open admissions succeed. But only a few are extremely enthusiastic.

Q. Have many of the students with academic deficiencies suceeded well in math courses?

Steinhart. Some. If you aren't going to be certain that saving a relatively few souls is worthwhile, then you had better make up your mind that it is going to be a flop.

[More than anyone else, **Howard Addelson**, a professor of medieval history, has become identified as an opponent of open admissions at CCNY. According to Addelson, a large percentage of the faculty share his views, but they are afraid to speak out because, "for political reasons it is not a practical position to take." Addelson spends four of his five working days at CUNY's graduate center on 42nd Street.]

Addelson. I was never opposed to open admissions per se—only this particular plan of open admissions. You cannot take people who are unprepared —people who cannot adequately speak and write—expect them to compete with academically well-prepared students, and not expect the level of work in the class to decline. The only alternative is to flunk out large numbers of students, which would be disastrous to their psyches.

[Addelson said he had advocated a plan of open admissions whereby underqualified students would be admitted to a special preparatory program and only allowed into the regular university classes after they had proven themselves capable of college-level work.]

Addelson. City College has been most deeply affected by open admissions, and since the new president took office the decay has been accelerated. I'm not sure that it can be stopped at this point.

A year ago there was a requirement for competence in mathematics (and it was minimal) for entering students. Recently, the faculty debated whether the same level should be a requirement for *graduation*. And finally they voted for no requirement at all. In most fields graded prerequisites are gone, so when you begin to teach a course you have to assume that everyone in the class knows absolutely nothing.

In some of the remedial courses they are granting credit for noncollege work, and this is depriving the student of the education which he is due. I'm not sure that I could any longer recommend to a bright high school student that he come here.

Ethics: Biomedical Advances Confront Pub

Early last month the Senate passed a resolution calling for the establishment of a National Advisory Commission on Health Science and Society. The vote, assuming it is reaffirmed in the House, culminates a quiet battle that Senator Walter Mondale (D–Minn.) has waged for several years for a federal-level body to center the nation's attention on ethical and policy questions raised by new advances in biomedical technology.

The new body would have a 2-year existence, with a budget not exceeding $1 million a year. The commission, directed by a board of 15 professionals from the fields of law, theology, medicine, government, and the humanities, would have as its mandate the study and evaluation of the ethical, social, and legal implications of advances in biomedical research and technology. In addition to holding hearings and seminars, the commission would contract for studies to be conducted by various universities and research centers.

The resolution was unanimously approved by the Senate, despite mild Administration opposition voiced in testimony by Merlin K. DuVal, undersecretary of Health, Education, and Welfare for health and scientific affairs, who said public and private groups already have things under control.

Mondale tried to get the Senate to act on his commission idea in both 1967 and 1968, when heart transplants were the center of medical controversy. But the proposal met strong resistance from members of the biomedical community and got bogged down in committee. During hearings in 1968, for example, Nobel laureate geneticist Arthur Kornberg testified he saw no new ethical or moral problems arising from advances in his field. The only use he could see for such a commission, he said, would be in educating the public on the need for more research money for scientists. Heart transplanter Christiaan Barnard took a similar tack. His remarks betrayed the assumption that attempts by any nonmedical body to influence medical or scientific policies would automatically be repressive.

Times have changed. Heart transplant decisions are child's play compared to the questions raised by advances in other fields, notably genetics, which have transformed yesterday's science fiction into today's foreseeable reality. Amniocentesis has made it possible to detect certain genetic disorders, such as mongolism and Tay-Sachs disease, in utero. In vitro fertilization of human ova has been achieved, and scientists are working on reimplantation of an egg in the womb. The ability to choose the sex of a baby is pending. And cloning—that is, producing an individual genetically identical to the original individual—may be technically possible in the next 50 years (some scientists say in the next decade).

Behavior modification is another field of equally rapid advances and stupendous implications. Both through chemistry and through electrical manipulation of the brain, scientists have found ways to stimulate or control emotion—developments that have the press speculating about "thought control" and the imminence of *1984*.

Technology that indefinitely prolongs the life of the dying has raised questions as to the "right to die" and when to "pull the plug." Linked with this is confusion over the allocation of scarce and expensive resources such as kidney dialysis machines.

The increased sensitivity to individual rights manifested over the past decade has caused a number of old practices to be reevaluated. Sterilization of the hopelessly retarded has become taboo. Methods of obtaining "informed consent" for human experiments are being questioned. And the denial of a life-saving operation to a newborn Mongoloid, a practice taken for granted at many hospitals for years, was the subject of passionate denunciation at a recent symposium on ethics.

