

DOCUMENT RESUME

ED 317 376

SE 051 243

TITLE Task Force on Women, Minorities and the Handicapped in Science and Technology: Executive Session. Report of the Proceedings (Atlanta, Georgia, March 3, 1988).

INSTITUTION Task Force on Women, Minorities, and the Handicapped in Science and Technology, Washington, DC.

PUB DATE 88

NOTE 132p.; For the final report, "Changing America: The New Face of Science and Engineering," see SE 051 294.

PUB TYPE Legal/Legislative/Regulatory Materials (090) -- Reports - Descriptive (141)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS Access to Education; College Science; *Disabilities; Elementary School Science; Elementary Secondary Education; *Engineering Education; Equal Education; *Females; Government Role; Higher Education; *Minority Groups; Science and Society; *Science Education; Secondary School Science; Technological Advancement; Technology

IDENTIFIERS *Task Force on Women Minorities Handicapped

ABSTRACT

The Task Force on Women, Minorities, and the Handicapped in Science and Technology was established by the U.S. Congress in Public Law 99-383 with the purpose of developing a long-range plan for broadening participation in science and engineering. Public hearings were held in Albuquerque (New Mexico), Atlanta (Georgia), Baltimore (Maryland), Boston (Massachusetts), Chicago (Illinois), Kansas City (Missouri), and Los Angeles (California) between Fall 1987 and Spring 1988. The final report of the task force was produced in December, 1989. This document is the verbatim transcript of the meeting. Co-Chairs Dr. Ann Reynolds and Mr. Jaime Oaxaca presided over the meeting. The document includes: (1) introductory remarks; (2) a report of the Subcommittee on Employment; (3) a report of the Subcommittee on Social Aspects; (4) a report of the Subcommittee on Research Support; (5) a report of the Subcommittee on Higher Education; (6) a report of the Subcommittee on Pre-College Education; and (7) preparations for hearings to be held in Boston. (CW)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

**TASK FORCE ON WOMEN, MINORITIES, AND
THE HANDICAPPED IN SCIENCE AND TECHNOLOGY**

EXECUTIVE SESSION

REPORT OF PROCEEDINGS of a meeting of the Subcommittee Task Force on Women, Minorities and the Handicapped in Science and Technology held on the 3rd day of March, 1988, at the Radisson Hotel, Atlanta, Georgia, and presided over by MR. JAIME OAXACA and DR. ANN REYNOLDS, CO-CHAIRS.

PRESENT:

Co-Chairs

Mr. Jaime Oaxaca, Corporate Vice President
Northrop Corporation
Kansas City, MO

Dr. Ann Reynolds, Chancellor
California State University System
Long Beach, CA

Members Present

Mr. James A. Biaglow, Project Engineer
NASA Lewis Research Center
Cleveland, OH

Ms. Ferial Bishop, Chief
Registration Support and Emergency Response
Branch, Office of Pesticide Programs
Environmental Protection Agency
Washington, DC

Dr. Mary E. Carter, Associate Administrator
Agricultural Research Service, USDA
Washington, DC

Dr. Alan Clive, Equal Employment Manager
Office of Personnel and Equal Opportunity
Federal Emergency Management Agency
Washington, DC

Dr. Joseph Danek, Deputy Director for Research
and Improvement
National Science Foundation
Washington, DC

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

Sue Kemnitzer

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

* This document has been reproduced as
received from the person or organization
originating it.
 Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
DERR position or policy.

ED317376

ERIC 15075
SE 051 243

BEST COPY AVAILABLE

Mr. Herbert Fernandez
AFWL/NTS Kirtland AFB
Albuquerque, NM

Ms. Stella Guerra, Director of Equal Opportunity
Office of the Secretary of the Air Force
The Pentagon
Washington, DC

Ms. Penelope M. Hanshaw, Deputy Chief Geologist
for Scientific Personnel
Department of the Interior
Reston, VA

Mr. Norbert Hill, Executive Director
American Indian Science & Engineering Society
Boulder, CO

Mr. James Jeffers, Chairman
Board of Trustees
Community College of Baltimore
Baltimore, MD

Dr. Harriett G. Jenkins, Assistant Administrator
Equal Opportunity Programs
National Aeronautics and Space Administration
Washington, DC

Ms. Brenda Kay, Staff Assistant to the
Assistant Secretary for Water and Science
Department of the Interior
Washington, DC

Dr. Shirley Malcom, Program Head
Office of Opportunities in Science
American Association for the Advancement of Science
Washington, DC

Mr. Frank B. McDonald, Associate Director
NASA, Goddard Space Flight Center
Greenbelt, MD

Ms. Stephanie Lee-Miller, Assistant Secretary
for Public Affairs
U.S. Department of Health and Human Services
Washington, DC

Mr. Raul Ernie Reyes, Director
NASA Quality Assurance
Kennedy Space Center, FL

Dr. Miguel Rios, Jr., President
Orion International Technologies, Inc.
Albuquerque, NM

Dr. Lawrence Scadden, Director Rehabilitation
Engineering Center
Electronics Industries Foundation
Washington, DC

Mr. Nathaniel Scurry, Director of the Office
of Civil Rights, EPA
Washington, DC

Mr. Curtis J. Smith, Associate Director
for Career Entry
Office of Personnel Management
Washington, DC

Ms. Sonia Mejia-Walgreen
Mansfield, MA

Ms. Vera (Nina) Winkler, Deputy Director
Planning & Evaluation Service
U.S. Department of Education
Washington, DC

Reported by: ABL Associates
2254 Hall Place, N.W.
Washington, DC 20007

Thomas O'Rourke, Verbatim Reporter
(202) 337-4609

INDEX

CLOSED SESSION

PAGE

I.	Mr. Oaxaca - Opens Meeting	5
II.	Ms. Guerra - Employment Subcommittee	8
III.	Dr. Clive - Social Aspects Subcommittee	32
IV.	Ms. Kemnitzer - Research Support Subcommittee	44
V.	Dr. Danek - Higher Education Subcommittee	60
VI.	Dr. Malcom - Pre-College Education Subcommittee	78
VII.	Ms. Kemnitzer - Boston Meeting	101

MR. OAXACA: Good morning. This morning's meeting is a very important meeting. We hope you had time to read the first cut of the report. We will be getting into that, scheduled for 10 a.m., and at that time, we will kind of set some of the ground rules for the very important work ahead that involves being in good shape for the Boston meeting, to have those substantive things in much better shape for what the interim report will say.

Let me say that on that report we have to work very diligently, all of us, to get our comments, our written comments, into Sue Kemnitzer, and we will be setting drop-dead dates for getting the inputs in there.

There are two areas that are woefully weak, and it appears that the hearings have not brought to light the issues to a degree that we must address them in our report for it to have real meaning, and that is in the area of the handicapped and in the area of the Native Americans.

And so we are going to take the bull by the horns and assign the area of the handicapped to the very competent people on the Task Force, and the area of the Native Americans to Norbert Hill, who has suggested that the name of the Kansas City Chiefs be named the Kansas City Causasians, and the Pittsburgh Bloods.

So, the document that Deborah put together, and I think right at the very beginning, right at the onset, we owe Deborah a debt of gratitude for this fantastic first cut, and

we should all tip our--what was that in the old comic strips?-- a tip of the Hatlow hat to Deborah for this thing.

We surely want to address the elements of what we view as the vision for the future in America, the definition of the problem, the recommendations, and the substantive implementation plan that includes all the seven elements of what has to occur--the what, where, why, when, how much, who-- all the seven things that we all know about.

So, it is going to be a very intense activity from here on out, with a lot of redoes and redoes.

So with that as the format for this morning, we would like to start off with the reports from the subcommittees, and we are going to go first with Estella Guerra because her T-39 is warming up on the runway and she has to cut out and go tend to matters of national security and boondoggles.

MR. REYES: Jaime.

MR. OAXACA: Yes, sir.

MR. REYES: On the comments to the report, rather than everybody going helter skelter and sending it to Sue, why don't we ask that the comments go to the subcommittee folks. That way you have more channelization--you don't want that?

MR. OAXACA: No.

DR. REYNOLDS: We got time problems.

MR. REYES: Well, you got coordination problems if you don't do that.

MR. OAXACA: Well, we're going to--it's going to be

coordinated by all the folks at--Sue will be doing that.

MS. KEMNITZER: I will take on the responsibility, and make sure you get the comments.

MR. OAXACA: Yeah, but we are going to get into that as a whole topic of discussion, because there is a lot of work to be done on this thing, how we present it. We are going to have to be very careful that we present this thing so that people can view this as a report with credibility with realistic implementation plans attached to it, with substantive comparisons as to what we view our nation to have to be in the year 2000 and how do you get there.

And something that can't be used to be ridiculed or discarded or a political football, or whatever people do when they want to discredit something that is not to their thinking.

And so it is going to take the combined resources of all this Task Force and the in-kind support that Sue Kemnitzer with her infinite ability to raise money can bring to the thing.

And then all the peripheral things that we have to do to put an implementation plan that raises the awareness in our nation through all the elements that you can deal with, be it the media, corporate America, the school boards, the state and local governments, and, of course, the federal government, and still not get into the situation--I see this morning on CNN that some bill on civil rights, because it talked quotas, as quotas, is now being viewed as something that the President

will veto.

So I think we have to look very carefully as to how we address specific numbers, but we must address it as an issue that says--here is the reality of our population make up and our demographics in the year such-and-such, and you will need this many science and technology people to be competitive as a nation against the people that you have to compete, which are probably Japan and the European Common Market and the Soviets, the Eastern Bloc countries, and therefore it cannot be interpreted to mean that just because you put numbers that we are going into the quota situation, which will cause a big political fuss, but is indeed something that is mandatory for the nation to survive and to flourish as the number one nation again.

So, those are the issues for the report, and we will start that at 10 a.m. Estella, you're on for your committee.

MS. GUERRA: Is this on?--yes. Let me just inform you, Jaime, that technology has now made the T-39 obsolete and we now have a C-21, which is a little more sophisticated.

MR. OAXACA: A little more tacky, too.

MS. GUERRA: But let me get on with the report on the Employment Subcommittee. We have not had a meeting since October, and then we worked on the--what was to be included, based on the recommendations that were made by the committee--or by the Task Force--when we were in California.

And there were several areas that we needed to expand

on, and out of these areas, there were several reports that were to come in to be included in our draft, and there's two that I regret to say, to inform that they have not been expanded on.

One of them is the compliance from the agencies that do contracting, because it was decided at that time in California that we would also include statistics on compliance, and this of course includes some of the private industry, the defense industry, or people that do government work, that also--and we're not talking about statistics, but merely what is being done in the private sector, or agencies, or rather industries, the companies that do government work for the area of minorities and women.

The other area is--and we do have the report now that the Department of Labor has put out, but it arrived in a very, comprehensive, very voluminous type of publication that needs to be gone through and taken out, and I don't know if anything was sent to you, Deborah, but it--I got it a couple of days ago from Labor.

The other one is on the area of employment that we needed to include or address the problems with the employment of math and science teachers. And this is some information that we have gathered from the Department of Education, but again needs to be summarized into some type of narrative.

I don't have anything else to add, other than we are looking through the report and particularly the area of

employment. I think there is a lot of work that needs to be done. We did add some language on the Civil Service reform and even that, I think, needs to be, in discussing with some of my colleagues from the subcommittee that are here, whether--how much do we include on the Civil Service reform?

Will this really come to pass or are we getting ahead of ourselves addressing laws that nothing might happen this year or next year because they are very politicized issues?

So we need to have further discussion on that.

Also, the area of handicapped, there is very limited information that we have been able to locate. We have discussed getting some of our members of the Task Force that might--instead of just limiting it to the people that are in the employment subcommittee, regroup in and including people that might bring expertise from other areas, or because of their experiences.

So we will be addressing that in a different manner.

One of the things that I would like to add for all of us to consider is when we address the recommendations at the end and in our final report, I think it would be very wise if we would also include--because if we get to a narrative and Ferial Bishop prepared a couple of the exemplary programs that we could list, and I'm sure there will be a lot more as we finish with our hearings and finalize the report.

But instead of making them very broad, if we make them more concise, but at the end include an appendix that

includes addresses, points of contacts for anybody that reads the report that would like further information on a particular program.

This is all I have to add, unless I have any questions that I can address at this point. If not, the only--the final word is that we still have a lot of work to do. I think Debbie has done--or Deborah has done an excellent job with what she--the first draft of our report and will continue to work to polish it up and include the information that needs to be in it, which some of it is sitting in my "in" box, in volumes.

Dr. Haines was also collecting some data on some programs. Is she here?

VOICE: She's not here apparently.

MR. OAXACA: Thank you very much, Estella. Have a safe trip and we all sleep better knowing you're defending our country.

MS. GUERRA: Taking care [INAUDIBLE].

MR. OAXACA: You Air Force folks.

DEBORAH: Can I ask, what form is this information on the compliance in?

MS. GUERRA: It's in a booklet that was probably sent out the companies that--and it talks about, it's not really what needs to be done, but it is more like a regulations for compliance, and Shirley Peterson's office has been working on this, and I have asked her if she could--there is additional

information that we needed to include in this, because it is more of a something that is sent out to contractors [A bell is ringing].

DR. REYNOLDS: Fire alarm.

MS. GUERRA: And it's a booklet, a booklet that's mailed out.

MR. OAXACA: I think it's a fire station, though.

DEBORAH: But it wasn't compiled for this exercise?

MR. OAXACA: There is a fire station right underneath my room.

MS. GUERRA: No, not for this. It's something that's [INAUDIBLE]

DR. REYNOLDS: Ma'am, is that the fire alarm? Do we need to leave?

VOICE: Sometimes it just goes off. [laughter]

MR. OAXACA: Most of the time it's not a fire.

[laughter]

[Several inaudible comments]

MR. OAXACA: The censor recognized that we're dealing with a hot subject.

DR. JENKINS: May I ask a question, please?

MR. OAXACA: Yes, ma'am.

DR. JENKINS: Is this the time to ask kind of what is the bottom line [bell starts ringing again] that we might...

VOICE: Can you speak up?

DR. JENKINS: OK, all right.

[INAUDIBLE COMMENT]

DR. JENKINS: You're sure? Because it makes a difference about what people go home and do or work on.

MS. BISHOP: Harriett, I didn't hear the first part. I asked if you would go to the mike.

DR. JENKINS: Sorry, OK, I'm sorry. I thought you were telling me to get out because there was a [INAUDIBLE] [laughter].

MS. BISHOP: No, I'm waay down here.

DR. JENKINS: All right. Let me give you an example of why I was raising the question and then you can tell me whether I should delay it until later on this morning.

There are two things in the report that deal with employment, deal with flexibility of bringing people on board essentially, and the Civil Service Simplification Act.

And I guess I am having some discomfort if that is all we are going to recommend about the employment of minorities and women.

MR. OAXACA: Harriett, let me--you know, maybe this will clarify this a little bit. From 9 to 10, we have a session where we have each of the heads of the subcommittees give their status report.

At 10 a.m. we get into the report.

DR. JENKINS: OK, but when you talk about the status of the report, we are going to go out and do more things. You see, we can wait and do it at 10, but we will have to return to

this topic.

MR. OAXACA: Sure, I think we...

DR. JENKINS: Because you brought up the issue of federal contract compliance. You had sent us a report. It has a whole series of recommendations that have been developed by the staff of the Congress, and so I don't know why we are not looking at that as well as whatever the Department of Labor is putting out.

Those were the issues...

MR. OAXACA: I'm sure we will. If it's OK with everyone, why don't we do it at 10 o'clock, or you know, if the reports of the subcommittees doing, and we'll just start off, because it's going to be that sort of thing.

We surely agree with you, Dr. Jenkins, that we have got to discuss all these things. But we'll see, we'll just do it when we start doing it. Yes, sir.

DR. DANEK: Yes, before Stella leaves, I would like to ask you whether you would serve as the DOD representative in the collection of some of this survey data that we're collecting.

Ann Berman was doing it, and I'm not sure that Ann will be in a position to continue, but we do need a contact on it because I need some help on completing the survey for DOD.

MS. GUERRA: Well, call me at my office.

DR. DANEK: Would you be willing to serve as a coordinator?

MS. GUERRA: I will be glad to.

DR. DANEK: Good.

MS. GUERRA: I work with Clara [INAUDIBLE].

DR. DANEK: Good, because we have got some real gaps there.

MS. WINKLER: A lot of forms to fill out, boy.

