# Balancing Between Deaf and Hearing Worlds: Reflections of Mainstreamed College Students on Relationships and Social Interaction

Sara A. Kersting
National Technical Institute for the Deaf
Rochester Institute of Technology

This qualitative study of the social aspects of mainstreaming from the perspective of deaf college students indicates that for some students, social adjustment to college is complicated by experiences of separation and alienation from both deaf and hearing peers. Data were collected through open-ended interviews with deaf students who had little or no previous experience with or exposure to deaf culture or language before their arrival at a mainstream college environment. Feelings of isolation, loneliness, and resentment were most intense during orientation and first year, when alienation from the deaf student community appeared to be caused by lack of sign language skills, unfamiliarity with norms and values of deaf culture, and perceived hostility from deaf peers. Simultaneous experiences of separation from hearing peers appeared to be caused by physical barriers inherent in the classroom, residence hall, and cafeteria environments, as well as by discrimination from hearing peers, who tended to stereotype deaf students. Findings suggest that those involved in the administration and delivery of postsecondary programs for the deaf should investigate the experiences of students who arrive on campus without knowledge of sign language or familiarity with deaf culture and evaluate currently existing programs and services designed to meet these students' needs.

The increasing number of deaf students mainstreamed into educational programs has raised questions about the quality and quantity of social interaction between deaf students and their hearing peers. Most of the resulting research has focused primarily on secondary

Correspondence should be sent to Sara Kersting, National Technical Institute for the Deaf, Rochester Institute of Technology, Carey Building Office 2431, Rochester, NY 14623.

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school settings, such as studies by Foster (1988), Mertens (1989), and Holcomb (1990), which indicate that many deaf students in mainstreamed high schools experience isolation from hearing peers. Other studies, such as Stinson and Leigh (1990), Stinson and Whitmore (1992), and Kluwin and Stinson (1993), suggest a more complex picture, in which orientation to both deaf and hearing peers varies, and interaction is affected by a variety of factors.

Although some of the conclusions about deaf students' experiences in high school appear to be applicable to postsecondary environments, concern with the success of the growing numbers of deaf students being mainstreamed into colleges requires that we learn more about their social lives. The connection between social satisfaction and persistence in college has been well documented. Early retention studies suggested that integration into the social systems of college, as well as the academic systems, affected students' persistence (Pantages & Creedon, 1978; Tinto, 1975, 1987). Bean (1985) found that relationships with peers alone had a significant effect on student retention. In their recent review of 20 years of research, Pascarella and Terenzini (1991) conclude that both the frequency and quality of student interactions with peers, and participation in extracurricular activities, are positively associated with persistence in college. Pascarella (1985a) even found that social involvement with peers positively influenced students' levels of education aspiration.

Research with deaf college students indicates that social satisfaction is just as critical to deaf students as

to their hearing peers. Stinson, Scherer, and Walter (1987) found that freshmen at the National Technical Institute for the Deaf (NTID) who expressed greater social satisfaction were more likely to persist. Walter, Foster, and Elliot (1987) interviewed deaf students who had left mainstream programs and found that lack of social integration into the college community was a major reason for withdrawal.

One of the major obstacles to research on mainstreamed college students lies in the number and variety of postsecondary programs that serve deaf students. The 1995 edition of College and Career Programs for Deaf Students (Rawlings, Karchmer, DeCaro, & Allen, 1995) identifies over 134 postsecondary institutions in the United States that have programs for deaf students, varying in the number of deaf students they support and the kinds of services they provide. In most cases, the number of deaf students in these programs is very small.

In one of the few studies of social aspects of mainstreaming in college settings, Murphy and Newlon (1987) surveyed 170 hearing-impaired college students from eight different colleges, using a questionnaire to measure loneliness. They found that hearing impaired students were more lonely than students in the hearing sample, but the small sample size available in any one school prevented further conclusions about the factors associated with loneliness scores.

Foster and Brown (1989) interviewed mainstreamed deaf students and found that many students reported experiences of separation and isolation from hearing peers. Although some deaf students reported friendships with hearing students, the most common patterns were casual and/or temporary relationships ("acquaintanceships") and separate parallel social networks ("separate worlds"). Most of the deaf students interviewed relied on social networks of deaf peers, deaf clubs, and deaf organizations because of the ease of communication, group identification, and the negative influence of social prejudice. Foster and DeCaro (1990) also reported that most deaf students tended to socialize with other deaf students, although some described positive interactions and friendships with hearing students. This study identified a variety of factors that influenced interaction between deaf and hearing, including individual student characteristics, the nature

of campus settings, and the larger campus culture and organization.

