ward gifted children. Fearful of violating egalitarian notions by giving them special treatment, teachers often load them with extra routine work to keep them busy. Gifted children, bored with regular classwork and uncomfortable in their uniqueness, often turn into behavioral problems. Many, usually boys, become disruptive and uncooperative and end up being labeled hyperactive. Other gifted children adapt by becoming excessively withdrawn and go off into their fantasy worlds while externally trying to create the appearance that they are just like everyone else.

But according to James T. Webb of the School of Professional Psychology at Wright State University, gifted kids "are different by definition. They don't act like other kids by definition. They are more inquisitive, quite active, they often need less sleep, they get into things. Very often they are seen as hyperactive, obnoxious, unruly, strongwilled, mischievous, unmanageable and rebellious."

Webb, who has been named to administer the Dallas Egbert Fund, says that because they are out of step with family and peers, gifted children are more prone to feelings of loneliness and depression. They manifest depression even as very

Gifted children have become the "growth stock of the educational business."

small children—through withdrawal, temper tantrums, destructiveness. Psychiatrist Rima Laibow adds that the gifted child often suffers from isolation and feelings of "invalidation" of internal perceptions. Children need to grow up with a feeling of "rightness" she says—that "what is there is real and right. Yet what they get is continuing invalidation."

Webb says the problems are particularly severe for gifted girls, since females are not expected to be rebellious. Since minorities often come from a culturally impoverished environment, the disparity between them and their peers is even greater. They are often ostracized and even their parents think they're strange.

Parents of the gifted also have problems. Some try to force their little geniuses into a purely cognitive track of development, overlooking the fact that even if they think like adults, they still have the emotional needs of all children. Some parents feel almost as lonely as the children. They find that very few people sympathize with their "problem." They get no help from the schools and suffer from a general unavailability of information.

Research on gifted children has been paltry; indeed the main reference point remains the longitudinal study of high IQ children begun by Louis Terman in the 1930's which, among other findings, contributed to dispelling certain derogatory myths about brilliant people by demonstrating that the intellectually able also tend to be more successful, productive, and physically and mentally healthier than average.

One reason there has been so little research is that looking at exceptional people is by definition an elitist pursuit and runs against the prevailing egalitarian philosophy. Now a new generation of research is in the seminal stage, research which strives to reconcile egalitarianism with elitism by proposing a far broader definition of "gifted." In all past research, IQ tests have been the sole determinant. Now researchers are looking into a variety of measures, subjective as well as objective, of creativity as well as intellect to identify the gifted. This development, says Renzulli, "is about the newest and biggest thing in the field since Terman's work." There still is an intellectual division in the field, which Renzulli characterizes as being represented by the "absolutists" on one hand, who believe giftedness is a fixed quality "you either have it or you don't" and those, on the other hand, who see giftedness as a more fluid, plastic quality often dependent on particular circumstances.

The federal government definitely espouses the latter concept. According to Lyon of the Office of Gifted and Talented, IQ tests, which he regards as culturally biased, have become of marginal use in detecting giftedness. Indeed, he maintains that if definition of giftedness were confined to the top 5 percent of IQ scorers (130 and above), 70 percent of what his office defines as "gifted and creative" would be left out. His office has evolved a five-dimensional definition of giftedness: high IQ; academic aptitude; creativity as evidenced in "divergent thinking;" ability in the performing or visual arts; and "leadership." This last category comprises what Lyon calls the "psychosocially" Although gifted. some states are adopting this taxonomy, not everyone agrees with it. At the Uni-

(Continued on page 882)

Advising Reagan on Science Policy

During the campaign, Ronald Reagan said little about how he would direct the government's science and technology policy, and he mentioned no candidates for the post of White House science adviser. But now that Reagan has won the presidency, he will find it easy to get advice. On the first weekend after the election, a group of senior science gurus met in Washington, D.C., to draft some preliminary recommendations for the President-elect and possibly suggest nominees for key science posts.

The 15-member task force on federal science and technology policy is being cochaired by Simon Ramo, director and the "R" of TRW Inc., and by Arthur Bueche, senior vice president for technology at General Electric Co. The group has held a couple of informal meetings in the last month, and plans to begin working in earnest on 8 November.

According to Ramo, the first assignment is to come up with a paper by the second week of November addressing three concerns of Reagan's staff. First, the administration-in-waiting wants to know what the scientific community considers to be the most urgent actions needing the President's attention. Second, the group has been asked to suggest ideas for the inaugural and state of the Union addresses, particularly legislative ideas. Third, the task force will be asked to suggest candidates for appointive offices in technical agencies throughout the government.

One of Ramo's wishes, which may or may not find its way into the group's paper, is that the President include scientists more intimately than did Carter on decisions that affect national security, energy, economic competition with other nations, innovation, and unemployment. Ramo thinks the role of the science adviser was narrowed and weakened in the Carter White House. He would prefer a science adviser who could initiate programs, attend meetings of the economic advisers and the National Security Council, and speak in a voice that would be heard above the background clatter of Washington politics. Ramo would also like to see the Presi-

dent's Science Advisory Committee revived, for he thinks the President would find it valuable to have some fearless elders on hand, people with great practical experience but no political or bureaucratic allegiances. Ramo did not know how his colleagues would receive these suggestions; he has not met with them yet.