DR. DANEK: Well, we have to come back to you also.

MS. WINKLER: I know the staff members are going to beat me up.

DR. DANEK: That's all right. You're tough, Nina.

MS. BISHOP: Mr. Chair, I would like to offer an-- suggest that an exception to our agenda here.

In the interest of the fact that Stella is going to be leaving now, and the other subcommittees are going to stay here through the 10 o'clock session, it seems to me that any comments regarding employment and the further writeup might be better expressed now, while the Chair is here, and then revert back to our original schedule.

MR. OAXACA: Fine, I have no objection to that. You got 13 minutes, right? Before you've got to leave? Let's utilize those 13 minutes.

MS. BISHOP: So, therefore, I think we probably ought to go back to what Harriett was talking about.

MR. OAXACA: OK, we'll do that.

MS. GUERRA: In answer to her question, no, it will not include just retention and recruitment. There is a lot of

other information that we had even in the original draft that is not expanded on, but I understand that it will be in finals, and this is why we are taking these reports back to comment on them.

But, no, I think the employment area, because we see employment as ultimately what everything else leads to--the employment of people, the supply and demand in the nation.

So I should hope not, that it would not just be, Harriett, retention and recruitment. A lot of the things that need to be done are in the recommendation areas, too, and I think this is the area where we will really be able to make an impact.

DEBORAH: Well, I think that Harriett has a point in that the document that I work from, which was this one.

MS. GUERRA: On the compliance?

DEBORAH: No, we got nothing on compliance.

MS. GUERRA: Oh, right, um hum, OK.

DEBORAH: Only, in fact--I mean what I drew before that chapter X, only in fact addressed systemic changes, changes in public law, which was the Civil Service Simplification Act, pay banding, pay for performance, simplified classification, special pay rates, recruitment, retention, public support.

And under "public support," there were some of these things which I did put under other categories in chapter 10. You recommended Adopt-A-School, early sciences program...

MS. GUERRA: Right.

DEBORAH: And I rearranged those and put those under education or some other place--not under employment specifically.

So, in fact, there was nothing in here about any intention to deal with the contract compliance.

MS. GUERRA: Well, no because that is still missing, and I guess I didn't make make myself clear that there's two areas specifically that we discussed that we needed to add to this report, and one is on the compliance of federal contractors and what they are doing for minorities and women, or how they are helping the problem or how they are meeting their needs.

And the other one is in the area of teachers, the employment of math and science teachers in the nation, which is a critical problem.

So that is still to be added onto this report, to this draft.

MS. KEMNITZER: May I add one point about other information to be added. The OPM personnel have very generously been working with Betty and myself to come up with more complete data on scientists and engineers, federal-wide.

And we don't--we have a sort of preliminary snapshot. We expect that next week or so we will have the complete story on that. There will be a wealth of information there, which we'll have to analyze some, and may tell us some different

stories than we presently know.

For example, I will just toss out one idea for you to begin thinking about. It appears to be the case that employment of handicapped scientists and engineers have gone down in the federal government over the past 10 years.

I'm not sure why. We will try to figure that out, but that is a big point that we will have to discuss in depth in the report, I believe.

There are also some things that are coming on salary and on age distribution, and we will have some interesting points to make when we have that data together.

MR. FERNANDEZ: Mr. Chair, going back to Harriett's point, I think that what she was suggesting, you as the chair of the employment committee sort of give us your indication of what the bottom line is on employment.

And just to refresh your memory, if I recall correctly, at one of the previous meetings on employment, we sort of suggested or agreed that we would break it down into three major components--what can be done within the federal laws and the federal bureaucracy to improve the employment.

Number two, the laws again that apply, like the contract compliance against private sector.

And then secondly, all the other things that relate to the relationship of education, preparation for employment.

So taking those three categories--and I guess this could apply to the other subcommittees--is that the chairs of

the subcommittees glean those bottom lines and make sure that the eight recommendations that are now appearing on the report are sort of shredded out against those eight general areas.

Because if we don't do that, I'm afraid we are going to be here for the next two years trying to decide what's important and what's not.

But if you in the subcommittees decide that, by category, then we can discuss it a little more in detail.

MR. OAXACA: Ms. Winkler.

MS. WINKLER: You--is this thing on?--you mentioned something in the beginning that I think we ought to pursue here just a little bit, and that was the issue of specific legislation versus general principles.

I have thought a lot about this since our last meeting and just wanted to raise it.

I don't object to the Civil Service Simplification Act, per se, at all, nor does I think anyone in my department. Even so, I think that there's two things that could happen when you advocate a specific piece of legislation as opposed to the principles which attracted you to that legislation in the first place.

One is that the thing may get passed. Therefore, one of your few places you have to put a recommendation in becomes out of date, and it may get passed in a form that isn't what you wanted anyway and doesn't satisfy the need that you were trying to satisfy.

The other problem is that--which was alluded to earlier--is that names of particular pieces of legislation become labels by which you identify is this a Republican or a Democratic board or commission?

I think we have tried very carefully not to be either, particularly, and to be mostly concerned about the issue that we have been pulled together to deal with.

And so, therefore, I would recommend that each of the subcommittees, including employment, when they are looking at legislation, not to cite the legislation, but to state fairly specifically the principles that need to be put into place.

So that if this law doesn't make it or gets into a big war, we still haven't lost our point.

Or if it does make it and the point hasn't been met, then we need to...

DR. MALCOM: Then you end up dating the document.

MS. WINKLER: Yeah, you do.

MR. SMITH: Speaking for OPM, that would be fine with me. It is the principles that are important.

MR. OAXACA: Yeah, I think that's very important. I think that's a very good idea.

MR. SMITH: We talk about the legislation [INAUDIBLE], the code for us for those principles.

DR. JENKINS: May I ask a question, though? Do we want to infer that it is the simplification of the Civil Service process that is keeping minorities and women and

handicapped out of the federal service?

MR. SMITH: No, what I would like to infer from that, why it seems important to me, is that, as the labor market becomes more and more competitive, our archaic and cumbersome systems hurt us more and more.

So if the federal government wants to be able to compete for these people, we have got to be free. Our managers have got to be free to deal with them directly, rather than what's currently very centralized.

The other part of that, and most important, is pay flexibility. Our pay levels are below industry standards, which hurts us in the competition.

One of the important principles is that managers be free to offer higher rates of pay to these folks when they are recruiting them. I think those are the things we need to stay with.

MR. OAXACA: Shirley.

DR. MALCOM: I think that--I want to pick up two things. One is one that came from the OPM representative. The other is the one that came from Dr. Jenkins, and that is the whole issue of, is this the message that we want to leave?

Now I used to--when I was in the federal government, I was with the, with an agency that had unbelievable flexibility in terms of its hiring. It could go and pluck just about anybody out that it needed to in order to do these things.

It was totally excepted from doing any of these, jumping through any of these hoops.

?: Shh--we don't want OPM to know.

DR. MALCOM: We don't want OPM to know? But no, I mean, you know, but it did not, per se...

MR. OAXACA: What country were you dealing with?

DR. MALCOM: Sweden. But it in fact...

?: The District of Columbia. [laughter]

MR. OAXACA: The People's Republic of the District of Columbia.

DR. MALCOM: But, in fact, it didn't get us to where we needed to go in terms of women, minorities, and handicapped. And they are still struggling with that particular issue.

Flexibility in and of itself is not going to get you where you need to go. You have to have accountability as well, and I think that that is not in there, and I don't want to leave the impression that if we give people the ability to go and hire and things like this that it is going to get us where we want to go without the accountability and without some sense that this is in fact something desirable, and that we want to do it, and that it is--that these are values that everybody shares that these are things that ought to be done.

I think that the other piece is that we heard the whole question, Dr. Mason yesterday talking about the salaries and the competitiveness of salaries.

On the other hand, we see a particular section--what

was it, the IPA recommendations--the IPA legislation. We have seen restrictions on that--tightening of those restrictions, rather than loosening, in terms of the caps, and things like this, on pay in the NSF system of being able to use rotaters and people from universities who are making much more money.

And essentially what you are doing is you are restricting yourselves to the more mediocre people, rather than the stars.

I mean, if you want--that's not to say you can attract the stars, anyway, but it is a matter that you are limiting your ability tremendously.

So that on the one hand, we're saying this, and on the other hand, we have actions that go in the other direction, and I think that we need to put something in there that can address what we are doing to ourselves by doing that.

We are forcing Bob Gallo out of the federal system. We are doing--I mean there are a lot of these kinds of examples.

And I think that the other piece is that the responsibility, the responsibility that goes with the employment picture on the one hand, to grow our own, must--you know, if you take from that pipeline, you have the obligation to put back into pipeline, and I think that that needs--those things need to be pushed.

They need to be juxtaposed in a way that they are not right now.

DR. DANEK: I would like to comment on it, because I am seeing some of that come out of the federal survey of programs, and I think that is a very important point.

There are too many people in the agencies who, when asked--what is your agency doing to enhance participation of minorities, women, and disabled in science and engineering?--are giving the EEO programs.

They are saying, we have EEO, we have affirmative action, etc., etc., etc.

What's happening is that is at the very, very end of the pipeline. It's too late to do anything. I think we need to characterize what we mean by recruitment to be much more expansive than simply hiring those people who come out of the pipeline.

Betty Vetter shows that there 14 engineering, black engineering Ph.D.s. Not every federal agency is going to be able to fulfill their quota, so to speak. OK?

DR. MALCOM: Cut them up in more pieces.

DR. DANEK: That's--but they can, but they can serve an enormous function by reaching down and having each agency begin to take responsibility for moving people into the pipeline in agency areas.

DR. MALCOM: [INAUDIBLE] How many of them came out of GEM?

DR. DANEK: Five, five out of the 14 came out of the GEM program.

DR. MALCOM: And yet Howard fights to get federal agencies.

DR. DANEK: Yet GEM fights for federal agencies.

DR. MALCOM: To participate in the GEM program.

MS. KEMNITZER: Here you have a program that works, that could reach more people if it had more bucks, and there is no explanation for why we don't do it.

DR. DANEK: But I think the point that I would like to make to Stella is that I think that there will be coming out of this survey some exemplary recruitment activities that we can use as examples.

But again, we have got a mixed bag here and people interpreting these federal programs and we're getting data on certain programs and recruitment activities.

And it's hard to sort some of this out, but I think there's some messages there.

MR. OAXACA: Deborah.

MS. BISHOP: If I may, I would just like to--I sit on the committee with Stella, and I think one of the things that she mentions about having to do more work is the realization and the recognition that I am aware of, that there are different agencies that are in different states of progressiveness versus--regressiveness.

SEVERAL VOICES: Yes, regressiveness, very much so, right.

MS. BISHOP: And I am looking at my own agency as I

read a lot of these recommendations and I am saying, we do this.

But then I said, but there is still a problem. And I can go down here and tell you, oh, yeah, we do this, we do that, it's ongoing. But I know that there is still a problem.

So what I'm saying is that as we address our recommendations, we have got to wear two hats. We have got to think about the guy who--the agency that is so backwards and so rigid and compare that to another agency that is very progressive, and then you still will see that there is still a lot more work to be done, and you have recommendations to address those two situations.

And in the case of a progressive agency, they need to do more. They are already recruiting, for example. But where are the people in the policy making positions? There are none. There are none.

DR. JENKINS: And you are touching on what's concerning me. I guess I looked for a line that says we're supposed to increase the numbers of minorities and women in science and engineering kinds of positions within the federal government.

We don't quite come out and say that, and I don't know why not.

Another issue is getting them into significant positions, line management positions, policy making positions, and senior level positions.

MS. BISHOP: That's what I'm concerned about.

DR. JENKINS: And mid-level positions. I think we need to be as explicit as possible. Otherwise, the head of an agency won't know what it is we are recommending.

Let me just tell you. I see a very creative recommendation on page 69, where it says, "Emphasis should be placed on recruiting people with high potential and providing internal development programs. Hire new employees and train them for scientific and technical jobs and promote promising employees already on the roles."

Now that is quite innovative, and I wondered, do we mean what we are saying there?

DEBORAH: could I just make a statement about this which I have grappled with a lot, and some of you have already heard me say this. Please forgive me for repeating myself.

I understand because of our many discussions I and Sue have had with members of the Task Force and OPM and Stella and others the drive that is behind the movement in the reports to make the federal government competitive in a situation of upcoming shortages.

And we heard some of that from Mr. Mason--Dr. Mason--yesterday. And it seems to me there is no question that that is one component of this entire national global issue that this report deals with.

On the other hand, we have the question of compliance, and to the extent to which a good compliance

record, even if it is there, which it is not for some agencies, actually addresses our problem, which is a little different from purely compliance.

So let me say what I have already said to others one on one. Just think about the future, think about the picture I am trying to paint in this draft, that we have a very different nation in 10 or 12 years, we have a very different school population, maybe we will have a different mix of college students, depending on what is done in the universities.

Suppose the federal government were competitive and was successful in siphoning off a certain number of that few numbers of highly competitive scientists, white males, and succeeded in attracting some more blacks, some more women, some more handicapped, and had a good record.

We convened in 10 years and we had great marks all across the board.

The question I ask you is, what the hell would the government have done to improve the national picture, vis a vis the whole pool available to the country.

In other words, I think it is a little--it stops short of where, of a large vision, to only make the federal government more competitive in a tightening.

That's sort of like trade protectionism, if you want me to make an analogy--but we won't get off onto that.

So, I'm urging you to think big, because I don't think it is enough--we will be accused of not having solved the

problem--proposed solutions to the national and the international problem.

MS. BISHOP: I think what you are saying is that I should consider the federal government as an employer.

MR. OAXACA: That's right.

MS. BISHOP: Not the end, but one of the slices in the whole wheel. There is a private employer, there is a government employer.

MR. OAXACA: Just one segment.

DEBORAH: Because remember when we come to universities--sorry to interrupt you.

MS. BISHOP: That's what you're saying?

DEBORAH: Yeah, when we come to universities, we are going to have the same discussion. We are going to have data on their hiring compliance. They are going to come in screaming and yelling, as we heard some of this in the Los Angeles hearing, about the shortage of available minorities, and they are going to weep on their shoulders and talk about the future death of the university sector.

They have got the same problem.

MS. BISHOP: I understand what you are saying. It's only that every now and then I have to go back to the original charge.

DEBORAH: Yeah, right.

MS. BISHOP: And then I get a little confused, but I understand what you're saying.

DEBORAH: Well, but the original charge, remember, is very heavy on coordination among federal agencies to address this problem. So that what I'm saying is that to only make recommendations that go so far to make each agency performance better doesn't quite come up to the charge, if you see what I'm saying. There are a lot of pieces to it.

MR. OAXACA: Shirley.

DR. MALCOM: I am one of Betty Vetter's commissioners, and the Commission on Professionals in Science and Technology several months ago we did a symposium that took this all one systems approach, and we in essence had representatives from all the different pieces to say what their needs were going to be.

And that meant like teachers and university folk and the federal government and industry and everybody who was going to want some of these folks were there.

And you very quickly came to the conclusion that there was not going to be enough.

Now the charge that we are looking at in terms of federal employment must be taken in two different directions: near-term federal employment and long-term federal employment.

For long-term federal employment, we must protect the integrity of the infrastructure that produces these people ultimately, which means that we can't siphon off too many. We can't steal from the teaching pool because otherwise we're shooting ourselves in the foot for the year 2020.

We can't kill the university situation because then we're killing ourselves for 1995. So we have to realize that we are in fact--we have a near-term problem of federal employment of these folk, but we have the long-term problem of protecting the integrity of the pipeline which must give us these people forever, if we are to remain a democratic society that is able to compete in a world market.

I think that if we can keep our eye on both of these things, that slopping over into these other employment questions doesn't really bother you as much.

MS. GUERRA: Well, and I think that we need to keep in mind, too, that one of the--if we are going to be effective, we need to address where we are today with the existing system and were it not to change, what would we need to do to improve that system, and that, I think, is what will be critical about the recommendations.

What needs to be done to change it? But we do have an existing system that has been in operation for years and years, and we need to see how has that system not served us and what needs to be recommended in order that we meet the problems that we will be facing tomorrow, and in some ways facing now.

And I'm sorry that I do have to depart, and, Kirk, if you will take close notes, and we will talk back in Washington. Thank you.

DEBORAH: Thank you.

MR. OAXACA: I think to sum it up, if I understood

correctly, there is that old Jewish proverb that says you should never kill the well chicken to make chicken soup for the sick chicken.