Both studies suggested that not all deaf college students rely on the larger deaf community for social satisfaction. Foster and Brown (1989) pointed out the existence of subgroups within the deaf population based on communication mode and previous mainstreamed experience and suggested patterns of acceptance and rejection among deaf students, similar to those that characterize interactions between deaf and hearing groups. Foster and DeCaro (1990) found that some deaf students with a history of mainstreaming were as comfortable or more comfortable with hearing peers as they were with deaf peers.

Findings such as these from both secondary and postsecondary studies raise interesting questions about social satisfaction and the kind of social integration relevant to retention. If deaf students can find satisfactory relationships with other deaf students, does this compensate for the lack of social interaction with hearing students? Are deaf students who interact with both deaf and hearing peers more socially satisfied than those deaf students who interact with only deaf peers? Do deaf students who do not rely on the deaf community as the source of social interaction find satisfactory relationships elsewhere?

The purpose of this study was to collect more information about social interactions in a mainstreamed college setting, from the perspective of deaf students who had little or no previous history of relationships within a deaf community before their arrival on campus. Lack of previous research on the adjustment needs of this subgroup indicated the need for a pilot study that would help to clarify issues and establish a basis for more extensive research.

# Method

Qualitative research methods were selected as the most effective way to collect and analyze data about students' social interactions. Investigating the nature of students' relationships from their perspectives required research methods that would allow for the description of attitudes, motivations, expectations, and perceptions, most not easily discernable using statistical or quantitative measures. Although using qualitative methods would

allow for much more complete understanding of the students' experiences, there are significant limitations to generalization from this approach. While findings from this study are expected to provide information useful to those interested in promoting successful integration of mainstreamed oral deaf students, these findings should not be assumed to reflect or represent the experiences and needs of all such students.

In-depth open-ended interviews were used, following a set of guideline questions shared with each student before the interview. Interview questions were divided into three main areas: (1) experiences during the orientation programs students attended before classes began, (2) experiences during their first year on campus, and (3) experiences since that time. Each area was further divided into the following topics: descriptions of friends, types of relationships, communication used, participation in social activities, degree of satisfaction with social life, and others.

Each interview lasted between one and two hours. Students were given the choice of communication. Half of the students used some signs while they spoke; the other half used voice only. Interviews were recorded on audiotape and transcribed verbatim. One interview was also simultaneously videotaped, in case the student's speech did not record clearly enough for accurate transcription. These interview transcripts provided the database for this study. Data analysis for recurring patterns and themes followed the guidelines suggested for qualitative research (Bogdan & Biklen, 1992).

Subjects. Fifteen students were invited to participate in this study, and the first 10 who responded were selected. These students were among a population of 200-300 deaf students who are mainstreamed ("crossregistered") into various bachelor degree programs. Unlike the majority of deaf students, who take courses in self-contained classes in associate degree programs, mainstreamed students attend regular classes with hearing peers and use support services (interpreting, notetaking, tutoring). This group was further defined by the fact that they had all, at one time, used the counseling services provided for those programs and, although no longer in therapeutic relationships, had

maintained frequent contact with the counselor/inter-

Only those students who had entered the mainstreamed academic programs either directly upon arrival or very shortly (one or two quarters) after arrival were asked to participate. Students who had previously earned a degree from the college or who had spent more than one or two quarters in self-contained classes were not included. The only other criteria used was length of time at the university; students had to have completed at least one year of study. Freshman students and transfer students who had been on campus for less than one year were excluded.

No attempt was made to select on the basis of communication skills or academic skill levels. However, by definition, students accepted into bachelor level programs must demonstrate competencies required for admission to that level of study. In addition, the students interviewed demonstrated very high oral/aural skills and would appear to have little difficulty communicating with most hearing people (see the Appendix).

Seven men and three women, ranging from 19 to 26 years of age, participated. Seven had entered as freshmen; three had transferred to RIT after one or two years of study at another college. At the time of the interviews, two of the students were in their second year of study, three were in their third year, and the other five were in their fourth or fifth year. Since the focus of the study was on students' social experiences on campus, detailed information about students' previous experiences in other educational settings was not formally solicited. However, all students described their high school experiences as "mainstreamed," and most of them described themselves as being mainstreamed "all the way" (i.e., throughout their entire educational history). In most cases, students were either the only deaf person or one of a few deaf students in these mainstreamed settings.

