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TEACHER'S GROUP MEETING

11/28/76?

The following is almost a completely accurate and literal transcription of the teacher's group meeting held on 10-28-76. There are a few instances where it was difficult to hear what was said and of course many instances of fragmented sentences, partial impressions, and polyphony. My apologizes to those who feel that my adherence to the policy of literal (sometimes mindless) transcription resulted in confusion rather than clarity.

g.g.

Greg Gargarian

Kathy: I guess the other thing is that...I sort of feel that I'm in the position of having the best of both worlds. In the sense that we're sitting here talking about all of these things and kids and how kids learn and I feel that I'm now going to have the opportunity to go out and really use all of this in an actual situation with kids. And I'll have the opportunity to share what's going on there and to continue to get feedback. I'm hoping that if the group does continue that I can get feedback or input from that on a continuing basis and somehow be able to give feedback here on what I'm doing.

Ellen: I'd like to make a comment about how it is sometimes difficult to get a point across. I think that in my situation a lot of it was that...with my experiences with kids I didn't have very accurate protocols. I had the output of what they did, and I could comment, I could make some generalizations about the conversations and so forth, but I didn't have anything that was really accurate enough...I didn't feel that I could accurately sum up three hours of interaction with the kid in fifteen minutes.. so that I could give people a flavor of the interactions so that they could really understand what was going on. I think that for the future it is really more important to do something like Bob and Laurie did where you got really accurate protocols and someone can really see the details of the experience that had gone on... you have a much better sense of the issues involved in that one particular experience.

Kathy: I wasn't really referring to the misunderstanding with my work with kids, but mainly my own personal learning experiences with the computer. Trying to... [I always knew what I was talking about, and I think other people realized it, but sometimes they threw questions back at me that really didn't seem to be relevant.] I was trying to state something simple, and it ended up into something that became..... I guess people were maybe having difficulty just seeing it as simply as I was seeing it.

Bob: I think there was a comment ^{that} / ^{Laurie} ^{made} ^{to} / ^{the} other day about something very much like that. He said when you get into a situation with a bunch of people, and you get people asking you what appear to be crazy questions, that don't seem to connect very much with what you're talking about, there's some indication that they are working very hard on something else, they give out what you're saying to fit that in to the other kind of theory that they're building up in some other area. It seems to me that that's really true.

Dan: It's not necessarily an invalid thing from them to be doing, if what they're working on is somehow related to what the group is trying to do, and what they are working on is clear to the people working in the group. I can give an example of something like that. Meir very early on got this very interesting insight...presenting kids with a range of possibilities (I forget his actual phrase). A lot of his comments after that related to that idea. The idea of whether you present teaching that way, or whether you present it by teaching a little bit to see where the kid can go with that little bit. So that he was sort of working on that issue during the last few sessions of the group, in a way. Since that was clear to me,

I found that when he commented in that kind of way it fit in to the ongoing process of the group. Even though it wasn't what I was thinking about or what you were thinking about in that particular case I could still fit it into my perspective. In some of the earlier session I did not share an understanding of what some people were talking about, or what they were trying to do. It wasn't really possible to do that somehow. It became very difficult for me to follow some of the conversation. To expand on this a little bit, some of the best and more useful parts of the group were in various ways when we focused specifically on things that happened, either in our own learning or in our teaching experiences. I think that this is the function of the group, and I agree with Kathy in saying that its a very profoundly different kind of experience than we normally have in teaching and a very positive one. I don't think in order for it to be profound to have all of these detailed protocols. The detailed protocols have been wonderful things to use and look at, but I don't think all of our procedures need to be that way. I not convinced myself that I'm willing to do that yet. I find that even the time I take to write up my limited protocols, memories of my experiences,, it's very time consuming for me...may be even too time consuming. May be what I need to do find ways of spending less time than that if I'm really going to do what I want to do here. Crystalizing the essential, but spending even less time trasscribing all that data for other people.

Bob: This is one of the things that I was trying to get at...a whole methodological question here. I figure here that the detailed protocol which you take with a tape recorder, video tape, or something like that, is one whole way that you gather data. On the other end the kind of

thing we found at the first meeting when you and Seymour were discussing the go tactic...you sort of take one incident you judge to be significant and explore that in depth. I'm trying to think of other poles...where on this continuum of gathering data is the best place for us to do it.