And that's what happens when you start stealing from, when you start stealing from the universities to plug up another hole some other place, you have done what that fellow that testified yesterday, was that you're eating your own seed corn.

Thank you, Stella. Have a good trip and check in with Sue for--the minute you walk out the door, you're delinquent on your comments.

I would like to ask Dr. Alan Clive to give his subcommittee's report on social factors. Alan.

DR. CLIVE: By the way, the name is Clive, Mr. Oxica [laughter].

MR. OAXACA: Alan, you will have to bear in mind that in Spanish the vowels are [he pronounces vowels]. One of the penalties of being bilingual.

DR. CLIVE: We have an example in our report that I tabled in California of exactly what Nina Winkler was talking about. There we advocated passage of the Civil Rights Restoration Act, and it looks like, despite the anticipated Presidential veto, that probably within the next 10 days, it will become law.

I don't know if the version of the act is the version that we thought ought to be enacted. It probably is,

but at any rate, what Nina says has a lot of force, and I am at somewhat of a disadvantage not having read beyond about page 15 of the report.

So I don't know where or what of our recommendations made it into the first cut.

I will simply add that at the California meeting I discussed what I felt was the need for some approach to dealing with the racial and ethnic diversity that is coming in our country, and I said at that time I was having a tough time formulating it.

Well, I finally reached what was not a terribly satisfactory resolution, as far as I was concerned, but I recommended that there be an establishment of a presidential level commission, which I refer to as the Commission on a Multicultural America.

I'm taking the model here from Canada, which actually has a Ministry of Multicultural Affairs, and I gather in that country the ministry exists primarily to placate the individual minority groups. That's not exactly what I have in mind.

What I am concerned with here is the fact that this country is always changing, and the United States of 50 years from now will be radically different in its demographic makeup from today, just as today's is radically different from 50 years before.

I want to--I would like to have some high level thinking begin now, under presidential auspices, about the

consequences of the society of the future.

Now, beyond that, really the recommendations that I tabled in California have not been amended and I guess that's really all I have to say.

DEBORAH: Can I respond to that real quickly, so everybody knows. I know that the chapter 10, which is really an amalgam--which I still haven't looked up the word--of all the subcommittee reports received to date, is a big thing to wade through anyway, Alan, so that don't feel too--you're lucky in a way, maybe you haven't gotten to those pages, because it goes on.

But just so everyone knows, in a nutshell, Alan, the report we received, which was excellent, had six items, and they are all in there, and just so the committee knows what Alan's group recommended.

All of these are there, scattered under the different headings where it seemed most appropriate.

Number one, "The nation's political, educational, and religious leadership must recommit itself to ending discrimination based on race, color, national origin, sex, or handicap." And that is verbatim in I think the leadership, the first section in chapter 10. That came from Alan's group.

Number two, the essence of it was the President should--"There must be a response from highest national leadership, the President should sign an executive order instructing the government to take appropriate action."

A number of the other subcommittees recommended an executive order of some kind, although it is unclear what it should be. And I should draw your attention to the fact that there is a lot of overlap. A lot of people seemed to think the executive order is a good mechanism. It's not clear what exactly it says.

Item three is an excellent one. "The federal government and scientific community must increase their efforts to spread scientific and mathematical literacy among the general public."

And that's important. I think that is the only one we have received on science literacy generally, and it's an important recommendation which is in there.

"Use of female, minority, and handicapped role models is vital to the success of any campaign." That's in there.

And then, "The President should appoint a national commission on a multicultural America to examine fully and fairly how the United States will fare as a nation of nations." That's in there.

Item five is, "A national policy to ensure adequate and affordable day care." That's in there.

And then this very interesting six, which I would like to discuss further with anyone who wants to discuss it. "The Congress should encourage--enact an orphan technology for the handicapped law. The statute would provide federal funding to underwrite development and distribution at reasonable cost

of systems or devices that open job opportunities, including home-based employment."

And, Alan, all of those are in that list at the end of the thing, and I think it is up to the group to decide how they want to handle it.

DR. CLIVE: Thank you, Deborah. There was one other item. I recall that at the end of the California hearing I was given a charge to come up with a catchy title for our report.

And I have given that some thought, but so far I have only come up with preliminaries. I was very struck in the about 15 pages I was able to read of the report by one phrase that Deborah had crafted, which is "We are not merely sitting on our laurels, we are tearing up our roots."

And since we are dealing with people to come, I decided that our preliminary title for this report should be, "Roots: The Next Generation."

MS. BISHOP: May I offer some comments?

MR. OAXACA: Yes, comments.

MS. BISHOP: In the beginning there, where we talk about that the President should sign something, and I agree, we need to be very clear about what it is he is going to sign.

But the first statement says, "Our highest national leadership must recognize the vital importance"--blah, blah, blah, blah. I would like to see that open up with some statement about the climate, and I would like that to be a very, very strong statement.

I am a person who believes that right now we are not writing an act, so we're not--we shall do this and we shall do that--I am more in tune with the word "must."

And in particular instance, it seems to me that the President must, must create a climate in which all of this is-- a very positive climate in which all of this will work.

And somewhere in there I would like to see the words, "must create a climate," because he is the person. And we are talking about a top-down, trickle-down atmosphere in which all of these actions will be able to be implemented.

And if it doesn't come from there, where else is it going to come?

So I would like to see something about creating this climate [INAUDIBLE], that we are in a crisis mode. I mean there's no question about it. So I'm ready to call a spade a spade.

MR. OAXACA: No pun intended.

MS. BISHOP: The other thing is the business about the President appointing a national commission on a multicultural America. We need to expand on that, because when I read it what was missing was to do what to whom for what purpose?

And we need to expand on that, and quite frankly, in some of these recommendations--another one: "The Task Force recognizes the traditional role to ensure equality of educational opportunity"--to do what to whom for what purpose?

We have got to expand on those areas. And I am not familiar with Canada's operation of the multicultural situation, but I think that's really an area that we really need to expand that, so that the reader will understand what exactly are the impacts and to whom.

MR. OAXACA: Shirley.

DR. MALCOM: One possible candidate under the social factors issue is to deal with the image of science and scientists. We have--you know, that's been the place that we have put things that we didn't know where else to put.

This is clearly one of those kinds of things, and that's the kinds of images that we reinforce particular kinds of socialization, to say which people can't, in essence, because you only see one kind of folks who can, or who do, or who have.

And I think that you might want to consider that as a candidate, along with climate.

MR. OAXACA: I think that when you get into this multicultural affairs thing, we have to be--we have to address that in a way that doesn't let that become a mechanism for folks to let that become an enterprise in itself.

The issue is how do we get our young people into the mainstream as quickly as possible, while being sensitive to the multicultural issues that they look at and not let that become like what happened in the Hispanic community where there was major infrastructures to teach the value of eating enchiladas

for lunch. I mean this is actually true--which had nothing to do with getting our young people an education and that sort of thing.

And so, you have got to be careful that these things are not gotten out of hand, and we address the issue of generating science and technology people to handle the needs of the nation.

Otherwise, you will get into all the peripheral issues that really, you know, decoy you and defocus you away from what we're tasked to do, and that's to tell the nation what it's got to do and by when, and if they don't, here's what it will look like, and if they do, here's what it will look like.

MS. BISHOP: That follows on with one other comment I forget, and that is that reading the words that I did last night about the President should sign an order and instruct the government to do this, that, and the other, and send an annual report.

Someone in here, we have got to use the word "accountability" or at least address the issue of accountability.

MR. OAXACA: Amen.

MS. BISHOP: And it has to be throughout the ranks. I kept reading this and I said, well, what if the President issues an order? What if agency A or private concern B doesn't do what the President would like him to do?

I mean, what then? What's the consequences?

And I can only fold that back into some sort of an accountability mode, which has to be, which has to permeate throughout all the ranks of both federal and private concerns in terms of implementing this executive order, or whatever it is we want the President to do with it, it must be accountability.

MR. OAXACA: Deborah.

DEBORAH: Yeah, I just, I'm glad you raised that point. The reason why you don't see any language re accountability anywhere in this is that none of these reports suggested it.

And I don't--I'm happy to take liberties to try to structure the problem in the discussion in my draft, but I think one of the major philosophic issues in front of this group is obviously the extent to which we wish to build accountability into our recommendations.

It's a sensitive issue. I will say this, that in the discussions that Sue and I have had individually and the subcommittee meetings that I have attended, there has been a lot of discussion about the problem of what we will recommend for an ongoing monitoring function, recognizing that this Task Force goes out of existence, and we will have this sort of action phase from middle of this year until the end of 1989, but then what happens?

And also recognizing that one of the premises,

although it could be thrown out, I presume, but one of the premises that I was told in the beginning was that we did not want to set up new agencies or new bureaucracies of some kind.

This leaves us in a kind of a never never land about what to do about accountability because all the subcommittees hesitate to come forward with the suggestion of an office or a bureau or something that costs money, and on the other hand, how do you have any kind of ongoing mechanism to deal with this?

So I just throw this out--it's your problem.

DR. MALCOM: [INAUDIBLE] subcommittees' discussions right now, because I think that...

MS. BISHOP: Yeah, OK, OK.

DR. MALCOM: ...this is not going to be solved in one piece at a time. We are going to have to talk about the overall kinds of messages, and therefore, if we have finished with Alan, maybe we should go on and finish up the subcommittee reports, so that these particular kinds of--this discussion on the overall picture can be undertaken with more focus.

MR. OAXACA: Dr. Clive, with a long i, are you done with your report? Thank you very much.

SEVERAL VOICES: Larry, Larry.

DR. SCADDEN: I would like to make a comment, if I may.

MR. OAXACA: Oh, Larry, I'm sorry.

DR. SCADDEN: In response to one of the comments that

Deborah read off from Alan's report. And this may not be the best time to bring it up.

You had mentioned earlier, both one on one and also to the group, that the whole issue of disability has to be addressed in more detail.

And one of the--and I'm prepared to spend some time on that. I think we have the expertise within the Task Force to do a lot of that.

But the specific issue I wanted to address is the one on technology. I think the term there was orphan technology, which is yet to be defined, although we had some legislation dealing with it in 1986.

But, more importantly, I think we really need to ensure that technology not only for disabled people, but for students in less affluent economic areas have the appropriate type of laboratory technology necessary for them to experience the hands-on science--or sciencing as someone said yesterday--that will prepare them for the future.

I think we--and I'm, again, as Deborah knows, I'm working without having read even the first 15 pages of the proposal, and so my written comments will state that very clearly.

But how we ensure that disabled students and disabled scientists and engineers have the appropriate assistive technology necessary to make them competitive is something we have to look at very carefully, and I'm not sure if the

language there is some that I would even agree with.

But I promised to provide some comment.

MR. OAXACA: Deborah.

DEBORAH: Just a second--I don't want to hog the time. It's other people's turn to talk, but let me--I said this--Ginny Stern and I were talking about this to some extent yesterday, Larry, and I haven't had a chance to explain this to you, but I think it should be quite clear that I, too, feel that not enough has been done on the disability question at all within the whole work of the group, and the report is deficient.

And my apologies, to the extent that so far, it's somewhat deficient, but the structure and format of the report certainly allows for specific recommendations, as separate recommendations dealing with disability-related issues.

And the box format, as well as the text that incorporates the range of problems of the different groups that we're dealing with, I hope will allow for a good discussion of it in the report, so anybody reading the report would, in fact, get educated as to the relationship between disability and science and technology and all these different issues.

So I would look forward to any kind of detailed input from you and, of course, sitting down with you and hashing the whole thing over.

DR. SCADDEN: Good.

MR. OAXACA: Why don't we now go on to the research

support committee. Is Luther Williams here? Who is doing the report for research support?

MS. KEMNITZER: I guess I am a self-appointed spokesperson for the research subcommittee.

Let's see--no, I am only going to say two things. One, Deborah has quite faithfully taken the recommendations suggested by the committee and put them in chapter 10.

Two, my impression is, having...

DEBORAH: Never got a report

DR. JENKINS: But there are recommendations from the committee, starting on page 66.

DEBORAH: But those were made by other committees. We never got a research committee report. Am I not right, or am I wrong?

MS. KEMNITZER: We did, we did.

DEBORAH: Oh, all right, well, maybe my memory is...

?: All that statistics in front...

MS. KEMNITZER: The research committee report that was sent to our office after our last meeting was quite similar to, if not identical to the one that you had before, so there is nothing new on the recommendation front. That's point number one.

My second and final point is that my impression, having worked with all the different subcommittee topics, is that we have the least data on the research support area.

Indeed, as far as I know, only the National Science

Foundation has statistics on how much they give to women and minorities and handicapped persons, and much of this is reflected in what Joe will have to say about his survey.

MR. OAXACA: It seems to me that that is such an important part because that's the one that has a tremendous amount of leverage in the universities. To attempt to try to leverage the use of those monies as a mechanism for aiding those women, minorities, and handicapped to go to the advanced degrees as opposed to running out for the quick buck after their B.S.

And it appears to me that that's another very weak area along with the disabled and the Native American, that we have to do that because there's a lot of bucks involved there, and there is going to be significant resistance to coming in with something that is going to be an expensive plan.

I think it is a reallocation of resources problem because if you look at the numbers that are in the report, you know, to quote Norbert Hill, there are a "zillions of dollars" being spent, and that's a lot of money.

Yes, Ms. Winkler.

MS. WINKLER: I would like to say something about statistics in general, since it has come up and it addresses a number of things. I have given this some thought since our last meeting.

There are a number of suggestions about statistics in various reports and sections of this report, and among them

included having a special analysis in the budget and having NSF collect data and so forth.

I have worked at OMB and I have worked at Education, where we have the National Center for Education Statistics, and have a sense of how things work in terms of getting money to do surveys and so forth.

I would like to suggest that we not pursue an OMB special analysis, but that we do pursue an NSF-led, with--as far as Education is concerned, support from the National Center for Education Statistics, and in terms of research, I'm not sure, I'm not as familiar with information on research.

And the reason I would suggest this is that, as an institution, OMB doesn't have a strong incentive to devote to this to keep doing this year after year, after the initial excitement wears off or an administration turns over.

It is going to be one of the first things dropped. It doesn't have a budgetary implication, at least not any direct one.

Whereas an agency like NSF has a very strong incentive to provide support to very data gathering year after year, long after we have passed out of the picture.

Similarly, in our department, we have an office--not the one that I'm in, but we do a lot of work with them. They are institutionally in the business of data, and they hire people who collect data, and they love it, and they love doing surveys, and they are up on the Hill hustling for more money

all the time.

And that's kind of what you want. You don't want someone who is doing it because they have to. You want somebody who is doing it because that's what business they are in.

And I don't know who collects research data. I would assume NSF would be the appropriate focal point, working with other federal agencies.

I think we need a very strong recommendation on data in this and it should be fairly comprehensive, touching a lot of the different variables and the work of different subcommittees.

But I think it ought to be something like that, that would last.

MR. OAXACA: Shirley.

DR. MALCOM: I support Nina's viewpoint. I think that there is a quality issue, too, and I think you are liable to get a higher quality product out of--and there is more stability in the data collection folks out of NSF, and you are liable to get a higher quality product than from some of the other agencies.

I know there has been a quality problem in the Department of Education, but that is coming around.

I sat on the Academy Committee for the Center on Statistics, and I know the problems that were there, but I think that they are getting fixed, and so I...

MS. WINKLER: They got a huge budget increase. They should be fixed.

DR. MALCOM: Yeah, yeah. I think that they are being fixed, and I have been pleased to see what's come out of there.

But I think that there is another issue, too, and that is that, again, this is not a paid political, or even an unpaid political announcement, however I am one of Betty Vetter's commissioners.

And the fact is that we need the kind of independent view, not just of the data collection but somebody to make sense out of the data who understands the problem. And we haven't, and I also know the budgetary problems that independent groups like the Commission have faced and continue to face in terms of getting support for the very basic kinds of independent views.

And one of the things that is, in fact, the case is that the--while there's monies that have been protected, in terms of the analysis--I mean the data collection side, the data analysis monies have gone by the by, as we have, as the budgets have gotten tightened.

And we really can't understand how bad a problem, how bad a situation we're in unless the data get analyzed, not just collected--and analyzed both within the federal agencies, but also that there are funds for independent external analysis of the data.

MR. OAXACA: I totally agree. Ms.--Betty, did you

want to comment on that?--where's Betty?