Students' comments about their social interactions with deaf and hearing students are divided into two parts: (1) experiences during the first year, which includes the orientation weeks during August, and (2) experiences during second and subsequent (third, fourth) years. Although some patterns appear to persist throughout, unique aspects to both the earlier period

and to the later years appear to have a major impact on students' relationships and thus warrant separate attention.

## First-Year Experiences

Three main themes appear throughout students' descriptions of their social life during their first year: (1) feelings of alienation and separation from the deaf student community, (2) the importance of close relationships with other "oral" students experiencing the same difficulties, and (3) the struggle for acceptance from the hearing student community.

# Relationships With Deaf Peers

For most of the students interviewed, interaction with deaf peers began during orientation programs in August. The orientation programs the deaf students attended in August before their first fall quarter were not mainstreamed; they were designed for and attended by deaf students only. Approximately 200-300 deaf students attended the main orientation program, known as the Summer Vestibule Program (SVP), for three to four weeks. During this time, all deaf freshmen were housed together in the same residence halls. All interviewed students described initial relationships and interactions overshadowed by what they called "culture shock." Clearly, students were not expecting, nor were they prepared for, the segregated environment. As one student put it, "It was a big shock when I arrived here. It is like I arrived in Russia." Another commented:

It was a total change for me because before that time, I spent most of my life in the hearing world and things like that. I had a lot of deaf friends . . . but to go into an all-deaf situation like that was very awkward for me.

As students described their first few days on campus, two factors emerged as causes of their feelings of shock and alienation: sign language and the negative responses they perceived from other deaf students. Although some of the students had been exposed to sign language, none had ever lived in an environment where sign was the most prevalent, or only, form of communication. One student recalled feeling very nervous and apprehensive at the sight of signing, or, as he put it, "throwing their hands." Another student described how difficult the experience was for him:

I remember the first three days were really hard. It was like everybody was signing and I was like, oh. I mean it was too much for my eyes. Hands were flying everywhere. . . . The third night or something, they went to the theatre at LBJ and there was some kind of performance. I could hear it through the system and I was enjoying it but all of these images of hands flying everywhere . . . so I went to the back of the theatre . . . I was in a daze . . . [I]n fact I broke down crying because it was just too much. I am in the middle of all this. I was in a sea of hands.

Even those students who knew some sign language were very frustrated by the limitations of their ability to communicate: One student who knew some signed English found she could not communicate with students who used American Sign Language (ASL): "[T]hey couldn't understand a thing I said." Another student, who knew only fingerspelling, talked about the time it took her to spell out a sentence: "[I]t was like hours." One student, describing her frustration, said, "[M]y hands were frozen."

Although some of the initial "shock" appeared to wear off after the academic quarter began, sign language continued to be one of the major obstacles to relationships with other deaf students. Most of the interviewed students took sign classes during first year, but some students expressed frustration with the time required to develop signing skills:

The sign language classes did help a little bit but not much because here is my level of communication [student holds hand at waist level] and here is their [deaf students'] level [student holds hand above head]. I am not proficient . . . and I don't have the vocabulary. . . . [I]t is probably very hard for someone who is really proficient to really drop down to someone who is learning the language. It is really hard to be friends, I think.

The second factor that contributed to students' feelings of alienation involved the responses they received from other deaf students. As one student recalled, "If you make the mistake of talking [using voice] to a deaf person, and the deaf person signs, they react rather negatively, really negatively." Another student described more subtle reactions: "Some guys were teaching me how to sign but they kind of felt like I was an outsider instead of an insider, you know? They didn't really want me as part of the group."

Interviewed students reacted in various ways to these behaviors. Some spoke about being confused, not understanding why students reacted negatively. Others expressed anger and resentment. Many students described feeling "left out" and, as one student put it, "like an outcast."

Although intensity of feeling faded with time, negative responses, and/or the anticipation of negative responses, continued through the first year. Some students felt discouraged by the responses from other deaf students when they tried to sign. One student talked about how other deaf students made fun of her when she "messed up" trying to sign. Another student talked about her fear of making mistakes:

I like to communicate with the deaf people without them getting mad at me for not knowing sign language, for not making them think that I am a hearing person and thinking like a hearing person [student makes a sign on forehead] when I am deaf person.... But I was afraid to meet them.... I didn't want to make a mistake and give them the wrong impression or something.