Dan: The one thing I disagree with in what you're saying is "where is the best", because I think that all of them are valuable. Especially with a group like this, but even if we were a group of teachers teaching daily and we met like this once a week it would be very valuable to have something like what you did. It might also be valuable to have something like Kathy or I did, or what Laurie did that we don't have. I don't feel that one is necessarily the best.

Bob: I guess its clear that "what's best" / ^{depends on} what your values are what you're after. Say for things like, if you've had a bad session, like the one I had with Robbie, it's really good to have a lot of detail there because you can say this went wrong or that went wrong. But if things are going right then you don't need all that information. You seem to say, well, this and that seem to be working preety good.

Dan: [You really don't know though even when things are going bad you look at all those details and you think you know what happened. Where as it very often has to do with what that person had for breakfast that day. As a teacher, I know that.] I know that things change, how kids interact with me, and me with them, if we both have

had good breakfasts or hadn't. And [so to look at the protocol might be very interesting but might be beside the point. And so I'm not comfortable with the idea that that's all we have to do all the time.]

Ellen: I'm not sure that that was really what I was trying to get at. [There seems to be something missing in a lot of our discussions. And that is the nature of the interaction between the teacher and the kid.] Like what did you do, did you sort of walk around, talk to them about random things about LOGO stuff, I mean, if you say to somebody "well we started out, and I showed them these turtle commands and that was that". But there's a lot to the way you show them those turtle commands. There were things that were really lacking in the way we presented even our particular experiences sometimes.

Dan: Yes, I can understand what you are saying. I think it is valuable to have that. I would have felt comfortable with someone else doing that for me, but I'm not going to do that unless somebody radically changes my own thinking.

Bob: If I can make a methodological interruption here. We were recording this session because you weren't here Seymour. (Seymour comments that we want a permanent record of this session)

Dan: I think we should leave this as an open question still (referring to above comments about changing thinking). I don't feel ready to resolve on it myself. I think it's been a terrifically valuable documentation.

Dan Summarizes for Seymour: We've been talking about how this group is functioning and how we feel about it and we've gotten onto the question of protocols. I agree that we have very few good examples buggy teaching to look at.

Dulce: So you find it great...since the bug is with you.

Dan: Yes, Partly.

Kathy: It's a fantastic system since it's one that you people are very sensitive to personally. The whole business of video taping. I visited a pre-school in Connecticut where video taping took place on a daily basis. And at the end of every day teachers sat down and watched the video tapes and discussed them. It was an inherent part of the system, not something that was done once a week or once a month. It was absolutely fantastic. Everyone had to say a good thing first and then they offered criticisms or suggestions. [I think people feel infringed upon if video taping is done infrequently...is used as an evaluative process. But if it could be built into a system where it is a regular ongoing kind of thing where you learn an incredible amount about yourself.]

Bob: I did a video taping experiment here on Monday. If I get to show that I'd like you to take a look at it. But that's not really a LOGO teaching experience, but I think it's a fine idea.

Kathy: I think if you're really talking about taling about kids and teachers and LOGO and you want it to be an ongoing thing where you're constantly reassessing and re-evaluating.. {Ellen's point, you don't capture it all by just writing it you have to see it.} [But you've got to be sure that people are comfortable with it.]

Dan: You can take a long range view and say that people are not comfortable the first session and say that that's understandable, but that kind of thing does dissipate.

Kathy: Another thing is that they rotated teachers doing the video taping, and they video taped what ever they chose with nothing pre-set.

Bob: What school is this?

Kathy: It was in Stanford, I don't recall the name. The woman who was the head of it was trained initially on the whole ^{Marie} Montasory technique. All the furniture is scaled down to the children, and it's an open environment.

Bob: I think we're talking about using video as a real debugging device.

* Dan: There is a real issue, I think, and that is the time put in versus the return. If we video taped all of our teaching as a way to getting our protocols, then we would really have to look at those video tapes, spend some time to get others to look at them. At the same thing happens with typed protocols. The time spent looking minutely mushrooms. I think there are other things to consider, one is to take sample viewings out of one days of teaching or of one session.

