective in five of seven areas.

VOCATIONAL SUBJECTS

-- At least 75 percent of the students enrolled in the travel and tourism course will score at or above the 65 percent passing criterion.

In previous years, Project BITEC offered courses in industrial, secretarial, and commercial subjects. During the semester under review, the project offered a course in travel and tourism. This course sought to provide an overview of the travel industry and to provide more specialized training in the use of computers by the airlines. Although the course had been planned as a bilingual offering, because of the late arrival of project funds and the school's inability to guarantee that a bilingual teacher could be provided, it was made part of the mainstream program. As a result it enrolled only a small number of LEP students.

Field trips were an important aspect of the course and included a tour of Kennedy Airport sponsored by the Port Authority, and a visit to Alitalia headquarters at Kennedy.

A member of the evaluation team observed a travel and tourism class which was listening to a representative of a major airline discuss job opportunities in the airline industry. The students listened intently and asked the guest lecturer very specific questions about how to get a job, the training required, and how their course at New Utrecht might help them get a job in the travel industry.

Student Achievement in Vocational Subjects

Data on student achievement in this area were not provided.

Therefore, the proposed objective could not be assessed.

Because of BITEC's known experience in the development and provision of vocational courses, Kingsboro College approached the project director to discuss the possibility of developing a jointly administered program in travel and tourism.

PARENTAL CONTACT

-- The family assistants will make home contact at least twice each semester to inform the parents of project students about their children's progress and program activities as measured by their logs.

The project proposed that parents be contacted at least twice per semester to inform them about their child's progress and program activities. This was deemed important because students' parents were not always aware of the importance of schooling to their child's upward mobility and future. Sometimes some pressed their offspring to drop out of school to get a full-time job.

According to program records, the family assistants contacted parents at least three times during the spring semester, thus surpassing the proposed objective.

Both the family assistants and the bilingual paraprofessionals carefully monitored students' report cards and contacted the parents of each student who had a grade of 60 points or below, or who showed gaps in attendance. Home visits by family assistants and paraprofessionals were reported to have been very successful in keeping students who were at risk from dropping out. During these visits, the importance of an

education was emphasized, and help was offered to solve student and family problems. In some instances, dropping out was prevented by helping students find summer or part-time jobs, thereby enabling them to meet pressing family financial needs without interrupting their education.

The Italian-speaking family assistant noted that many parents did not show concern about their children's absences or low grades because they viewed a job, not schooling, as the road to success. When interviewed, the Spanish-speaking paraprofessional reported that the attitude of Hispanic parents differed according to their place of origin. She said that, overall, Central American parents had the strongest pro-education attitude. An Asian family assistant who spoke Mandarin, Cantonese, and Vietnamese reported that Vietnamese and Cambodian students had more attendance problems than Chinese students. He explained that some of these students had only four or five years of schooling before they entered the United States and consequently could not follow the ninth- or tenth-grade classes to which they were assigned. He also declared that many Vietnamese students were depressed and homesick, and had profound problems of adjustment to American school life.

According to the project director, only a small number of program students cut classes. To discourage students from staying out of school, the school principal prohibited students from loitering on the sidewalk outside the building. This regulation, enforced with the cooperation of nearby shop owners,

was largely successful in forcing the small number of truants to return to class.

Other strategies to increase the students' interest in school and foster parental involvement in the school included activities to raise the students' level of aspiration, increase achievement orientation and ethnic pride, and promote inter-ethnic understanding. Examples included: a student-organized spring festival for parents, featuring folk dances from different regions and popular music from America in the 1940s and 50s; a parent/student walkathon to raise funds for children with hydrocephalus; a trip to Bear Mountain; and a social club for project participants.

The project reported that although the level of parental involvement seemed to have increased over the years, the project continued to experience difficulties in attracting parents. This was due in part to the fact that most parents had full-time jobs that left little time to attend school activities. In addition, many reportedly felt intimidated by the school environment.

IV. CONCLUSIONS AND RECOMMENDATIONS

Project BITEC has successfully completed one semester of extension made possible by New York State discretionary funds. In addition to E.S.L., native language arts, and bilingual content-area instruction, the project provided a course in travel and tourism that trained students for a field in which bilingualism is in demand. Moreover, through a variety of instructional and non-instructional support services, Project BITEC facilitated the rapid acclimatization of young immigrants to American language and culture.

Despite the fact that the project could not fulfill all its bilingual personnel needs, it was able to provide the services it had proposed. Courses in E.S.L., native language arts, and content areas such as social studies, science, and mathematics were taught by licensed teachers. On the basis of a survey of bilingual student interests and needs, efforts were being made to recruit additional teachers.

Newly hired staff members appeared competent and enthusiastic and seemed to have empathy with the students' problems. Most of the school's teachers and administrators appeared to share these attitudes, and the project enjoyed the active support of the school's principal. Finally, the program was able to achieve its proposed objectives in the areas of native language arts, content-area subjects, and parent outreach.

BITEC has been taken in the past as a model by out-of-state school administrators, and is presently discussing a

collaborative training project in travel and tourism with Kingsboro College.

Declining numbers of Italian immigrants in the New Utrecht zone and the end of the option that out-of-zone Asian students have to attend the school seem to presage a declining LEP population. Nevertheless, the school already has a substantial LEP population, and even with the above-mentioned changes, LEP students will continue to enter New Utrecht. Therefore, in view of the important services provided by BITEC, it is recommended that funds be sought to extend the project's life beyond the one-semester reprieve that was made possible by the grant of New York State discretionary funds. It is also recommended that the school continues to seek appropriate personnel to assist the Asian students in their adaptation to U.S. society.