Although most students reported orientation as a time of feeling "discouraged" and "lonely," those who did start friendships found them with other "oral" students; as one student commented, with students who "talked like me." Reasons students gave for these relationships centered around ease of communication and the shared experience of mainstreamed backgrounds: "The first day of SVP I was like nothing. Then it got better because I knew that other people were in the same boat that I was in. Other oral people who were from mainstreaming."

Despite their hearing loss, most of the interviewed students did not refer to themselves as "deaf." Students talked about "deaf" people and "their" culture, obviously not including themselves in this group. Instead, most students described themselves, and others like them, as "oral" or "hard of hearing," or, as one student said, "[S]ome who used sign language but not those who are capital D, Deaf, like strong deaf with ASL."<sup>1</sup>

Many students originally found these friendships through opportunities offered by the SVP orientation program for "oral" students (e.g., "oral" floors in the residence hall, and "oral" career counseling groups for students who depended on oral methods of communication and/or did not have signing skills). After courses began in the fall quarter, students reported meeting other oral students in mainstreamed classes. Other opportunities to meet students "like themselves" were also reported by students who, after the orientation period was over, had moved to predominantly hearing dorms. On these mainstreamed floors, students met other "oral" deaf students who had also requested to move to more mainstreamed environments.

Students' descriptions of their feelings of separation from both deaf and hearing communities during the first year underline the importance of their relationships with students sharing the same experience. Half of the students interviewed described very close (best friend, boyfriend, or girlfriend) relationships with other oral students during first year. Students talked about these relationships as a source of support, protection, and acceptance:

[T]he reason why he and I got along so well is that we both hated R.I.T. He . . . grew up in that hearing world and he had problems accepting NTID. . . . So, he had to deal with it. And the way him [sic] and I were able to deal with things together was to . . . basically be buddies for each other. We knew that we were always there for each other. And that is how we coped through a lot of things.

While relationships with other oral students appeared to alleviate some of the loneliness and alienation, some students continued to be frustrated. Reasons varied. Some students expressed dissatisfaction with the limitations of their friendships, always interacting with just "the same people . . . a very small group." Another student talked about feeling left out, never knowing "what was going on."

# Relationships With Hearing Peers

Although some students were more successful than others in establishing relationships with hearing students, all of the interviewed students described obstacles they perceived to have significantly inhibited interactions and prevented relationships with hearing peers. Students' descriptions of these obstacles can be grouped into two main categories: physical factors or conditions and factors related to social prejudice.

Physical factors. Physical factors that students perceived to be barriers included the grouping of deaf students in classrooms, separate dining facilities for deaf and hearing, and separate residence halls for deaf and hearing students.2

In mainstreamed classrooms, deaf students often sit together in the front of the room in order to see the interpreter and the instructor clearly. Some of the students interviewed expressed surprise and discomfort with this seating arrangement:

In the mainstreamed courses, my problem was I wanted to be involved with the hearing world more. And having to sit in that little group with those deaf students really separated me from them. . . . I don't know if you would call it prejudice, but no matter how hard I tried to communicate with hearing people, just knowing that I had hearing aids on and that's where I sat kept me that far away from them.

While some students appeared resigned to this situation, other students developed alternative seating arrangements:

I decided to sit in between. . . . [N]ormally I always sit in front and center so I can hear the teacher. But I observed how deaf people interact among each other. And I watched the other hearing people that are trying to get acquainted. So, I made acquaintance with the hearing people. I moved to this direction because I do not believe in the separation of deaf and hearing . . . and they [hearing students] were comfortable. And I was glad and relieved.

Most students were also uncomfortable with what they perceived to be separate dining facilities on campus. To create opportunities for interaction with hear· ing peers, some students chose to eat in cafeterias used primarily by hearing students, instead of using the "dining commons" where most of the deaf students ate. As one student recalled, "We tried to break into the hearing world by eating dinner and lunch and breakfast in the hearing cafeteria. You never saw deaf people in there."