DR. VETTER: Oh, it's absolutely true. There is no money left in any budget for analysis, including NSF's. There's not a penny left in there.

The data analysis that NSF is doing now, which is the one document on women and minorities that comes out every other year, is being done on a shoestring and under official mandate, and let's say, kicking and screaming, and it's not very good.

And you have it. I guess you all have a copy of the current one, and it's not very current. And all sorts of things are wrong with it.

There are data elsewhere. There are data in the federal government.

DR. MALCOM: But they don't like to use data outside...

DR. VETTER: There are data outside the federal government that are in many cases still better. They all need to be looked at at the same time, because they tell us a whole lot of things.

But it is very hard. There's nobody doing this, but us, and "us" is two people in my shop.

DR. MALCOM: Who barely can keep the doors open.

DR. VETTER: Who barely keep the door open. So, and it would be sure nice, you know, we could do a little better, if knew that there was going to be enough money to do it.

DR. DANER: Could I ask for a clarification of what

you would ask NSF to do? Are you talking more about doing an analysis of what other agencies are doing, similar to the survey that we have just tried to start?

Or are you talking more about looking at the numbers of people?

MR. OAXACA: Herb was next, Herb Fernandez.

MR. FERNANDEZ: Well, I don't know if this touches on what you're talking about, Joe. But I think from a national impact perspective, I would like to reinforce the idea of reallocation of resources and leverage.

One, I think the employment area and this research area are two of the areas where we can be directed and specific on what the federal government can do.

Two examples--the Department of Defense, Department of Energy, NASA. I think we can put in some very strong recommendations there, suggesting that there be a reallocation of research dollars directed to the universities, if we really want to start working on that pipeline, from developing our researchers.

Number two, the national labs again. That resource is a basic national resource to beef up our research effort. And again, the dollar reallocation of budget and dollars is necessary in order to move those labs towards supporting the universities better.

So, in this area, I would suggest that we come up with very strong words which Debbie has already given a good

start on her items here, on these eight items.

But then support that with some specific recommendations on the leverage. I don't know how much more analysis we need to probably--that's a forcing function on the agencies to take an internal look as to what they can do.

But I think the numbers are already here, that we can say very definitely we need to beef it up.

MR. OAXACA: Nina.

MS. WINKLER: A basic tool of accountability is data, I think. You cannot hold people accountable, you can't hold the nation accountable unless you know how well we're doing.

That's the whole point of such a program, and I think that's the justification that you spend on it, not just to entertain researchers and keep social scientists off the street.

I think what I have in mind, and I think that's what I'm hearing around the table, is something fairly comprehensive that looks at all the same subjects we are looking at as a Task Force--employment, research, education at all levels, and so forth--and that the data would be collected in series, so that you would have comparisons.

How well are we doing in these various areas? Right now, we not only don't know that well how we are doing right now, we don't know how well we're doing in many areas relative to how well we were doing five years ago, 10 years ago.

And I hear a lot of anecdotal evidence. I'm not

seeing that much that's that really strong, hard stuff, and particularly if we are going to tell people we are going to give grants based on outcomes, and if you don't have outcomes in five years, you're not getting another grant, I think that's what we're talking about when we're saying accountability.

I think we have to hold the federal government as a whole accountable in many areas, and the nation as a whole.

So, I hope that that's feasible. What we're talking about is something i looks like NSF already is doing a lot in that area, so it wouldn't be starting from nowhere.

MR. OAXACA: Well, that's why this whole thing is so key. It's not a simple problem. Deborah.

DEBORAH: It just jumped into my mind that we really have the resources within the Task Force, particularly with Betty available to us, as she is, to really work this problem well in the next few months, if perhaps a few people could be tasked to develop a white paper on data.

I have been quite--I asked some of the subcommittees as they were asking, what exactly do you need from us? And I said, give me a clear statement of what you've discovered are your data lacks, because you now know in detail what you know and what you don't know, and I can glue that language together into some kind of statement.

Well, none of that happened, even though I know that Joe Danek and Shirley and everybody around the table knows what they know and what they don't know. If we have another, you

know, more than 18 months to go in the lifetime of this group, and if we've gotten as far as we have already into figuring out the nature of what we know and we don't know, possibly, I don't know, Sue or Mr. Oaxaca could think of some mechanism by which one of these specific products of the Task Force would be a little mini study which made a very sophisticated recommendation.

I agree with Nina completely that the kind of data we need is very specific to this problem. There is no point in large-scale data collection. The kind of data collection that is necessary is one which will tell us in three or five years if anything has changed.

And I think the case is obvious that as a nation we can't address this problem without knowing on an ongoing way what the problem is.

MR. OAXACA: What I hear is that we ought to do it in parallel. We know we have got a lousy starting position, as far as what is really happening.

We also don't know what that starting position is. So we need a starting position, but we also need to start at the same time, because we know it's bad.

And so it has to be the often-used, the dual-track approach, same thing they used on INF.

And so I would ask Sue and any comments by Ann if this makes sense that that be one of the things that you maybe get together with all your experts that are at your beck and

call, and Betty and yourself at the Boston session or before have a plan of attack.

And, Herb, I would ask from your end the other parallel track so that we get those inputs in writing into the process, and any thoughts that you have, Nina, on that, because I think it is the whole issue--the whole issue of accountability is going to be one that people, if we don't do it correctly in my mind--and maybe I'm naive, they can use it as a political football and screw the whole thing up.

DR. REYNOLDS: I would just like to say, though, in conjunction with that, I think Nina made a very good point on accountability. All you have, but somebody said the independence of the data collectors is terribly important.

The most useful studies nationwide in the health and science fields have been those coming out of the National Academy of Sciences over the years. They are the ones that people really trust.

In--oh, for example, the basic data on whether people are getting enough vitamin D or whether people are--what is happening here, there, and yonder.

[INAUDIBLE COMMENT]

DR. REYNOLDS: Yeah, that's right. The real effects of oral contraceptives on blood pressure and things like that.

The point of all that being that there are data and data. For example, I am kind of quietly talk back and forth reading through here, and Deborah has done such a good job of

this, but there is a statement which has been picked up, I'm sure, from someplace, saying, "Twenty-nine percent of the high schools did not offer a physics course."

Now that in sum sounds awful. The only trouble with that is when you get in--I happen to know that data well--when you get into that, those are small rural high schools that fit into that 29 percent.

If you phrase it differently, the percentage of high school students that have access to a physics course, it's over 90 percent. And so the reason you need the Betty Vettters of this world and the National Academy of Science groups are that just bald data simply don't mean anything.

And people have to sit around and ask questions over the 29 percent of all high school don't offer a physics course. And some of those high schools have graduating classes of 10 students and arrangements whereby they send their students elsewhere.

So, what I would like to suggest on that issue, and your eighth recommendation, I think, is data gathering, and I would be glad to work with Betty Vetter on it before the meeting, as Dr.--as Mr. Oaxaca suggests--is that an independent--is that we come up with a statement for that eighth recommendation that an independent means be arranged for that data analysis and recommendations and for the accountability that Nina was getting toward.

MS. BISHOP: The reason I would support that is for

the one simple fact, and that is that NSF is part of the group that would--it's like the fox watching the hens.

NSF is part of us and they are in the position to receive as well as EPA and NASA.

MR. OAXACA: Present company excepted, Joe.

MS. BISHOP: So I certainly would support a National Academy of Sciences as an independent.

DR. REYNOLDS: Or someone.

MS. BISHOP: Or someone like that, whereby they get data from the various agencies and public--private...

MR. OAXACA: Ms. Winkler

DR. VETTER: Beautiful miracle document that we will have 10 years from now...

MS. WINKLER: I would like to say that you have to distinguish between data gathering and analysis. Data gathering is traditionally done by the statistical agencies--the Census Bureau, the Center for Education Statistics, the Bureau of Labor Statistics, and so on across the board.

All of them have certain things in common. They are set up fairly independent of their agency head, some of them by presidential appointees. In our case, not, although he is trying.

That's one thing. Analysis--what you do with the numbers--is generally a wide-open thing where everybody gets into the act, including the high prestige and the low prestige, and I guess if you are just funding data gathering, which--it's

generally most efficient budgetarily to fund it through existing instruments or agencies that already go out there.

For examples, the schools, if you are already doing the common core data on schools, you want to add a question or two, it's much more efficient to do it that way.

That's different from funding analysis and runs and cross tabs and all the other things we like to do, and that--I would like to make sure we are clear on that distinction.

DR. DANEK: I would like to comment on that because I think that's very important. I think the NSF studies, the mandate of NSF is to provide data and not to make interpretive analysis of that data.

And so you would put the NSF in a strange position--legally, it might not be able to provide an analysis of it.

DR. REYNOLDS: Let me be direct.

DR. VETTER: Well, NSF used to have problems to support analysis.

DR. REYNOLDS: I would like Betty Vetter to be ultimately doing the data analysis for the public on this under contract.

MS. BISHOP: But there is no money right now in those. There is no grant...

DR. DANEK: Well, it would be possibly within the interest of NSF to support such a study and such an analysis and to defend and to endorse such an analysis.

The other problem I have with that, however, is that

you're going, you're taking--the special analysis K keeps it within the political mechanism, within the administration.

The further you move away, the more accurate you may get, the more analysis and oriented you may get, but the further away you get from the political mechanism and it becomes another National Academy of Sciences report, which was done--a number of them were done on economic competitiveness and the value of science and technology, and yet the NSF budget last year still got only a 5.5 percent increase.

MS. BISHOP: Well, maybe...

DR. DANEK: So I mean, I think you have a compromise here. You've got to bridge the gap between the two.

MS. BISHOP: Maybe what you do in that case--maybe what you do in that case is you gather your private concerns. If you tap into your private corporations--each ante up X number of whatever and convince them how it is in their best interests.

Now, remember, everybody has got a bottom line, and if you have got to sell, we've got to sell this report so that I know what's in it for me, and if you talk about tapping other people other than government, then we can tap the private corporations to ante up so much to support Betty's operation.

You are getting that further away from the political scene, but you also got to make them buy it.

DR. MALCOM: But may I say something as one of the commissioners. Betty has been--we have gone after private

funds to support that operation, that analysis for years.

DR. VETTER: Thirty-five years.

DR. MALCOM: They will do it for a while, and then they--the person that you had a relationship with drops out of that company, and that support from that company drops out.

Something of a national significance and importance like this cannot be dependent on happenstance and serendipity.

DR. VETTER: I agree with you.

?: That's right.

DR. MALCOM: And I think that unless we actually imbed a grant-making function within the federal structure for analysis and making sense out of the data, that we are just playing with this.

DR. REYNOLDS: Absolutely right. That's what we need to do.

MR. OAXACA: Well that's what we have to send in, in written form, to get that. Dr. Jenkins.

DR. JENKINS: May I at least call our attention to, I think what was going on at the top of page 67 was that the area that you have absolutely nothing on is what's happening with your principal investigators on research grants, intramural and extramural.

You don't even know how many minorities are women or handicapped may be operating on the grant. And that if you wanted--let's say you may not be able to get monies to do the overall, marvelous collection of data and assessment and

analysis that you want, one thing is to put the onus on federal agencies to at least just put a survey form every time they let a contract, research grant, agreement, or something, and find out who is involved.

To do that in the federal government, you are going to have to have an OMB approval of the form. That's all that was intended to do.

Now if you want National Science Foundation or somebody else to do it, the issue is, in the interim over the next, until 1990, is there a way to start federal agencies starting to look at where their monies are going?

?: That's precisely [INAUDIBLE]

DR. MALCOM: Also for a national [INAUDIBLE]

MR. OAXACA: With that note, let's turn this over to the fox that's taking care of the hen house, Dr. Joe Danek.

DR. DANEK: I am not going to make any comment about the composition of my committee.

MR. OAXACA: I'll have you know that Ms. Bishop gave me this tale of woe about how she was just not aggressive to get a ticket to attend the Los Angeles thing, and you can see that it's all baloney. [laughter]

DR. DANEK: I would just like, I think much of what we are doing with this survey relates directly to what we're talking about here. And I think that--let me just tell you a little bit about where we stand on it.

We passed a survey out to all of you, and I have

gotten results back from almost all of the agencies. And I must admit that it's a real mixed bag.

It is going to be difficult to kind of sort through this. It is not as easy as taking it, put it into charts, and then just tallying things up.

Part of the problem comes from the fact of the very differences among the agencies. That is, an agency being principally an extramural agency, funding research outside of itself, such as NSF, versus an agency being like the National Institutes of Health or DOE or Agriculture, where they are either mixed or a large percentage of their activity is intramural, in which case, there is interpretations of what you mean by agency programs, as EEO programs, recruitment programs, etc., versus taking a look in the agency, saying, oh, yes, I know what this means. We have two programs where we have \$5 million here or \$6 million there.

So I think there is a bit of confusion there and it's going to take something to sort it out.

But, having said that, I must say that I am very impressed with the amount of work that people have put into it, and the amount of detail that they have gone into, and they have really tried, I think, to search to find what programs they are doing with regard to support for minorities, women, and disabled.

So, from that point, I think it's very promising.

We asked people to try to identify what are the

programs that they have that are for targeted programs, specifically for the targeted group in science and engineering.

I think the data that we have on those is pretty reasonable. I think we're going to be able to see something there.

We asked people to then identify all of their non-targeted programs, and then to try to find out what percent of those programs are for science and engineering, or what percent of the non-targeted programs, general agency programs are, involve women, minorities, and disabled.

We really--some agencies did a very good job on it, really took a look at it, gave percentages of the amounts of minorities, women, disabled, amounts of science and engineering. But other agencies did not.

One of the largest agencies, Education, is unable to break out the percent that in their regular programs are science and engineering, and the percent within their minority, women, and disabled program for science and engineering.

And I think we are going to have to work with that, because I think there is some way that we can come up--I can't imagine that the Department of Education cannot come up with some estimate of degree of minority involvement in all of its programs.

So I...

DR. VETTER: They didn't come up with a percentage estimate of how many minority kids graduate.

DR. DANEK: On \$8 billion worth of financial aid, Ed can't say that 40 percent went to minority and 28 percent, plus or minus 15 percent--I mean is there any?--there's a real problem with that because of there's a huge amount of money.

MS. WINKLER: I think on some programs we can give you part of the picture, but not on a lot of them because--one thing that I'm sure other agencies will find, in many cases aid is handed out by the institutions.

There has been a great deal of pressure in recent years to reduce the paperwork burden, and some questions that seem important to us now didn't occur to people when they were finally paring down to the last two or three questions they were going to let you ask.

There are tremendous problems. There is a new, a big new survey on post-secondary student aid which is just coming on-line now and we may be able to do some analyses on that, which is very different from going to the program data, which is what you love to do, and go over all the applications and sort people out.

That, we are not going to be able to do. We do special surveys to find things from these very huge multibillion dollar programs. It's very hard to do. So, I'm sorry you're so disappointed.

MR. OAXACA: Nina, is Bennett amenable to us giving it to him pure alcohol? Can he--has he got a thick skin? Is he going to be able to understand that...?

MS. WINKLER: Probably the most thick-skinned person in Washington, I think.

MR. OAXACA: Is he going to be able to handle the fact that we might tell him he has done a crummy job in certain areas?

MS. WINKLER: Well, I don't know that it's fair to say it certainly on data, because he has provided bigger budget increases for data than other people have.

MR. OAXACA: No, I'm not talking data. I'm talking about the general job that has occurred, based on all the testimony, letting the educational system deteriorate to the level that it has deteriorated.

MS. WINKLER: I think if you--I think several factors you ought to look at before you go into that.

Number one is, look at the numbers, the budget numbers. Don't listen to just the stories, because I think they tell a different story than the anecdotes do.

Number two, I think if you want the new story on this commission to be "Bennett Responds to Dah, Dah, Dah, Dah, Dah," you can have that story, and I can't think of anybody in Washington that will do a better job of responding to any charges you make to him personally.

If you want to pick on someone that can fight back, he's the right one to go after.

MR. OAXACA: No, no. I think what we have to do...

MS. WINKLER: The third thing is if--I think, I think

our commission has to be positive, not negative.

MR. OAXACA: Absolutely, absolutely.

[Several other comments in agreement.]

MS. WINKLER: And if you want to get negative, you are really in for a fight.

MR. OAXACA: No, I think what we have to do is to meet with him ahead of time, and say, lock, here is what we have been told, so as to be the most effective, how do we now go public with the implementation plan?

Because he has gotten out there and said, you know, we have done a crummy job, himself.