Simon Ramo: The "R" of TRW

In addition to Ramo and Bueche, the task force includes Harold Agnew, president of the General Atomic Company and former director of the Los Alamos Scientific Laboratory; William Baker, former chairman of the board of Bell Telephone Laboratories: Edward David, president of Exxon Research and Engineering: Franklin Murphy, chairman of the board of the Times Mirror Company; William Nirenberg, director of the Scripps Institute of Oceanography; Lewis Sarett, senior vice president for science and technology at Merck and Company; General Bernard Schriever, former chief of the Air Force Systems Command: Frederick Seitz, president emeritus of Rockefeller University and former president of the National Academy of Sciences (NAS); H. Guyford Stever, former science adviser and National Science Foundation director under Presidents Nixon and Ford; Wilson Talley, professor of applied sciences at the University of California at Davis: Edward Teller, senior research fellow at the Hoover Institution: Teddy Walkowicz, president of the National Aviation and Technology Corporation; and Albert Wheelon, a vice president of Hughes Aircraft and consultant to the NAS and the National Security Council.

It is hard to guess how much influence advisers like these will have during the transition. It is plain, however, that the outside experts need not fear they will be given too heavy a burden of responsibility, for they will have a lot of company. At last count, the President-elect had gathered together 23 domestic advisory task forces and 25 foreign or defense groups, sheltering a total of 329 elder statespersons. "You name it," a Reagan aide said last week, "and we have a task force on it."

Congress Begins the Republican Shuffle

The Reagan landslide shook the House leadership and rattled the Senate to its foundations, striking many familiar names from Congress's roster. There will be changes among the committees, but at first glance no major changes seem imminent for science policy. The new chairmen will surely bring new pet projects with them, however.

"It was a bloody spectacle," said a Democrat on the staff of the House Committee on Science and Technology. "We lost three subcommittee chairmen." Indeed, the voters turned out Mike McCormack (D-Wash.), chairman of the energy research and production subcommittee, a backer of nuclear and fusion power; James Lloyd (D-Calif.), chairman of the investigations and oversight subcommittee; and Jerome Ambro (D-N.Y.), chairman of the natural resources and environment subcommittee.

Rumor has it that the committee may lose two more subcommittee chairmen when the leadership begins assigning members to new posts. Richard Ottinger (D-N.Y.), chairman of the subcommittee on energy development and applications and a friend of solar power, may want to take over a subcommittee on the Commerce Committee. Thomas Harkin (D-lowa), chairman of the transportation, aviacommunication and committee, may want to do the same on Agriculture. Since House rules permit only one such post per member, these two may give up their chairmanships on the Science Committee, leaving only two out of seven chairmanships unchanged. These are held by George Brown (D-Calif.), who heads the subcommittee on science. research, and technology, and by Don Fugua (D-Fla.), who chairs the full committee and the subcommittee on space science.

Similar but smaller shifts are expected on the House Commerce Committee. The chairman, Harley Staggers (D-W. Va.), has retired, leaving his place open to the next ranked Democrat, John Dingell of Michigan. If Dingell takes it, as seems likely, he may decide to give up his own chairmanship of the subcommittee on energy and power. New chairmen will be needed for the oversight and communications subcommittees to replace defeated incumbents Bob Eckhardt of Texas and Lionel Van Deerlin of California.

Because the surviving House Democrats will have many assignments to choose from, it will take time-perhaps 3 months, one aide guessed-to work out the new lines of authority. The puzzle is far more complex in the Senate, where the Republicans hold the majority (by 53 to 46) for the first time in a quarter of a century. This permits them to run the Senate's machinery and chair the committees.

In all, 12 Democrats have gone, some voluntarily. Edmund Muskie of Maine, a key supporter of environmental legislation, leaves office as Secretary of State in the defeated Administration. Adlai Stevenson III of Illinois, chairman of the Commerce subcommittee on science, technology, and space, will retire after this term. Abraham Ribicoff of Connecticut. chairman of the Government Operations Committee, also retires.

It is too early to anticipate what the Republican Senate will look like. But an aide to Senator Stevenson says that despite the Democrats' misery, the outlook is "far from bleak" for science. Stevenson may be replaced on his science subcommittee by ex-astronaut Harrison Schmitt (R-N.M.), who favors well-financed space programs. And William Proxmire (D-Wis.), the harrier of the National Science Foundation (NSF), may be replaced by Charles Mathias (R-Md.), considered a generous friend by NSF. There are no obvious candidates waiting to replace Edward Kennedy (D-Mass.) as chairman of the Senate subcommittee on health and scientific research.

Eliot Marshall ...