Most students also objected to the grouping of deaf students in residence halls. At the beginning of the fall quarter, 4 of the 10 interviewed students requested to move into what they called "hearing" dorms (i.e., residence halls with primarily hearing populations), as opposed to the Ellingson, Peterson, Bell residence halls where the majority of deaf students lived. These students reported frequent and positive interactions with hearing peers: "There were some difficulties. But they [hearing students] make me feel good about myself. They come up and talk to you and come up to your room, or [you] go up to their room. You can hang out and party together or do anything."

Social prejudice. In addition to physical constraints to interaction with hearing students, students also described what they perceived as social prejudice. One student assumed the perspective of hearing students, as she perceived it:

Even though you can talk, you are still deaf anyway. There is the interpreter and that means you [are] probably in your deaf club [and] that you don't fall into the hearing category. So you be friendly with your deaf friends, and we will be nice . . . [W]e will be nice but nothing more than that. We have our friends and our friends are not yours. We don't socialize with deaf.

Some students established relationships with hearing students, but in most cases, these relationships appeared to be limited. One student described these relationships as "superficial." Another talked about studying with hearing students, but "that was how far it got." One student who played on a university sports team during her freshman year reported similar limitations: "They were all hearing. It was fun just being with the team itself. But outside . . . we don't do things together. . . . Maybe because I am deaf . . . I got close to some of them but I don't know their ways."

Most students felt that stereotyping—the tendency of hearing students to assume that all deaf people are the same—was one of the major reasons for the prejudice they encountered. In most cases, students did not feel that they were being discriminated against personally, but that they were perceived as being "like other deaf":

[P]eople [hearing] would look at me and see the hearing aid and they automatically assume that, oh, he is one of those. . . . There are more deaf people that fit the stereotype of being deaf than there are people like me who are almost hearing but we are deaf. . . .

I went to parties but I could never really get completely comfortable about going . . . because invariably somebody would look at me and they would see the hearing aid. And then they would think I was one of the other deaf people. . . . And I wasn't in fact like them, and my only hope was that one of the coolest people in the party would know me and they would say to everybody, 'Oh, he is OK.' Either that would have to happen or forget it . . . I would leave.

Students also tried to demonstrate their differences from other deaf students by using their voices in class-rooms and dorms: "[W]e were talking and we were not signing to each other. . . . [W]e felt that if we had given it a chance, hearing people might accept us or see us or realize that . . . we are not a part of that group. . . . But that was first year, right there."

# Other Helping Relationships

Not all interviewed students found friends among the population of new students. Some found support, encouragement, and friendship outside of their peer group. For example, some students established relationships with older deaf students who had been hired as assistants during the orientation programs: "She was older, a helper for SVP. . . . I confided with her because she was more oral. . . . She really helped me understand what would happen after SVP and that it [SVP] wasn't the end of the world. And that it wasn't going to be like this forever."

Other students described relationships with coun-

selors as being very encouraging. Some students described finding friends among some of the hearing students in the interpreter training program. Others reported communicating frequently with their families and, in some cases, high school friends back home. It appeared that these opportunities for students to express their feelings and receive support and encouragement were very important. For example, one student recalled calling his parents every week during orientation and telling them he wanted to come home. He stayed however because "they told me fall quarter is totally different. There will be 14,000 other people [hearing] coming back."

During the first year, support networks expanded to include interpreters, notetakers, and other support service providers. Notetakers and interpreters continued to be sources of interaction and relationships for many students interviewed. Students described some hearing students who worked as notetakers as "friendly," "interested in deaf," and "open to relationships." Interpreters were also an important social support for many students who reported talking with interpreters before or after classes, or during breaks in class sessions.

It was clear from the comments of some of the students interviewed for this study that, without the support and encouragement they received from significant others, they would have left the univeristy during the orientation or the first year.

## Second-, Third-, and Fourth-Year Experiences

As students described their social experiences during second, third, and subsequent years on campus, many changes emerged. Although individual experiences varied, the most significant change students described was the "breakup" of the social networks that had been established during orientation and the first year. The bases for many of these early relationships had been ease of communication (oral), shared backgrounds (mainstreamed), alienation from the larger deaf community, and lack of acceptance by the hearing community. During second and subsequent years, students described relationships based more on common interests, values, hobbies, and activities. Most students also described social networks that had expanded to include more deaf as well as more hearing friends. Factors in-

volved in these changes appeared to be improved communication skills, increased participation in extracurricular activities, and persistence.