MS. WINKLER: Oh, he's--yeah, he has very strong views, and I think we can do something with that.

MR. OAXACA: So, I think what we have to do, and you're close to him, is get him in the frame of mind that says, look, drastic problems take drastic solutions, and you can't nickle and dime this anymore because the clock is running and it takes a long time to grow all these folks, and the demographics are going to be there, and you have got to get off the dime and move.

MS. WINKLER: Well, one thing you have got to keep in mind...

MR. OAXACA: And pouring money at it hasn't seemed to solve the problem.

MS. WINKLER: ...is that--exactly--only 6 percent of the education dollar comes from the federal government. If you

tripled the federal spending, which is \$20 billion a year out of our department, you still wouldn't be anywhere near what you needed to do to improve--what he has been saying around the country is we have got a lousy school system, and all these little programs around the edges don't solve the problem, that there is a lot of, especially poor kids in this country going to absolutely awful schools, and they are getting ripped off and doomed for life.

And I think you're not going to find anyone that's going to agree more with that than him.

DR. REYNOLDS: Nina, as I presently look at this report [INAUDIBLE] through a lot of revision, and I know Secretary Bennett pretty well, I don't think there is much in here that he would find, a) surprising...

MS. WINKLER: No.

DR. REYNOLDS: ...b) object to.

MS. WINKLER: What I just don't want to get into is what I sensed from what you were saying, Mr. Oaxaca, was that somehow we were going to say that he has screwed up and it is his fault, and I think it's unfair, and...

MR. OAXACA: No, no, no, no.

DR. REYNOLDS: That would be totally unfair
[INAUDIBLE]

MS. WINKLER: And it would be unproductive.

MR. OAXACA: No, no, no. My concern was that he might interpret.

MS. WINKLER: We have got to make sure that what we are saying is positive and makes sense and is reasonable, and I certainly intend to circulate this draft among senior staff, or if we are not ready to circulate this one, the next one.

[Several negative opinions on circulating this one]

MR. OAXACA: No, I think we have got to work and tighten it up.

MS. WINKLER: And I think if it is done right, and you can get him on board, you have got quite a valuable ally because I can't think of anybody that can get press coverage faster than he can.

MR. OAXACA: I know amongst the Hispanic community when--and I'm a staunch Republican--but when the administration said the first thing we have got to do is get rid of the Department of Education, you know, I mean that was a devastating blow to those of us that have been in the trenches trying to say that's an important thing, and now we say we'll put it in under some sublevel. And so...

MS. WINKLER: Well, there is one thing, you don't want to fight the battles that have ended, and that battle has ended.

MR. OAXACA: Well, I wasn't aware of that. I'm just a poor private citizen.

MS. WINKLER: Oh, absolutely. He went in for a budget increase this year--deliberately, so that people would quit fighting that battle and go on to the real substantive

issues.

MR. OAXACA: I know that as I tried to approach some of the presidential candidates, the only one that seems to have gone public in that area is Bush. The other folks seem to have a different agenda, and that's disconcerting when this is a big issue.

You know, they talk about the deficit and economics and then the balance of trade and all those things, and they are all tied into the fact that we are not competitive.

It's real fundamental to me as a businessman who has had to meet payrolls and have to lay off people and hire people and all the things that are very traumatic in the real world.

And so, you know, I think part and parcel of the whole thing has to be that a lot of us have to take responsibility for it, and the report has to have credibility, but it's got to call it pure alcohol and still walk that fine line that we don't upset these people that can help us.

And so my, my comment to you about your boss was, how do we approach him so that he understands what our feelings are, takes it as a positive thing, works with us, to get the most horsepower to solve the problem.

MS. WINKLER: We can talk about that. I'm sure that there are ways that we can do it.

I think you might be interested to know, in April, the Secretary is going to be releasing--or maybe early May, I'm not sure--the five-year report from "The Nation at Risk."

Last--was it last week?--it was all a blur, we released the annual wall chart of education statistics, which is kind of a preview of what "The Nation at Risk" report is going to say.

And the news--well, first, the first draft of the speech said, "I'm ticked"; the second draft said, "I'm disappointed," and that was what finally went out.

I think he is going to have to say the news is not fabulous. There have been some very interesting changes in recent years. A lot of people have tried to do a lot of things, but when you look nationwide, you are not going to see the miracle that we had hoped for, and that's where he is coming from.

I am sure that this report can add just another dimension to that story, because that's what we have all seen.

MS. LEE-MILLER: I think it's important that we not single out any one cabinet department and create a feeling in the report that we're honing in on Education, or honing in or honing there.

I think we should have a White House strategy as well. We did start at the White House and this commission is under that aegis.

And I think that in terms of reflecting since yesterday on which way to go, we have several options available to us because of this terrific writing that we've got I think we've made a huge amount of progress in the amount of time the

committee has been together, and it looks like we will have a final report fairly soon.

Now, one option available to us is to advocate in the last few months of the administration to really try to get the White House to put some muscle behind our preliminary findings in our first final document, and develop an executive order strategy.

That is the way you get cabinet officials to pay attention and really get some action moving. If we begin to talk to the White House about getting the President to issue an executive order to the cabinet agencies on this issue of having the existing resources redeployed to target scientific areas and technology areas, along the lines we've been talking about, we could spend our second year as a monitoring committee to work with the agencies in the implementation phase of the activity.

That would be an experience that most task forces never get. Usually, you come up with your findings, you drop them on the desk, and then you leave.

I think that as going into a new administration, priorities change, emphasis gets lost, almost for years of the last administration's pet projects.

So if we could kind of see ourselves as a report team now, and as a transition process as the new group takes over, going into '89, then we could keep the emphasis in place.

So my recommendation would be that we move along the track we're on--I think the leadership of those committees have been terrific in pulling together the document--not quibble too much around the margins. Let's stick to the main objective, which is to increase the numbers of women and minorities and disabled in science and technology.

We all, I think, knew at the beginning what some of the answers were to the problem. And see if we can't just lobby for the [INAUDIBLE] clearance mechanism. Now that can be a positive, it can also be a liability.

If you go to the various major domos out there and ask them to annoint the document, if they choose not to, then you are put in a position of going to the White House having already found out early on that you don't have a consensus among some of the major players.

There is a risk in that, because then the White House is in the position of asking the President to sign a document that some of his own cabinet members don't like.

If we get the White House on board with us, Graham's office, and they like the work we've done, and then they go to the cabinet officers and say, we've asked this committee to do some research. We've received the research. We think that what they have come up with is a good set of workable recommendations. Now we, White House, Graham, are sending it around to HHS and Education and Labor, etc., etc., for your reactions to the report and the recommendations of our

committee.

That's a very different request from Jaime and Ann going to the agencies independently and asking them for their reaction.

MR. OAXACA: No, our plan is to go to Bill Graham first.

MS. LEE-MILLER: OK, fine.

MR. OAXACA: Yeah, we had no plan to go to the agencies.

MS. LEE-MILLER: Well, that's kind of the discussion I was hearing earlier...

MR. OAXACA: No, no, Graham first.

MS. LEE-MILLER: ...was how to get Bennett on board and how to...

MR. OAXACA: And direction from Graham.

MS. LEE-MILLER: OK, all right, good, because I didn't want us to move down that path too far.

DR. REYNOLDS: Could I say something. I agree with everything you said, and especially about as we go through the final iterations on the draft. I think everything is here and I think you used the word, let's make sure that the committee is behind the major intents of the report, and the margins are not the most critical aspect of it. I strongly agree with that.

And I--in the most ideal of all possible worlds, I would totally agree with you about having the White House as

being the focal point.

Realistically though, this is a peculiar year. It's an election year and the White House, I would say now, is not in the strongest position right now to really be behind something and to try to--let me put it this way. I don't think we're a top priority of the White House now. I think it would be very hard to even get us up on the ankle-high priorities at the White House, to push something through in the remainder of this year.

We do intend, and we talked about it last night, and we will, of course, spend a good amount of time with Dr. Graham. He is interested in this report.

He, of course, met with us when we were starting, and I think his heart is with us. But I do think, and that's why I want to stress this to all of you because you all represent different agencies. It's going to be terribly important to have the agency chiefs on board, and I think that is going to have to be done quite independently.

That's the only thing I disagree with you about a little bit. I have to put that responsibility on each one of you, just as I think Bill Bennett will be a key positive player in this.

We have already talked to Eric Block. I think he is going to be a key positive player. We just are going to have to move agency by agency to make sure that they are positive.

MS. BISHOP: Let me just say one thing, based on my

experiences. Not only do you have to bring the agency on board, but because this is a political change, you are also going to have to get the top-level careerists involved.

DR. REYNOLDS: That's right, good point.

MS. BISHOP: Because as soon as my administrator leaves or yours or yours, then how have we institutionalized even the thought process in terms of monitoring and continuing on. So you have got to go--not only do you have to get the first man on board, but you are going to have to ask him to go down to get your top careerist, because they are the ones who are going to be left.

MR. OAXACA: I think you have got it, I think you are going to have to be very careful about what Ms. Lee-Miller says, that you don't make that an approval cycle.

Otherwise, you have diffused the whole purpose of the committee, and everybody does their own thing at the agency level, and it becomes their personal agenda to work a deal.

MS. LEE-MILLER: Yeah, and I wouldn't worry--I think it may be--and you were saying that it wouldn't be a priority. Let's at least find out.

DR. REYNOLDS: We will, we will ask for help.

MS. LEE-MILLER: I mean we might be pleasantly surprised that...

DR. REYNOLDS: But what I did not want this group to think was that Mr. Oaxaca and I would go see Dr. Graham and then everything would occur, and that the rest of you don't

have to do anything.

MS. LEE-MILLER: Oh, no, no. I was not suggesting that.

DR. REYNOLDS: [INAUDIBLE] be very blunt, that we really--you have a responsibility with your own agency head to come and say, gee, this is great stuff. Our agency is going to benefit from this. How can we get this out? You know, this really has some important repercussions. You ought to be a part of this marvelous bandwagon. Get on it. You know, all that kind of stuff.

MR. OAXACA: Shirley wanted the floor.

DR. MALCOM: I want to say that, in a way, this particular report gives the White House a tremendous opportunity to win one.

DR. REYNOLDS: It does.

DR. MALCOM: Because this is a non-controversial motherhood issue. Business recognizes it as such and I think, quite frankly, that the business community can play a particular leveraging role to get attention from the--to get the attention to this issue. Not necessarily the report as much as the issue, so that then the White House will look at the report.

I said, you know, last week I went to three meetings that weren't supposed to be about this issue and ended up being about them. And it was--there were a lot of business people that were there, and people from places that I just had--media,

you know, folks from the learning channel and the PBS stations and HBO, and they were talking about this.

So I think that there is a bigger.

?: The climate is there.

DR. MALCOM: The climate is there to have this come, to have a really, you know, to be able to do something.

The next thing I wanted to say is that one of the problems of going through the approval cycle is also if there is a change in party, you may have tainted the document.

This is not that kind of document. This is a bipartisan, nonpolitical kind of a thing. This is a national problem, and that's really the message that is to be--that we need to make sure that comes out.

The other is that one of the things that would be nice about getting an executive order is that presidents tend not to rescind executive orders that carry particular foci, but, you know, like the executive order on the HB--the historically black colleges and universities--that has continued over presidencies.

The executive orders, the order with regard to affirmative action with federal contracts, that has managed to continue over presidencies, even in cases where one might have expected that--from early signals--that wasn't going to happen.

So I think that there is some advantage as well as some advantage for imbedding it in the transition process.

MR. OAXACA: We're going to be adjourning in 45

minutes. We have to do the--Joe, if you're done--let me tell you what the problem is.

DR. DANNEK: Yeah.

MR. OAXACA: We want to be able to get to the eight recommendations on the report and kind of discuss those, and we still have Shirley on the pre-college education, and for you to finish up on the higher education.

So maybe we can move through that and get into the eight recommendations and leave the last 50 minutes or 45 minutes, I mean 35 minutes to the discussions on the eight recommendations, because that is very important for Sue and Deborah and Betty and those folks, Mildred.

DR. DANNEK: OK. I'm going to make this very brief. I think what's very important is that we've got a start on this survey and some of it looks pretty good, and I think we are going to be able to tell some things about it. I think we will be able to answer some questions.

But I am going to have to go back to everyone that has completed the survey, the people that are responsible, and deal directly with them to try to fill the gap so we can get compatibility across the agencies.

And with that, I think that we can come up with something maybe next month on it.

I think what's very important is, and I think we can use this, because I think it will fit in precisely with what you are talking about.

The survey, I think, is valuable for not only what we know but for what we don't know and who is not doing anything.

There is, in my view, some agencies that are doing absolutely nothing, when there are other agencies that have comparable missions.

The apparent differences are very little between the agencies' objectives and another agency is doing quite a bit.

So I think there's--I think there will be room to be able to go to agency heads with comparative analysis of what other agencies that are similar to theirs that are doing, and simply raise the question of, what is concern for people moving into your--into disciplines that are related to your agency's mission, and what are you going to do about it.

And I think in some of the letters that we have seen with regard to the survey, it appears very clear that some of the people who are filling the survey out are in fact willing to do something.

And I think we may be able to find some interesting things out.

MR. OAXACA: Thank you. Shirley.

DR. MALCOM: We had a meeting of the pre-college group and essentially what we tried to do was to tighten up our ideas and our thoughts and our language a lot more, and there have been some things that have been added, based on the discussions that occurred in California.

One was this whole issue of endorsing continuous

education in mathematics, science, and technology. At the same time, being cognizant of the fact that we are not talking about a national curriculum.

I think that this probably comes as close to any kind of statement about science literacy, as it were, that--you're right, we don't actually say "scientific literacy," but by endorsing continuous education in these fields, that is what we would end up with.

But I think that there needs to be some kind of signal about science literacy from some group, somewhere in the report.

One of the other things is that we talk about the question of outcome measures, which was not there previously, and that is this sense of how are we going to know when we get there.

And I think that there is a need for a great deal more research on different kinds of measures, so that we would know when we have gotten someplace. How well the students are doing, and how well they understand science, math, and technology.

The same other kinds of things are there--support for the models that already exist, trying to get more federal involvement in some of the issues.

We tightened up on some of the teacher recommendations and added pieces, for example, to encourage use of alternative certification--looking at models for alternative

certification to try to get more retired scientists and engineers to go into the classroom, to try to reattract people who are already certified back into the classroom because of the teacher need.

We have also added a piece, and it's amazing to me that it escaped as--on the whole need for long-term commitment, because you can't go into this with the idea that it is going to be solved anytime soon.

And we're talking about decades of what is going to be needed over the long term to try to bring about some change.

Other than that, I think that the large problem that I think that we're facing--oh, there's another piece, and that is to add something in here about mathematics as necessary for more than just scientists and engineers.

And I think that that is an issue that does need to be--it can be broadened and this particular notion can be inserted.

Now, one of the, I guess one of the problems that we face, as well as I face when I read the larger document, and we are kind of sneaking in the back door on the larger document, is the issue of how this particular section articulates with the next one and the next one and the next, to give a coherent sense of the pipeline and a coherent vision for where it is that we want to go.

Now, Nina is absolutely right. The federal investment in pre-college education is fairly small, and

compared with the overall investment in pre-college education.

And the federal role in pre-college education is a delicate one, given the questions of who has responsibility for what?

But there is indeed a national need for those folks, and so national need has to drive us to position, federal role, somehow, so that they can leverage the actions of other groups.

Now I don't know if that comes out, but whether that comes out or not, the whole question of how we leverage the system and make the system, the pieces of the system fit together, and what that is supposed to look like when we finish.

That is not what--I don't see that yet in the document, and quite frankly, I think that she did a marvelous job with what we gave her, which in some cases was not enough, because I think that this idea of how the system that doesn't exist, but that somehow we must envision, is going to come together to give us a pipeline full of folks who are knowledgeable and excited about the responsibilities, and who can deliver, whether they are in industry or in the federal government or in the classrooms or whatever, that vision, that common sense of purpose across the different pieces is what I am not seeing.

And one of the things that I think that we're going to have to do is that we're going to have to say, I think that

we as subcommittees have done pretty good, given the fact that we have looked at, we have restricted our vision to our own, to the boundaries that we were given.

But that now, as a committee of the whole, we must articulate a larger vision, and must look to the whole set of recommendations to see if they make a coherent, if they make coherent sense.