Marshak sees the university as an instrument of social engineering, while I believe its main function should be the dispersal of knowledge. The way it is now, open admissions isn't helping anyone—it's programed for failure. Deculturalization is not the same as acculturalization.

[**Oscar Chavarria-Aguilar**, professor of linguistics and dean of the college of arts and sciences, came with Marshak to City College from the University of Rochester.]

Chavarria. One of our biggest problems has been a fairly conservative faculty who are often resistant to change. Some faculty members are hung up on the magical figure of an 80 score in high school, yet at the same time they complain that the high schools aren't doing good jobs. We don't know what the measure of a quality student is. People talk in terms of the quality of the education a student received before he got here—not his potentials as a student.

Of course this place is grubby and we're terribly overextended. The number of students choosing City as their first choice has declined sharply in the past few years, but not all of that is due to open admissions. Some of it is an irrational fear of Harlem and a take-over of the college by Blacks. But the evidence points in the opposite direction; more white kids have benefited from open admissions, even at this campus, than all the minorities put together.

One of our biggest problems has been that remediation in math and English is not, by itself, enough. Some of these kids are unable to even conceptualize a topic in order to write a composition. So we're trying to develop courses to teach the basic skills necessary to undertake a college education.

Q. Why not a short period in which the student is enrolled in nothing but remedial courses?

Chavarria. You'd just be prolonging high school, and that would be psychologically difficult for the student. Anyway, sometime you've got to assess whether or not he can do college-level work. But one of the biggest problems has been where to put the open admissions students. You can't just say to a department chairman, 'Your courses are easy, subcollege-level work.'

Q. What about credit in remedial courses?

Chavarria. This has been a real knockdown, drag-out battle. We finally

'olitícians, as well as Professionals with New Issues

A central issue in recent ethical debates has been abortion. Genetic advances and the rolling back of legal and religious prohibitions has turned the question of abortion into a forum for new attempts to define "life," "the right to life," the conflicting rights of interested parties (in this case, mother and fetus), and even (in the case of a grossly defective fetus), the right to be aborted.

A number of organizations that have recently come into existence are attempting to lay the groundwork, through symposia and interdisciplinary studies, for principles covering these matters.

One is the 2-year-old Committee on the Life Sciences and Social Policy of the National Academy of Sciences, directed by biochemist Leon Kass, which has been conducting studies in four areas: choosing the sex of the unborn, in vitro fertilization, behavior modification, and aging. Another is the Institute of Society, Ethics, and the Life Sciences of Hastings-on-Hudson, N.Y., which was set up in 1969 by Daniel Callahan, a writer and theologian. The Hastings institute has set up interdisciplinary task forces to conduct long-term studies on a similar range of subjects, including population and the teaching of medical ethics.

The Joseph P. Kennedy, Jr., Foundation, hitherto primarily devoted to the study of mental retardation, recently gave Georgetown University $1.3 million for the establishment of the Joseph and Rose Kennedy Institute of Bioethics, which will provide "on the job" training for graduate students in ethics.

The Kennedy institute, according to director Andre Hellegers, will be an unusual experiment in reuniting long-fragmented disciplines. Under one roof will be all the clinical, scientific, psychological, and sociological aspects of reproduction, genetics, and obstetrics.

Many people think that the reunification of long-estranged disciplines will be the only way to ensure a built-in sensitivity on the part of medical practioners and researchers to the implications of their work. Says Hellegers: "Ethics as a cogent force fell apart when it became divorced from other faculties." By the same token, intradisciplinary barriers have allowed the legal profession to come up with laws that are theoretically sound but medically senseless, and have left most members of the clergy ill-equipped to offer advice on anything but religion.

There are still only a handful of universities across the country that offer courses with an interdisciplinary approach to ethics. The only full-fledged program is a 4-year course offered at Columbia University's College of Physicians and Surgeons. But ethics seminars, where available, are increasingly popular with medical students.

It has been more through the activities and symposia sponsored by such interdisciplinary groups as the Hastings institute than through the efforts of organized medicine that public attention has been focused on questions raised by new biomedical technology. These groups see a federal-level commission as a desirable supplement to their endeavors and a way to educate scientists as well as laymen on the need for public discussion.

The American Medical Association, by contrast, has indicated to Mondale's committee that the private sector is giving adequate attention to these matters through such forums as the biennial AMA congresses on ethical issues in medicine, which began in 1966. Nonetheless, the AMA Judicial Council moved in November to arrange for a series of articles on euthanasia, genetic engineering, and so forth to be written for the AMA journal—a possible sign that deep-rooted complacency in some areas is being rapidly replaced by concern over unanticipated and possibly irreversible developments the future may have in store.—CONSTANCE HOLDEN