#### Communication Skills

One of the major factors in increased social activity with deaf peers was improvement in sign language skills. By the second or third year, more than half the interviewed students had become skilled enough to be able to communicate easily with deaf peers. This opened up new choices for some students. One student who had previously associated more with hearing students talked about a new deaf friend: "We got to know that we were both serious. . . [S]he was interested to talk about [things] outside the classroom like . . . reading books or novels or political or issues. . . . [T]his is the first time I really got close to an ASL deaf student."

Once communication was no longer a significant barrier, some students found their closest relationships within the deaf community. Half of the intervuewed students described their most important relationships (best friend, boyfriend, girlfriend) as being with deaf peers. One student, who described herself as "stuck between two worlds" explained her choice: "So, I jumped into the deaf world—not really the deaf culture, I don't believe in the whole deaf culture—but in the deaf world." However, communication skills per se did not always open up relations with deaf peers, unless there were also shared interests and activities. One student explained how signing did not change his relationships in the deaf community: "I sign all the time now. With those people who are deaf. But do anything on the weekend? Nothing." Nor did increased relationships with deaf peers satisfy all students' needs. One student described his mixed feelings:

So, in a sense, I relied on the hearing impaired people... and the fact that they were there for me. But I also got frustrated being in there because I thought it was keeping me from being in the world that I wanted to be in which is the hearing world.

### **Extracurricular Activities**

One of the changes students described during their second and subsequent years was an increased participation in clubs, organizations, and extracurricular activities. One student described this change, which did not occur until his fourth year: "I had to make a transition. And I was very depressed most of the time and psychologically it was very draining. . . . A part of me is sad and I was in a shell the first three years. Then finally I broke out of the shell."

Some students reported joining deaf clubs and organizations; others expressed preferences for predominantly "hearing" organizations: "They [the hearing fraternity] told me they wanted me in the first place. They didn't care if I was deaf or not. . . . They weren't discriminating and all of that. . . . I liked the brothers."

Other students expressed frustration with communication problems when they tried to join hearing clubs:

[The club] was not hospitable with deaf people. . . . I mean there is no way . . . that deaf people could survive there. And I am hearing impaired. There was one impaired person there who has been a member for a long time but he could hear more than I can. He fit better . . . and he knows what is going on. But I had to ask people the same questions. . . . I did that and I still didn't know what was going on.

Although some students who chose a more "hearing" world reported successful relationships, others emphasized the continual struggle for acceptance. One student talked about feeling like a "secondary" friend. Another described the stress of maintaining relation—ships.

## Persistence

Half of the interviewed students formed very close relationships (best friend, boyfriend, or girlfriend) with hearing students during second and subsequent years. Although the factors that contributed to this change are not entirely clear, interview data suggest that students' persistent efforts were an important part of their success. Some students described continual struggles to maintain relationships with hearing students: "Since I am deaf, I have to put a lot more effort to keep my relationships equal with the hearing people. Oh geez, it is hard."

Other students talked about having to tolerate

communication problems, especially in group settings. Some students discussed continual efforts to educate their hearing friends about deafness. One student emphasized the need to be persistent, to "keep fighting for it."

It is important to note that most students did not describe their social lives as located exclusively in either community. While students clearly demonstrated differences in their orientation to the deaf community and to the hearing community, where students found their closest relationships (in the deaf community or the hearing community) did not necessarily determine where other relationships were found. For example, a student who had a deaf boyfriend or girlfriend might also describe a close friendship with a hearing friend; similarly, a student whose best friend or boyfriend or girlfriend was hearing might also describe friendships with deaf peers. Clearly, a strong motivation to have hearing friends did not exclude the need to have deaf friends, and a strong need for deaf friends did not mean that a student was not also very interested in having hearing friends. Some students described their social lives as "50-50," going "back and forth" between deaf and hearing communities.

Only a few students described their social lives as exclusively centered in the hearing student population. Those who did described certain groups of hearing people with whom they felt most comfortable, such as notetakers and interpreters. Another group of hearing students who appeared to be very accepting of deaf students were international students. Some students described common bonds with the international students, who were more "open":

I think the reason that we got along so well was because they had separated themselves too. They weren't able to speak English very well, and they also knew that I had a disability. I wasn't able to hear very well. And we were able to understand each other.