Are the things that are in here going to move us? Are we saying what the states actually need? Are we saying what the Federal Government can provide are the things that the states actually need.

Are we saying how, whether we are going to have enough teachers and where the responsibilities for the teaching questions lie.

I mean I think that the issue of teachers--we really have not, in essence, called the higher education system into account for the fact of the teachers that we have and how we're going to get them to a different point, or we haven't called the school systems to account for the kinds of service that we're going to need for the teachers, in order to get them to-- the ones that we already have, not the ones that we're going to be having through the pre-service line--into the system.

And is there some sense that the people, that the students who are in undergraduate school, do they see a place for them in the hierarchy of the scientific infrastructure?

Do they--can they look out there and see people in

line management positions? You know, I think that we're going to have to start lining up the entire document to see where those holes happen to be.

And then to focus in on some action things, rather than simply kind of restatements of prin--of--yes, we need to restate some principles, but I think that we also need to state some action things that are going to get us beyond those statements of principles to this larger vision.

MR. OAXACA: That's absolutely right. If you were grading, if you were grading ourselves as a proposal that you submitted to some agency for an award of a contract, you would, the part that would be missing was a sensible program plan for implementation.

And implementation is what's going to make it happen. Otherwise it will just be something else that somebody will throw on their shelf.

And that surely leads us into the part that Ann Reynolds talked about, that we have got to get started on, if you're done, Shirley. Let's now get into the part on page 21 which--the very bottom--which starts the eight recommendations.

And, you know, we would like to start the discussion. Ann, you had some thoughts on that? Maybe we can hand it over to you.

DR. REYNOLDS: No, I just want to just listen to the group. The two--there are two things that are very, I think are very important, and we have heard over and over again.

One is undergraduate research experience, and the other is science teacher in-service training.

I assume they--the undergraduate research experience, Deborah, didn't make it in here anywhere, not in even one single place.

DEBORAH: Right.

DR. REYNOLDS: And it really needs to be in here.

DR. DANEK: It was in the recommendations that we made. So it...

DR. REYNOLDS: It just didn't make it into the draft.

DR. DANEK: Didn't make it in, but it was in one of the higher ed recommendations.

DR. REYNOLDS: And the whole NSF totally agrees with that, and we do, too.

DEBORAH: What was the second one?

DR. REYNOLDS: The other is science teacher in-service training, all that, and Shirley just alluded to that. So I don't know whether they are--to me they are important enough to be somewhere in these eight recommendations, or to fit back under chapter 10.

The other suggestion I have is that in my view items 6 and 7 are quite related and could be coalesced together if they were shortened a bit, and those are my main concerns there.

And otherwise I just wanted to listen.

MR. OAXACA: Nina.

MS. WINKLER: A couple of comments. One is I am going to want some time after this meeting to go over these fairly carefully, more than just--this can get fairly chaotic with a lot of people's opinions. I saw...

MR. OAXACA: Well, let me kind of clarify that. This whole, the whole purpose for this morning is that it is absolutely imperative that every person in this Task Force go through page by page and in writing submit this.

Right before we adjourn, I'm going to turn it over to Sue and she is going to give us our drop-dead date...

MS. WINKLER: OK.

MR. OAXACA: ...that we must all submit our thoughts in writing to the system, so that it can get into that very difficult process where you tighten it up and make it punchy and all those other things that are going to sell.

MS. WINKLER: Good, OK, I'll save the overwhelming majority of my comments for the written comment. I think that is a very good procedure.

I have one substantive one, and then kind of a processy-format kind of one.

The substantive one is on the first one where we are establishing a national goal. The specific goal that's spelled out here is, "By 1998 have a science and technology work force at levels proportionate to their share in the population."

We have a little experience with a goal like that. We had a president's goal by 1990, regaining half the test

score losses since the sixties.

MR. OAXACA: Do away with the deficit.

MS. WINKLER: And graduation rate up to 90.

?: All of them are going to occur in the next two years.

MS. WINKLER: Right, I know, and graduation up to 90 percent. It's real easy to set these goals. We repeat them every year, and of course, it's just a hopeless situation. We are not going to make it. A few states have made it.

For that reason, having been burned once, I am concerned that goals that are in here be really attainable. And the thing that's impractical about this goal that jumps out at--well, there are several things.

One is that you are trying to have the people coming into the pipeline account for the fact that you have all these people already out there who are going to remain, who don't look like the population mix we're aiming for.

So one thing is I think this thing should be refocused at the new professionals, not at the existing.

It is a little strange to compare the new to the old.

The other thing is, given that it takes eight years...

DR. REYNOLDS: That is a very good point because even if we today started in the public schools and K through 12 and the universities, of having everybody represented at their population level, because scientists and engineers live such a

long time [laughter], statistically, and I think I'm right on this, by 1998, we would still not achieve that goal.

MS. WINKLER: It's impossible.

DR. REYNOLDS: It's impossible...

MS. WINKLER: Furthermore, [several people speaking simultaneously]--can I finish?

DR. REYNOLDS: She makes a very good point.

MS. WINKLER: Even if we were dealing with new professionals, the kids now who will be coming out of the pipeline are already juniors in high school, and we know we have learned a lot about, particularly junior high, and we have already lost a lot of them.

I think a goal is a good idea in general, but let's have something where you can have some victories along the way and not set ourselves up to lose.

DR. REYNOLDS: Where we could say, and be more interesting, "Were a child born today, by the year 2010 would have..."

MS. WINKLER: And you can have intermediate--I mean you need something a little, within our lifetimes that we can see. But I think you can do it by cohorts is one way to do it, and have goals.

And I think the goals--well, let's all go home and think about what those goals should look like. I'm not sure myself exactly what it should be.

DR. DANER: Could I offer another alternative way of

looking at this, and it may take more time than we have today.

We know what dropout rates are. We know that dropout rates for white males in high school. We know the dropout rates...

MR. OAXACA: What is that number?

DR. DANEK: The dropout rate for men, going from high school to freshmen, is 52 percent.

DR. REYNOLDS: No, but he was asking high school dropout rate.

DR. DANEK: Oh, OK, the national...

MS. WINKLER: The national is like 25 percent, ninth graders four years later.

DR. REYNOLDS: But let me ask white males, the high school dropout rate for white males is 10 percent.

DR. DANEK: Ten percent. For minorities, it goes to about 20-some percent.

MS. WINKLER: That was why we were going for a 90 percent graduation rate.

DR. DANEK: So we also know that, we also know that for black students who declare that they want to major in science and engineering as freshmen, that 77 percent of them don't make it to the baccalaureate degree.

MR. OAXACA: That's freshmen in college?

DR. DANEK: Freshmen in college who want to become science and engineering majors--77 percent of the blacks do not make it, 66 percent of Hispanics, and only 32, 31 percent of

Asians drop out.

The white male rate is 53 percent.

?: They don't drop out of college, they drop out of science and engineering.

DR. DANEK: They drop out of science and engineering for the degree.

Now what, we can--we also have the rates of how many drop out of college, but what I am suggesting is that if you were to use this mechanism and say that we want to in some way--the goals are to either move the minorities, women and disabled to the same rate or equal to white males or the population as a whole.

That kind of system might...

DR. REYNOLDS: Yeah, that's [INAUDIBLE]. But I would even interject there, to make the point. We don't even have the college dropout rate accurately for this nation.

All you have got in a given college is the students that came in and the number that are there five years later, successfully completing the baccalaureate, or six years.

We have no data...

DR. DANEK: OK, right, on each individual.

DR. REYNOLDS: ...on the number of students that switch institutions and eventually finish a degree. We have no national tracking system.

And so the college dropout rates look spuriously high.

DR. DANEK: But we do know that so many people declare to be majors in science and engineering, and we do know on a national average that the total number of baccalaureate degrees that are awarded. That's what this is based on.

DR. REYNOLDS: That's all you can do.

DR. DANEK: That's right.

?: Let me just inter...

DR. DANEK: I think this kind of approach toward retention, and we have seen in some of the programs already that they have retention rates of minority groups of 60, 70, and 80 percent.

DR. REYNOLDS: But, Joe, even there I have to warn you, though--I don't mean to be a problem and I will get off this track, but I [INAUDIBLE] the premed students that come in have to sign up with a major and most institutions of higher ed they can't sign as a premed major. They have to sign up as a science major.

Or if they are going into veterinary school or something like that. So they go ahead and they don't graduate with a degree in science. They graduate and go on into medicine.

Very often they don't because they don't fulfill the requirements. They have taken a lot of science courses but they end up with a general ed major.

So that we have to be really careful.

DR. DANEK: I understand that there are problems.

But I guess what I am suggesting is that the Task Force consider this sort of an approach toward setting goals, rather than the general approach of equivalent number in the population.

DR. REYNOLDS: I agree.

DEBORAH: Can I just make a little comment about why it is in there. Again, I'm repeating myself, I have said this one on one to several of you.

As a media person clothed as a member of the establishment at this table, I do think that it is hard to get--I do think something like this ought--I mean I would recommend that something like this be in the report, and be, however it's fashioned, as credible as possible, which this statement isn't particularly--Betty's nodding, because she and I talked about it--in order to get attention when this darned thing is released.

Because you need something in there that is the obvious first line of the story, and that will help people write the story.

Now, I'm not saying that we put in anything in our report for PR only because I think that really hurts us. So I am not--there is a balance here between something that will get attention and something that is credible.

DR. REYNOLDS: We really need to move this group, and I think if we all work on that, when a child is born, with Betty Vetter's help, we can come up with the statistics. Why

don't you go ahead to the next question. We got it, we can do it, good point.

MR. OAXACA: OK, let's go on to the number two.

MS. BISHOP: Can I just make one point here? I must make a point. And that is that if you're intending, if you continue to use the levels proportionate to their share of the population, I don't want it--I know how some of these agencies work, and I don't want it to be such that in the case of black population, which is 11 percent of the population, that once we reach that level then, you know, we should just stop it, cut it off.

That's what I don't want it to say.

DR. REYNOLDS: It needs to be child born opportunity.

MS. BISHOP: Yes.

MR. OAXACA: I think we must not lose sight of the fact that the national competitive requirements are going to demand so many folks that are science and technology people, and you start out that if you need a million science and technology folks by a certain year, you have to start a production line.

It's no different than widgets, you could call them widgets. And you are going to have to produce them with the factories that you have in being at the beginning, with the modernization of the factories to get economy of scale, and those widgets are going to have to have the latest goodies.

The initial widgets are going to be the ones that

have less goodies. That is the existing work force.

And you are going to go down the path so that by the time you are in full production with science and technology people, you are producing the best science and technology people that puts the nation back pre-eminent in the world.

And that has to be the basic thrust of the whole report because you are going to have to draw from the existing populations that are there, and how do you do that?

And so, that has to come across to the nation, because the nation will understand that.

Otherwise, you will get into quotas and all those other things, and so we have to be very careful. And so how do you write that as a goal that doesn't get into anything that can be criticized.

It will be like, like Shirley says, it's motherhood, apple pie.

MS. WINKLER: I think we should just propose language when we go back. I mean I can think about and others of us can--Joe can think about it.

MR. OAXACA: Yeah, OK.

DR. REYNOLDS: To try number one.

MR. OAXACA: Let's go into number two--private companies and their reps, and Conference Board and all that. My comment to that was--and I have been talking to Dr. Neblitt of NACME.

I have great concern about the fact that we don't

have like an AMA for engineers and scientists. We don't have a united set of folks that represent all of the different subsets of folks.

And unless we have some organization, and I, my thought was that NACME was the organization that would be the lead organization for the black engineering societies, for the Society of Hispanic Professional Engineers, for the folks in the medical profession, the folks, you know, of the AIEEE, maybe, but then that's just one set of types of engineers.

Who is going to be that one organization that will take the lead to say, we and the organizations that have got all these engineers organized--the Society of Women Engineers--and we support this particular document as the thing that makes sense.

You know, in the Conference Board and the National Alliance, and all those, we don't have the mechanism in there somehow on that, and so I would suggest that maybe somebody has some good ideas on that and how we fit that in there, because you are going to need that kind of a constituency.

DR. MALCOM: What are you trying to get them to do? I mean what entity, what kind of thing are you looking for, Jaime, because quite frankly the Office of Opportunities in Science of the AAAS has been in business for over a decade and a half working for women, minorities, and the disabled in science and engineering.

And when other people weren't talking about this

issue, we were, and a lot of the things that have happened in this particular area have happened because that office was there.

I mean I wasn't the leader of that office, and didn't provide that leadership all this time, but it is the umbrella organization of the scientific community.

And the affiliates of AAAS actually contained the AMA, as well as the dentists and the engineers and the academies.

MR. OAXACA: I think that's terrific. I think it has to be written up in a way that says let's do it that way, so that, you know, you can see the whole gamut of these engineering organizations is saying, hey, you know, we are in the business and we recognize that there is a problem there and we need that solved, and that's another constituency, along with all the stuff with the media and industry and everything else.

DR. VETTER: Just don't mix up the science and engineering organizations. You can get the science organizations to support this, the engineering organizations will not, and there isn't any major--AAES won't.

There is no overview engineering organization that agrees it wants women and minorities, and don't kid yourself into thinking it is. It does not exist.

?: That's true. Amen.

DEBORAH: Could I just make a comment about this

number two, to keep just sort of focused a little bit.

DEBORAH: I do--it goes without saying to everybody in this room that the private sector role is something that we really have not explored in our hearings particularly, in my view, except for yesterday's testimony, which I thought was very promising and interesting, from several of the witnesses.

And I put it in because we all are philosophically inclined to say that there are so co-equal sectors here, all of which have to do something.

And also because when I asked Nate Thomas a rather innocent question, which reveals my ignorance of all of this, why was there a movement for blacks to go into engineering and there wasn't for blacks into science, he burst into laughter that Alice in Wonderland here didn't know the answer.

And the answer was that corporate America wanted engineers and wanted black engineers and they don't care about finding any scientists.

So that their support over these years has come from companies willing to up all of \$2,000 at a shot, \$3,000, \$1,500, to help.

So I do think that we need to--I put it in here to try to focus everybody's attention on the fact that we need to balance our recommendations out, but we really haven't thought of what we want private industry to do.

And again, the media, exactly the same reason, we haven't explored exactly the relationship between TV and all

that, although there is a lot of promising information.

And I just--I call your attention to the need for some real hard thinking.

DR. MALCOM: I have some contacts with, among some of the media people who are trying to organize around this particular issue, and so I can give you the names. There is a blue ribbon group that was really formed, I guess, by Terry Sanford, working with Hal Morris at the Learning Channel.

And they are starting to draw in other groups, looking and trying to get public service announcements on television, trying to send the message that we have a changing population here, and we have to deal with this issue in terms of science and technology in particular.

So I can give you some of that.

DEBORAH: Great.

MS. BISHOP: In addition to that, it seems to me the pharmaceutical companies, like Upjohn, and a lot of those other companies that do a lot of work in the biomedical, biological, toxicological area ought to also be supporting this.

I mean the engineers may have a loud mouth, but it would seem to me that you also should be able to rally to get some of these other types of companies to rally just as much as the technological companies that require engineers as [INAUDIBLE].

DR. REYNOLDS: That's a good point, and we talked about that last night, and we are almost in an ironic

situation, in my opinion, because I think there is a very strong organization for the pharmaceutical companies, called the PMA, Pharmaceutical Manufacturers of America--it's very big, very strong, very powerful.

They will embrace this report. They are very eager to hire more people.

MS. BISHOP: And toxicology--that's right.

DR. REYNOLDS: They won't be a problem.

MS. BISHOP: The buzz word these days is "risk assessment." Everybody wants to be in the risk assessment business.

DR. REYNOLDS: We plan to contact some of those big organizations. I will probably do PMA.

But I wanted to say one other thing. I think the media--I wanted to praise the second one, the media one. There is another group as well, Shirley, that is a very strong group, the one that Norman Lear spearheads, and I have forgotten the name of it.

It's Center--it has a lot of money, but more importantly can probably do something actually at the heart of media, so we should contact that group.

DR. MALCOM: The other is Action for Children's Television.

DR. REYNOLDS: So just put Norman Lear down. The other...

MS. LEE-MILLER: I think we have got two things

happening here, though. I heard an earlier appeal for a national network of industry leadership to come together, to pull together a private sector network.

That's different from the media recommendation. You might want to split those two.

I'm saying I'm not sure I would put them both in the same.

DR. REYNOLDS: Think they ought to be split?

MS. LEE-MILLER: I would split them. I would deal with the media as a separate...

DEBORAH: Well, we could split them if we had something to say, but at the moment, all this is a rhetorical call, and I would call--I would be highly critical of it myself, if I were writing about it, as a schizophrenic position.

DR. REYNOLDS: Yeah, and a good point.

DEBORAH: Because there are a couple of things going on here. One is that we have to face the fact that although I think Mary Good and Mr. Oaxaca and a number of industry leaders are deeply concerned about this issue and would put their bucks where their hearts are, a lot of the industry support in the past for this issue has been token.

And you don't really have to look into this very far to find out that they love to get the mileage out of giving \$1,500. We heard that Ford Motor Company's total giving to this issue was \$40,000. That's how I could decipher that

testimony. Maybe it's more.

MS. LEE-MILLER: But that's a problem.

DEBORAH: Right, exactly. So all I'm saying is I think there are two orders of problems here, and then I'll shut up. The first order is that there is not yet the kind of fad within--if you will pardon my using blunt language--within corporate community circles for this issue, although it is developing, and I think we heard some of it yesterday.

And it's development--Shirley probably knows as much about how it is developing as anyone, but one thing we have to do is to try to make it fashionable and interesting for corporate people to talk about, and it is, and some--it's not tokenism.

MR. OAXACA: This is a hard sell.

MS LEE-MILLER: So you could talk about a White House conference.

DEBORAH: Yeah, exactly, things like that.

MS. LEE-MILLER: Promoting a national network--all I'm saying is to get the private industry leadership to network is an important priority, and they won't necessarily perceive themselves as grouped in within the entertainment and media.

DEBORAH: Yes, right, well.

DR. REYNOLDS: I think they should be separated.

MS. LEE-MILLER: So perhaps we might want to say, to ask for a White House conference on this subject for the purpose of galvanizing private awareness, or something like

that.

MR. FERNANDEZ: This is one of those issues that I think can become very practical in our recommendations. If you listened to IBM yesterday, he said very definitely, they were zeroing in on the one through third grade.

And I have heard that from different companies recently, in the last two months, and I think that's a true movement among the private sector to support the lower grades.

So if you couple that with the media, publicity to them is a positive thing. I mean it's a good thing for them to get good, positive publicity.

At the same time, they are addressing one of the key issues that we brought up in the report. So that could mean big bucks from big industry and have a national type of effort in that direction.

MR. OAXACA: Let me break right here and then get back to this same subject, because we got a lot to go, but so that we don't get to the time and don't cover the issue on preparing for the Boston meeting, which is a very important meeting.

Let me turn it over to Sue, who will give us our marching orders.

MS. KEMNITZER: You have before you an envelope you should look at and do what the instructions tell you to do. Send in the card.

Point number two, I had a feeling that it would be

beneficial in Boston to set aside that evening so that particular people who are concerned about a specific target group--women, handicapped, black, Hispanic, American Indian.

MR. OAXACA: Which evening, Sue, which evening?

MS. KEMNITZER: The evening of April 7th in Boston, could get together to look, yeah, to really scrub through the report and be sure that that target group is adequately covered. And then share with us any thoughts you have the next day.

I will call up people to ask them to organize each of those. I don't want to spend time talking about that now.

But those are the two announcements about the Boston hearing.

MS. LEE-MILLER: You probably already thought of this, but since Boston is the seat of high-tech, getting some of those industry people on board.

MS. KEMNITZER: Yes, I can tell you that we have diligently tried to get industry representatives at each hearing, and the lack of attendance is not for want of trying, and I will make my appeal again, if any of you have particular personal contacts which we could use, I would welcome those leads.

MR. OAXACA: I think we should put the arm on Norbert and on Jim and on Biaglow and on Alan and Larry to see what we can do to have more testimony on those areas that we all agree are woefully weak, and that is in the disabled and in the

American Indian, the Native American.

MR. HILL: Let me just share one thing with you and invite you to a meeting next week at AAAS, March 10th. We have invited several government agencies to attend a meeting on "Indian Education: A National Tragedy," sponsored by Shirley's outfit and the Linkages Project.

And we have already drawn 50 to 60 people already, which is way above--and every time we have done this, we have had a good response.

So, you are all invited. Let Shirley's office know that you are going to come. So that might be a way of getting some more information, and I will be working with Debbie and Sue on putting together some recommendations that will make some sense.

DR. REYNOLDS: Could I just ask one thing? I don't mean to put our dear leader on the spot. Is it necessary that we have the Baltimore hearings? I just think this group needs more work time.

Could we cut the hearings down in time and get this, and just have us have more work time? You know, if we are at the point that we have really heard from the people that want to testify.

We are having a terrible time getting the corporate world to testify, and I don't think that is going to get any better. And I, for one, I think this group just needs more working time together now.

?: Agreed.

DR. REYNOLDS: What do the rest of you think?

MS. KEMNITZER: Let me propose that we have a few people whom we have already committed to speak in Baltimore. We could certainly have those [INAUDIBLE]...

DR. REYNOLDS: Very few.

MS. KEMNITZER: ...and then use more of the time for work sessions.

DR. REYNOLDS: Yeah, good.

MR. OAXACA: Shirley, you...

DR. MALCOM: I think we might want to structure the time differently. And let me just make a suggestion. I think, for example, in terms of Baltimore, that it might be appropriate, rather than to say to the people who would work on the disability issue, to try to get speakers, people to come in and testify, in fairly incoherent fashion because they are scattered through the day in different ways.

But you say, we want to give over an hour and a half on disability and we are going to bring in four or five people. We want to organize that time to be able to have dialogue and to have the people go back and forth, so we can make sure we get what we need.

MS. WINKLER: Like a panel, you mean?

DR. MALCOM: Like a panel.

?: Have them all there at once.

DR. MALCOM: Now the reason to have it concentrated

in such a way so that we can get the maximum kind of information out of that, rather than the kind of the testimony format.

To say we want to focus in on this for an hour, let Larry and Jim decide what that panel would look like and what they need to get out of that, and then to have a dialogue.

Because I think that it's much more productive.

DR. REYNOLDS: It is if the people are used to doing that. If they are not used to doing that, you are going to have [INAUDIBLE], and the advantage a little bit of having people testify and having a chair there is this we've had testimony, when there has been a witness that there were a lot of questions and there was a dialogue, this group is not shy about engaging in a dialogue with witnesses. We have had quite a bit of it.

And then if there is a witness where that is either inappropriate or that would not work, then the chair has the discretion to move onto the next witness, thereby using our time in the best way.

So I am just a little nervous.

MS. WINKLER: We could schedule.

?: Schedule them one at, yeah

MS. WINKLER: And ask them not to leave the room.

DR. REYNOLDS: That would be fine, that would be fine. I just say a modified thing. I don't think we want to get caught into a two-hour panel discussion and maybe be a

waste of our...

DR. MALCOM: But I think that we need some focus, to make sure that we can get a coherent [INAUDIBLE].

MR. OAXACA: Herb.

MR. FERNANDEZ: I have got a great concern that we are running out of time.

DR. REYNOLDS: Me, too.

MR. FERNANDEZ: In that this is the first time we have really talked seriously about the recommendations, conclusions. I think there are more conclusions than recommendations here.

In taking the eight points here and splitting them down to the specific recommendations that make sense, that are practical, that we can sell, and that we really believe can be, lead to the solutions to the problems, I think we need at least one meeting solely to do that.

And I'm afraid that the Baltimore session is a little too late for panel discussions.

MS. KEMNITZER: Well, we will have a day of meeting in Boston, that following day.

DR. DAN EK: How many people have already been committed? I mean how many people have been signed up for Baltimore, that have already agreed to?

MS. KEMNITZER: Five or six.

DR. REYNOLDS: And how many for Boston are firm?

DR. DAN EK: Don't you have commitments to those five

or six to hear those people?

MS. KEMNITZER: Yes, yes, that's what I said.

DR. DANEK: Then I think we should go ahead with that. I don't think you should cancel them. Maybe a half a day.

DR. REYNOLDS: But, Sue, how about Boston?

MS. KEMNITZER: Boston, we have about 10 people who are absolutely firm.

DR. REYNOLDS: But could we not have any more in Boston, so we cut the?

?: I have more than that, Sue.

?: I hear a voice over here in the wilderness.

DR. REYNOLDS: I'm really pretty serious about this, and I really think this is the sense of the group. I think we really should not have any more in Boston, cut back, give this group work time.

And I think in Baltimore, just the ones that we have had commitments to, and then this group needs work time.

MS. KEMNITZER: Yes, got it, OK. We will structure it that way.

DEBORAH: What about just having a longer meeting the next day? We have got 9 to 12.

DR. REYNOLDS: Sure.

DEBORAH: I mean does everybody absolutely have to leave at 12? I mean is there something written by God?

MS. KEMNITZER: That was set up in response to the

feeling of the group, so.

DR. REYNOLDS: Well, we start to lose people.

DR. SCADDEN: Getting out of Boston in late afternoon.

DEBORAH: Well, start at 8 a.m. then.

DR. SCADDEN: Yeah, OK, seven.

DR. REYNOLDS: Yeah, but, I'm just saying, the sense that I'm getting from the group and privately is we've had about enough witnesses. If we have got commitments, we follow through on them.

Otherwise, the group uses its time together for work time, and I see people nodding.

MS. KEMNITZER: We will set it up that way.

DR. CLIVE: Excuse me, how do we reconcile that we have heard enough witnesses, but we also want to hear more people from the disability community.

DR. REYNOLDS: They have the priority.

DR. CLIVE: But you have already got commitments from, sounds like a lot of people in Boston. Now, for instance, I know a lot of people in the disability in Massachusetts, having lived up there for six years.

But it sounds like you have got a full agenda already.

MR. HILL: I have the same concern with Indians, too, that we could get the right people together.

MS. KEMNITZER: Well, if I may ask this. Let me go

back to my office to work tonight and tomorrow call each of you and--one the Indian and handicapped item--and line up concentrated push on those without...

DR. DANEK: Sure, because I think there are other ways of getting input without the public hearing. We can certainly collect information from the groups that we haven't heard from and get public statements and even hold meetings if we have to.

DEBORAH: If I could make one recommendation of an informal nature, which was brought to my attention by the staff, that I think it is also quite important that we not go around about how we are writing this report.

I mean we collectively are writing this report, or I am writing this report in the sense that we really have not finished our deliberations, and I think we are agreed that we have not finished our deliberations, and it's rather insulting to the people who will be testifying later if we are waving around drafts of a document that presumably summarizes.

MS. BISHOP: In other words, no leaks.

DEBORAH: Well, not only no leaks, but just not to take a position with prospective witnesses or people in the community that we're dealing with that we have really got this thing all sewed up.

I mean I realize it is a little contradictory, but it is really not, I think.

MR. OAXACA: Yeah, and I think, I think we have to

take the inputs from those folks with the same seriousness that we do, and once again, we're woefully weak in the disabled and the Native American end of it, and we have to give that a significant priority, and Sue will be contacting these, the folks on the Task Force that are the experts on that, and then she will formulate accordingly.

You know, I don't know that it's out of the question to have a session in Washington where it is just a two-day working session, because it looks like Baltimore and Boston are booked.

DR. REYNOLDS: Well, no, we have said they are not going to be booked.

MR. OAXACA: Well, but I mean they are booked to some level. They are booked in Baltimore to the tune of six folks.

DR. REYNOLDS: Well, if you have got any higher ed people in Boston, just tell them not to come. They understand.

MS. KEMNITZER: I also would like to say that, just to get all of my cards out on the table, so to speak, we have to rely enormously on Deborah and her writing ability, and I would really urge you to get your comments in now.

I don't want to push you unduly, but she needs to have your input. Personally, I feel that what we have gotten from the subcommittees are largely weak conclusions, and we need a strong action plan.

So please, let me ask to read the draft with that in mind, and as soon as possible, I will set the deadline of next

Wednesday. Please get your written comments to us.

MR. OAXACA: Nina.

MS. WINKLER: I have another process issue that I think we have to at least look at quickly now. I really like the plan to have left-hand side examples on every page. That has several implications.

One is that the report is way too long and we're going to have to cut, and I'm sure everyone already knows that.

The other, though, is, from experience in writing what works books where we have the same format, we have a word we use--"bulletproofing the examples."

What happens when you publish a report like this and you put someone on the left-hand side of the page is that the news media pay a great deal of attention to that. You have to make sure that those things are legit in every way, that they are claims for success are substantiated and so forth.

The process of bulletproofing a large number of examples is no small job. We put a lot of staff people on the phone for days and days and days. We don't just call one person. We call a lot of people, because you would be surprised how many get thrown overboard at the last minute as being unsuitable, or having unproven claims.

DEBORAH: Could I make one comment on that? I would be--it was a comment I was going to make anyway--number one, as you read through this draft closely at your leisure, please feel free to scribble in the margin any expletives that come to

mind, but also bear in mind that in preparing this one I did not double check the figures that are used in there to the extent that I should have, just because of time--the 29 percent physics being an example.

And as a journalist I would try to be very responsible to only use those figures that clearly represent what we intend them too, all right?

So if you experts, as you read this, see anything that jumps out at you, write me a note about a figure or a percentage or say where you think I can get it, because there is a vetting of the numbers that are in here that just hasn't been done, and my apologies to Betty for shortsighting her, because she and I had a number of phone conversations, and then I didn't run this past her before it came to you.

So I have underutilized one of our human resources.

But, secondly, re the boxes, if you have a good staffer who likes to do that stuff.

MS. WINKLER: It's extremely costly in staff time. We used, we used interns.

DEBORAH: We have a little bit of resources within the staff. I will do as much vetting personally on the phone as I can, and we have a couple of good people.

MS. WINKLER: What I would be happy to do, and I think we should share this work around and not burden any one person. But we kind of are good at, especially at checking schools out, particularly exemplary schools. That's where our

best contacts are. I'm sure other people have contacts in higher ed and so forth.

We have done a tremendous number of checking of elementary schools, and certainly those that have been cited through various recognition programs.

Maybe you should think about ways to spread this work around. It really is something that needs to be planned and managed well.

DR. MALCOM: Some of it you don't have to do. We have gotten updates, for example, on a number of the intervention programs, and the work--and Tony Clue just came out with a brand new Ford Foundation report--she's at ETS--that went back and checked all of their evaluation data and everything like, and so she can tell you which ones are for real and which ones are not, in the middle school group.

So you don't have to redo that work. You just have to run through our files. And I think that that might save you some time as well.

DEBORAH: Well, there may not end up being all that many of these things. I don't want it to get too cluttered up either. The main point is to have a format that recognizes the diversity of the problem without distracting from the main thrust.

MR. OAXACA: Let me ask the question. We were scheduled to adjourn two minutes ago. What do you folks want to do?

SEVERAL VOICES: Keep going. Keep going until noon.

MR. OAXACA: Keep going until 12?

?: Yes.

MR. OAXACA: And then we all gotta go check out, I guess.

DR. CLIVE: Excuse me, Jaime?

MR. OAXACA: Yes.

DR. CLIVE: Are we, are we off the media issue, because there was a comment I wanted to make about that?

MR. OAXACA: No, we're not off of anything. We are back to what we were talking about before we got into the housekeeping thing of Boston and all that other stuff.

DR. CLIVE: I wanted to say something about the recommendation for media, from the skewed perspective of the social factors area.

I think there are two strains at war in American society. One of them is respect for authority and the other is disrespect, and it is my personal view that disrespect for authority is probably a good thing, and that it probably keeps us from becoming a police state, a fascist tyranny, etc.

And that we need as much of it as we can tolerate as a society. Now, unfortunately, what that means is that one of the focal points of authority is intelligence, and I'm afraid that the anti-intellectualism that is so rampant in our society probably stems, in part at least, from this very healthy lack of respect for authority.

And this is something that I think doesn't even operate on a conscious level all that often. I made reference in California to this "Mr. Science" show. I don't what went into the minds of those folks when they were developing this thing, but it is certainly detrimental to the image of science, and yet it feeds so perfectly into that unconscious sense that these guys don't even know what they are talking about.

And so, just as Nina suggested that our first recommendation might come a cropper, I would suggest that there is only so far we can get with asking.

Even as we recommend, and even as we all like to have the image of science brightened, that there is only so far that we are going to get and perhaps in a way there is only so far we ought to get.

DEBORAH: How about Orrin Hatch could set up a black marks day for media events that are detrimental to science, just like Proxmire's, what was his list?

SEVERAL VOICES: Golden Fleece.