## Discussion

The perspectives of the interviewed students represent the experiences of a small group of mainstreamed students whose social adjustment to college was complicated by struggles to find acceptance in deaf and hearing communities. The students who participated in this study differed from other mainstreamed students in that they had little if any previous exposure to deaf culture or experience in a deaf community before entering the mainstreamed college environment. This group was further defined by their use of counseling services before this study. However, it is not clear whether this use of services differentiates them in any significant way from students who did not use these services. Some of the students did not begin using the counseling services until after their second year at college, for reasons not necessarily related to the issues identified in this study.

Findings here indicate that for this group, the first few years of college were characterized by loneliness and isolation, caused by experiences of rejection from deaf peers and discrimination from hearing peers. Alienation from the deaf community appeared to be related to lack of signing skills, unfamiliarity with deaf culture, and perceived hostility from deaf peers. Simultaneous experiences of separation from hearing peers appeared to be caused by physical factors inherent in both the academic and residential environment and discrimination from hearing peers, who tended to stereotype deaf students. Support during this time from small groups of similar "oral" deaf students, certain groups of hearing students (e.g., interpreters and notetakers), counselors, and family members was an important factor in student retention.

Changes in students' social lives began during second and third years, as social networks expanded to include more deaf and more hearing friends. Factors appeared to be improved communication with deaf peers, increased participation in extracurricular activities, and persistence. Students' choices of friends and activities varied. Some chose the deaf community, some chose hearing, and some chose to try to participate in both.

Despite the small size and nonrandom nature of the sample, many of the findings of this study confirm the results of previous research and reflect what appears in the literature about deaf culture and deaf communities. The culture shock described by these students was also reported by Foster (1989) and Foster and DeCaro (1990) in comments of deaf students who were not familiar with deaf language or culture. These reactions apparently reflect what is also noted in writings about deaf culture and the deaf community. Padden (1989) describes the difficulties experienced by deaf people raised apart from deaf communities when they first encounter unfamiliar norms and behaviors of deaf peers. Comments from students interviewed for this study emphasize the profoundly discouraging nature of this experience and raise questions about factors that contribute to these feelings of alienation.

The two main factors students stressed-the language barrier and the negative responses of deaf peers—appear to be inevitably connected due to the importance of sign language within the deaf community. Padden (1989) and Kannapell (1989) emphasize that respect for ASL is one of the strongest and most important values of the deaf community. Higgins (1980) explains that failure to sign can be interpreted as an insult to members of the deaf community. When students in this study used speech to communicate instead of sign language, they were acting in direct conflict with the values of deaf culture. Some writers who describe deaf culture refer to antagonisms and divisions such as these within deaf communities. For example, Padden and Humphries (1988) define hard of hearing as "people who walk a thin line between being Deaf people who can be like hearing, and Deaf people who are too much like hearing people" (p. 50).

Previous research (Foster & Brown, 1989) suggested patterns of acceptance and rejection within the deaf population based on communication preferences and previous educational backgrounds. Although further research would be needed to clarify at what points in a student's college career these patterns might occur, these results suggest that such divisions begin very early. After only a few weeks, students appeared to be separated into the kind of subgroups identified in the Foster and Brown study, that is, based on ease of communication and shared backgrounds.

Comments from some students indicate that their relationships with deaf peers did change over time, due in part to overcoming communication barriers. However, comments also imply that the support and friendship of the deaf community became more important when students experienced rejection from the hearing community. This apparently confirms Foster's (1989)

analysis of social alienation and peer identification, which suggests that the combination of both experiences of rejection by hearing and experiences of acceptance by deaf creates the bonds within the deaf community.

These findings also confirm previous research about what factors encourage and discourage integration of deaf and hearing students. Physical constraints identified in the Foster and DeCaro (1990) study, such as the physical separation of classrooms, residence halls, and cafeterias were also identified by students in this study as barriers to interaction. Seating arrangements that separated deaf and hearing students within classrooms, pointed out by students in the Foster and Brown (1989) study as inhibiting factors, were similarly described by students in this study. The prevalence of "stereotyping" of deaf students identified in the Foster and Brown study also emerges in this study as a major cause of discrimination.