DEBORAH: Golden Fleece Awards. Just have some senator who wants some publicity issue, you know, a booby of the month award to some TV program that makes kids think negatively about math and science.

DR. CLIVE: Yeah, that's not bad. I think the more publicity in our--I know in our little disability world, we have a magazine that has a regular column on awful things that happen on the media and awful advertisements.

Unfortunately, that magazine has a 4,000 circulation and you don't hear too much about it. I think that is an excellent idea.

I think that this is an area where really half steps are perhaps all we are going to be able to get. But when we do these things, let's just keep in mind that we are kind of fighting the collective unconscious.

MR. OAXACA: If we are going to stop at noon, that leaves us four minutes for three through eight--each. So let's go on to three.

[Comments about checking out]

MR. OAXACA: I haven't checked out, that's OK, just tell them one o'clock.

So let's go on to three, "The federal government shall be the pacesetter in creating attractive educational and employment opportunities for all scientists, etc."

Comments on number three.

DR. DANER: I would again like to reiterate the need and desire to expand what we mean by employment and recruitment to include some concern for developing people in the pipeline and agency responsibilities or mission-oriented agencies.

It is not just hiring people when they are 18 or 19 years old, and I think that...

MS. WINKLER: Doesn't Ford do that?

DR. DANER: ...somewhere that responsibility ought to reflect that--no, I don't think Ford does that.

DR. REYNOLDS: Why don't you try reworking the wording on the bit to reflect that. I think it's a good idea.

MR. FERNANDEZ: I would like to reinforce again that in this area of the federal government, anything we can do to really be specific on our recommendations, on the back side of page 63 that we should, because, to refresh your memory, the first meeting we had, Congressman Lujan, who is a supporter of this Task Force, specifically said, "Get me specific things that we can work through Congress and take specific actions on."

So, again, even though we might not be able to refine the data very closely, I think we can make some very specific recommendations.

MR. OAXACA: Any other comments on three?

MS. LEE-MILLER: Well, just that we, did we make a conscious decision not to include things like calling for legislation or executive orders in this section?

?: No.

MS. LEE-MILLER: OK, well, one way of adding some specificity is to insert that kind of language here.

MR. FERNANDEZ: Well, the idea, I think--Debbie, correct me if I'm wrong--this is the overall sort of conclusion and thrust. Page 63 and on will be the detailed sort of things for each of these areas.

MS. LEE-MILLER: Yeah, I understand it, but...

MS. KEMNITZER: May I just say something? I believe

that 90 percent of the people who read this report are only going to read these eight points, so whatever you really want people to know, you gotta put it in there.

MR. FERNANDEZ: Well, let me make my point again. The things that go to Congress, the Congressmen might just read the eight points, but they are going to give it to the staffers to try to find implementation of this thing, and that's where you are going to have to have something that's specific in the back, page 63 and out.

DR. REYNOLDS: But I think Dr. Lee-Miller is right. An executive order is so important it ought to be in this section.

MS. BISHOP: Let me--can I ask a format question? One of the first things I wrote down was, where was the executive summary?

MS. WINKLER: Yeah, I was just about to say the same. You buried it on 21, it's buried.

MS. BISHOP: If this is the executive summary, then that needs to be page 1, 2 or 3.

MS. WINKLER: I'd say page 1.

MS. BISHOP: Because you want to hit these folks with a bang up front and a lot of what has been written in the forefront--you know, I'm not sure could that be moved back as an introductory or background.

But if this is to be an executive summary, it's got to hit me square in the face on page 1.

MS. WINKLER: Yeah, I think it should be the first thing after the title page, even before the table of contents or anything else.

DR. REYNOLDS: And that really needs to be added in here.

MS. BISHOP: That's right.

DR. REYNOLDS: It's not written right now.

DR. DANEK: Was there any thought at all to having a stand-alone executive summary?

MS. KEMNITZER: No.

DR. DANEK: Of maybe 10 pages?

MS. KEMNITZER: No, no, I would really strongly recommend that we have a report that ends up being 40 to 50 pages at the complete thing and referenced by incorporation anything else...

DR. DANEK: Because the way we're going [INAUDIBLE], we start paring down, that's not going to be possible.

MS. BISHOP: We're going to have to pare down.

DR. REYNOLDS: The one thing I wanted to say on that, when we come to that. I had a little bit of conversation with Deborah about it and a longer conversation with Betty Vetter about it.

Back in what I call "the thick pages," which runs from about 35 to 55, there is an awful lot of data, an awful lot of anecdotal material from the hearings. We are kind of halfway between a doctoral dissertation introduction and where

we want to be.

We don't have the room to do a thorough analysis of women versus men's test scores or what's led us into this. I just don't think people would read it, even though it's tempting.

And I think those 20 or 30 pages, with Betty's help, have really got to be culled down. So we're basically just saying, "Girls' scores are lesser than boys' scores." You know, "The data indicate that this," or the basic analytic conclusions.

I think that those pages can easily be trimmed to about five, and that will help a great deal, and then...

MS. BISHOP: That plus the complementary pages which reference name and address of specific people that you wish do go into more detail.

DR. REYNOLDS: That's right. And then we have the two or three page executive summary at the beginning, as you pointed out.

MR. OAXACA: Any other comments on three? Then I guess, Joe, you kind of led it into four.

MS. BISHOP: Joe, did I hear you say three, did I hear you say you wanted more on retention? What did you say?

DR. DANEK: No, what I would like, it was a broadening of the definition of employment and recruitment for federal agencies to include a sense of responsibility for funding some training programs which ensure a proper number of

people to be able to recruit, to employ.

MS. KEMNITZER: Training, you meant the graduate level?

DR. DANEK: That is to provide a training function, and many of the mission agencies that--we may have to recommend that a training function be added to many of the mission agencies, so that they can do...

?: We said that.

DR. DANEK: That's right.

DR. REYNOLDS: This is a very important part we discussed over and over again, because currently the agencies are there plucking talent, especially Defense, with no commitment or no set-aside of their dollars to help create the kind of people they.

DR. DANEK: That's right--to help create a supply, exactly.

DR. REYNOLDS: And that whole responsibility is left on the university [INAUDIBLE].

DR. DANEK: Or the Education Department or NSF.

DR. REYNOLDS: Or the Education Department, which is unfair.

MS. BISHOP: This is the "grow your own"?

DR. DANEK: Every--I mean it's part of instilling in every agency a sense of responsibility for a role in the pipeline, not just using the people.

DR. REYNOLDS: That's right, that's one of our

important points.

DR. DANEK: And I think that is a very important point, and that--it doesn't come across in [INAUDIBLE]

DR. REYNOLDS: And it needs to be there in number three...

DEBORAH: Could I ask for a clarification, though. I'm sorry it is vaguely stated there. It could have been more punchily stated and it's my fault.

I think if you look on, when you are reading closely the chapter 10, you will find that several of the subcommittees specifically recommend a federal role in K to 12, and then Joe has raised the issue, which I think is also in some of the chapter 10 recommendations, of a federal role in training and helping to grow your own at the next levels up.

So I am happy to recast this very explicitly to state both.

MR. FERNANDEZ: Let me make a point of that. I think in the first case, the excuse they give you is that it is not within their jurisdiction and the law does not allow it. So that might be a thing for Congress to address.

The second portion, though, in the higher education, the best mechanism is to provide upfront research dollars directly to the universities that would tie the recruitment of minorities, women, and handicapped into the graduate assistance programs or whatever, to augment that research.

The idea of an additional training function would

probably help also in mainly in the two-year institutions, where again they say, well, that's not really our job.

DR. REYNOLDS: But let me give you the worst kind of example that has just happened. As you know, DOD, which has a huge budget, has just had its increase trimmed back. It's not had its basic budget cut, just its increase has been trimmed back.

Do you know what they did? They cut a whole lot of ROTC training programs. I mean that was considered superfluous.

We need to say that that's not acceptable, that the educational programs, small as they are, should be protected, and that they should be doing even more of them. And I think that's what the point Joe was making.

DR. JENKINS: Mr. Chairman, may I make a comment? When we make the executive summary, perhaps we ought to decide whether this group of eight happens to be findings, or whether they are recommendations.

It seems to me that even the mention to the executive order shouldn't be there until we get to the recommendation side of the house. Perhaps...

DR. VETTER: They could also be conclusions.

DR. JENKINS: Right.

DR. VETTER: That the reports I came up with were recommendations, conclusions [INAUDIBLE]

DR. JENKINS: Yeah, and so there is an amalgam there.

DEBORAH: But one could have two short lists, one of which was findings and one of which was action.

DR. REYNOLDS: Two lists, that would probably be better, yeah.

DR. JENKINS: OK.

MS. LEE-MILLER: And the chapter 10 is really more the action side.

DEBORAH: It's the branching out of the details.

MS. LEE-MILLER: Well, maybe we need to merge chapter 10 into this portion. We say, "Here's our finding. Now, here's what we want to do about it," zip, zip, zip, and put them all there together.

DR. JENKINS: May I also make one additional comment? When you get to the teaching section, wherever you put it, don't forget the issue of expectations that children can learn. I don't think they are in there now.

?: Good point.

DR. DANEK: Deborah, have you seen this?

MS. KEMNITZER: Yes, we mailed it to all the Task Force members.

DR. DANEK: OK, I wondered how I got it, but I [laughter]. I merely wanted to say I thought it was a good format.

MS. KEMNITZER: We are adopting it!

[Several comments simultaneously.]

MR. OAXACA: We can check out at one o'clock or two

o'clock, and it looks like we might have to.

DR. MALCOM: One of the, see, one of the problems, and I've said it before, with continuing to think in the subcommittee mode is that, yes, we put in our particular section that they ought to have a training function, K to 12. We really believe that they ought to have a training function, period.

And so it's not necessary to say, you have a training function, K to 12, and you have a training function on grad-- you ought to have a training function, period.

DR. DANEK: Right, right.

DEBORAH: But it's been so ambiguous over the years, and it is a big issue for NASA and a lot of agencies. So [INAUDIBLE].

DR. MALCOM: I know, but I'm saying that I think that we could make it explicit and let one particular thing take care of it, and that's what I mean by thinking across our subcommittees.

DR. JENKINS: May I make a suggestion? I am a little worried about time and whether we are going to be able to give you good input, so we can get a good report.

And I was going to suggest that maybe we look at calendars and see if in Washington, D.C., we could get a representative group of each of the subtask groups to do what Shirley was talking about, which is to stand back from this and look at it an overall dream, and see if we are really helping

the nation take a look at this problem.

And it means maybe just sort of distilling and priorities here, making sure that things are kept in--but they would work with Debbie and Sue in Washington. That's what I would recommend.

DR. DANEK: You mean between now and Boston?

DR. JENKINS: Yes.

MS. KEMNITZER: That--I would welcome that, and I would say it has to be next week.

DR. JENKINS: All right. Get the input in by Wednesday and the group meet maybe Thursday, Friday or Saturday?

MS. KEMNITZER: That sounds good.

DR. MALCOM: Thursday is the American Indian meeting at the AAAS.

MS. KEMNITZER: Why don't we say get your input by...

DR. MALCOM: This Thursday meeting at the AAAS, the Indian meeting.

MS. KEMNITZER: Right, right. Why don't we say, get your input to me by Wednesday, and we will hold the meeting on Friday--Friday.

[Several inaudible comments]

DR. VETTER: Is there ever a time to [INAUDIBLE] kinds of revisions.

DEBORAH: Well, I wouldn't be able to do, resubmit anything, but I think that Harriett is right in the following

sense, that, you know, each of the subcommittees was conscientiously dealing with sub-sub-portions of this.

Now, let's just go back to where we are. Let's say we have a vision of what the world should be, the country should be like in the late 1990s with a multicultural society.

Let's take an imaginary walk through the university labs. Let's take an imaginary walk through the federal labs. Let's take an imaginary walk around the Department of Energy and the Department of Agriculture and everywhere else, what do we see? What is happening?

What does the educational system look like then?

When you play that game, what you dis--then you have to go back and say, how did we get to this improved situation? How did the Task Force back in whatchamajigit make a contribution to this?

And I think the only way to make that link is to think big and try to think about the federal government, which is the one where we have the most leverage, although the universities are key to this, too.

How do--you turn the federal government into a pivot, a catalytic mechanism, as someone said, and it's one thing to assert in a sentence that they should be given authorization to have a role in K to 12, but in our society where federal intervention in education is such a highly charged issue, you know, that brings on us a huge responsibility to figure out how to get from here to there.

DR. REYNOLDS: I agree.

DEBORAH: So, that's just by way of saying that as we build this thing up, I think we will see what the holes are.

MS. WINKLER: Can I say, on the process, and we're running out of time here--we gotta decide what we are going to do. Getting comments back by Wednesday is going to be a struggle in and of itself.

Having been out of town, the mail piles up, you know, there is a lot to do. Getting a meeting on Friday in addition to crashing all week to get you the things on Wednesday is even harder.

I mean I have other things to do. I'm sure at least a few of us also have other things going on. Can we get--can we go back and think about that? Or can you think about that and try and pull something together?

MS. KEMNITZER: My problem is that we have to get this to the printer on March 23rd in order to have your next draft in Boston.

MS. WINKLER: What printer? Do you mean just to Xerox it?

DEBORAH: Well, if we're going to have it slightly classier.

MS. KEMNITZER: And so that...

MS. WINKLER: Why do you need it classy...?

MS. KEMNITZER: Please don't. You don't want to know. You don't want to know.

MS. WINKLER: There's no pressure to have a polished product, beautiful document [Several comments at once]. Substance is the most important thing here.

MR. OAXACA: We have a meeting with Dr. Graham that he wants to see a working document so that he can start doing this same process in his mind.

?: He can't accept a Xerox. When is your meeting?

MR. OAXACA: We haven't set it up yet because we didn't want to because we weren't ready, and so I've been--he called me up day before, when is that?--Monday. He called me up Monday, and he says, where is it?

And I said, we're working on it.

MS. KEMNITZER: May I just say this. I really, I know I'm pushing people, but it would really be beneficial to us if you could get your written comments by Wednesday. Those who are able to meet with us on Friday, with the goal of giving guidance on how we can make the eight, the top eight or the top 10 points as clear as possible, we would value that.

We will build it all in. Deborah will write a new draft, which we will give to you in advance of the Boston hearing. We will have an abbreviated hearing there and then really roll up our sleeves again and go over the draft.

MS. WINKLER: I don't know what the situation is for me on Friday. If we don't make it, but we do give you comments in writing, are we still in the game, because I do plan to have extremely detailed and long comments.

MS. KEMNITZER: Yes, definitely.

MR. OAXACA: You will have to work awfully hard to get out of the game.

DR. REYNOLDS: I am in the same kind of situation. I have a trustees meeting on Tuesday and Wednesday of next week, and I want to really hone in on the higher ed and the education sections and help with the data, and I just can't do it by that deadline.

DR. DANEK: And from the higher ed's point of view, we had about 40 recommendations out in Los Angeles and we reduced it down to four, and I think we lost a lot in the transition, and we would like to go back and go back and take a look at that.

DR. REYNOLDS: So, it will just have to be understood that it will be a document in transition with that Wednesday deadline, and some of us will just come in beyond that. That will be all right?

MS. KEMNITZER: Sure, OK. So, comments by Wednesday, and then 10 o'clock in the Task Force offices on Friday.

MR. OAXACA: Yes, OK. Well, we're starting to lose people now. I would suggest that in the next four minutes, we're not going to accomplish much, except say goodbye.

Let me use the Chair's prerogative to adjourn and to tell you that it's now in the exciting part.

MS. LEE-MILLER: I hate to violate your wonderful summary statement, but whenever the committee gets together

again in the back, please, everyone, pay attention, on pages 64 and all that, we've got stuff in there on day care and some other issues that I'm not sure are germane to [INAUDIBLE] is a lightening rod.

So when you read it, keep [INAUDIBLE] and let's not get off the track.

MR. OAXACA: I would commend everybody for being pros and having thick skins. It's going to get exciting. People are going to have different ideas. We have all been in the ball game for a long time. We have all been around the track.

Let's not lose our sense of humor as we get into the interesting part, and I thank you again and we look forward to either seeing you in Washington. I will try--right now, I have no way of getting there--and will definitely try to see you in Boston.

And in the area of the disabled and the Native Americans, Sue will be talking to you folks, and talk to Sue because that area there is woefully weak and we gotta fix that.

Thank you again and Godspeed.