One of the interesting findings here, the apparent change over time in relationships, appears to be in part related to changes that occur during college years to hearing students as well. Major stages of psychological and social development coincide with college age years and involve changes in autonomy, identity, selfconcept, and social relationships. Pascarella and Terenzini (1991), in their review of the research indicating these changes, assert that the transition from high school to college is itself "a form of culture shock, involving significant social and psychological relearning in the face of encounters with new ideas, new teachers, and new friends with quite varied beliefs" (58). They describe research on social self-concept suggesting that initially students' self-concepts are less positive as they lose the social identities they had in high school and at home, but then become more positive as time in college increases. One study (Pascarella, 1985b) even suggests that social self-concept starts to become more positive by the end of the sophomore year.

The processes described by some of the students in this study seem to reflect the struggles described by Erikson (1968) in his theories of psychosocial development, especially the stages of Identity versus Identity Diffusion, and Intimacy versus Isolation. Other experiences appear to reflect the theories of student development described by Chickering (1969), which involve developing autonomy, establishing identity, and establishing relationships with those of different backgrounds and values. Similarly, Loevinger's (1976) stages of ego development describe a "conformist" stage, where individual behavior is largely determined by group behaviors and attitudes, which is then followed by a stage of increased awareness and acceptance of individual differences. Although deafness may alter and complicate stages of psychological and social development, many of the struggles experienced by students in this study are apparently in no way unique to a deaf population.

Another important aspect of the social life of mainstreamed students that emerged from this study was the importance to many students of having both deaf and hearing friends. Most of the students who sought and found relationships with hearing peers also enjoyed relationships with deaf peers, and many of the students who found their closest friendships within the deaf community also described important friendships with hearing peers. Kluwin and Stinson (1993) reported this to be true with mainstreamed high school students, that a strong interest in the deaf community did not exclude strong interest in the hearing community, and vice versa.

In summary, this study suggests that social adjustment issues related to acceptance in deaf and hearing communities should concern all those committed not only to the retention of deaf students, but to the quality of their student life. Although the majority of students interviewed eventually found some degree of social satisfaction within the deaf community, the hearing community, or both, their experiences of isolation, loneliness, rejection, and alienation require our attention. Despite significantly helpful programs and supports, social adjustment was complicted and time-consuming. In addition, these students "survived" the difficulties of the first few years. It is not clear how many students like these do not.

This study's findings suggest that those involved in the administration and delivery of postsecondary programs for the deaf should investigate the experiences of deaf students who arrive on campus with little or no knowledge of sign language or deaf culture. In addition to information on attrition rates of these students, this study suggests that information should be collected from students themselves. As evidenced here, students proved to be excellent sources of information not only about their emotions and experiences but also about the factors that helped and hindered them in their struggle to adjust. Students who contributed to this study clearly identified programs and personnel who were significantly helpful. Older students who served as mentors helped ease student transitions. Programming to group students with similar communication preferences in social and/or residential settings was also clearly helpful. Counseling services were also identified as being supportive.

Many students described negative and often hostile responses from deaf peers during their first year on campus. However, it is important to investigate this further by directly interviewing other deaf students who have grown up "deaf." What are their attitudes and reactions to students who do not sign or who are not part of deaf culture? Although reports of this perceived hostility do not continue into second or subsequent years—perhaps because most students attain at least some level of signing ability—it seems to be an important factor in students' initial perceptions of rejection.

The discrimination from hearing students that emerges in students' descriptions of their efforts to find acceptance has been demonstrated in many other studies of both high school and college programs. However, it is interesting to note that this subgroup of students who are "more like hearing than they are like deaf" apparently experiences much of the same discrimination as do their deaf peers. Obviously, communication abilities, while playing a part in deaf-hearing relationships, are not the only factors that keep deaf and hearing students apart. Additional research with the students, focusing on their experiences with hearing peers, might shed more light on these factors.

Appendix Communication Profiles

Pure tone average	Best speechreading score/profile	(1⇒5)
52	90%	(NA)
75	98%	(5)
62	NA	(NA)
98	94%	(5)
68	98%	(5)
90	96%	(5)
97	100%	(5)
63	100%	(5)
100	84%	(5)
NA	100%	(5)

## Notes

- 1. The use of the uppercase "Deaf" is used to refer to a "particular group of deaf people" who share a common language and a culture, as opposed to the lower case "deaf," which refers to "the audiological condition of not hearing" (Padden and Humphries, 1988).
- 2. None of the cafeterias or residence halls on the RIT campus is officially segregated, but the majority of deaf students live in one residence hall complex and eat in the cafeteria closest to the complex.

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