Bob: It seems to me that one of the things we could do if you wanted to do a lot of video taping is just to have a pool of tapes and just use them over and when something happens that you think is significant

worth looking at, then you have the data there to go back and look at it. It just the question of having something to back up and look at.]

Seymour: I think that there's a distinction to be made between different uses. The way in which video tape is most often used...in the spirit of being a feedback device on how you are teaching. Let's call it surface feedback, personal feedback on teaching method. An the other hand, the Loud Thinking conference and some of the video tapes I saw in Geneva were to another extreme. The amount of time spent on a tape....like maybe a hundred times it was seen through, over a period of many months. Although there's 20 minutes of tape, in the end hundreds of hours have been spent looking very carefully at someone's tape. That use of the tape has nothing more to do with that particular interaction with the child or teaching technique. What was happening was that a group of people, terribly immersed in a twenty minute episode had ellaborated very complex internal models of that episode. Well, what do we know about the objectivity of that. It's a different kind of experience, anyway, of taking a piece of manifest behavior seriously enough to put this enormous amount of effort into it. And there's a third function still which I saw from taking these particular protocols, like Laurie's or Bob's. I'm sure as Bob said, there were specific things that could be done as a result of having this immediate feedback. We might have gone into this much more and I still think it would pay to do so. To really probe into what is happening in a few incidences. A third function which comes up very clearly from those is the importance for us to develop a very

consistent vocabulary for talking about all the things that happen with the computer. I find that not only having the dialogue there in its detail reminds one of examples that one might even have thought of as important... to think of our need for a word for..(interruption). Developing our own standard terminology is special about this area.

Laurie: There is one additional ^{5th} function that I see. This is really an elaboration of taking seriously a particular piece of behavior and try^{ing} to probe into what is happening in the minds of the participants. All the people who are doing the analysis are the people actually being video taped. Because not only can we try to build a theory from the outside on what's happening, but you can also get at yourself from the inside. The other comment I wanted to make is about building a standard vocabulary. And there's two ways that I can see this happen, both of which have problems. One is that a group of people or an individual develops some sort of vocabulary for describing a learning interaction. And gives that vocabulary to other people. The vocabulary you develop may not be adequate. The other alternative is for people who are going to be using it to work together and try to develop a vocabulary of their own needs. The problem with that is that vocabulary cannot go beyond the people who actually develop it. [I don't see how an adequate vocabulary can meet all the needs that it would have could be developed.]

Andy: I think the problem is that it's not only a question of a lack of sufficient preciseness but a lack of labels and law to try to begin integrating...separating things out and putting them together. Some effort needs to be made to begin to separate things out.

Dan: I think there's a way of combining the two needs, and this comes back to my own feeling about this group. On the one hand part of what has to be done by the LOGO GROUP is developing vocabulary to train teachers. On the other hand this group provides a model on how you train teachers...how teachers train each other and train themselves. How teachers develop an understanding of what they're doing by doing it and coming back and talking about it... looking at it in different ways in that they also develop a vocabulary. The two things are not inconsistent. In fact having such a vocabulary available to a group of teachers doesn't have to be thought of as "this is what you're going to use, go out and do it".

Dan: We should try to build this process that we have done for all our teacher training whether it's in terms of developing a group to run a classroom next year, or whenever that happens, or whether it's a problem of training for teacher's in the classroom to do LOGO, or whatever...the two things go together. A development groups job is to get the vocabulary or a way of talking about things as much as possible and to develop this technique of training that we've been doing.

Ellen: I have to leave in about five minutes, I was wondering if we could put a few ideas together as to what we might do in the future. I would like to continue a workshop-type thing, maybe one afternoon a week for people who are doing any kind of teaching...for instance, the teaching that Hal and Andy are doing with the MIT students. I don't know what you people think about that.

Seymour: I think we should make a distinction. I think Yes we should do that...it serves a good function. On the other hand we could think of this group as having those three or four functions regarding those video tapes. I think the *second of those three* is the more important.

One of our troubles is that it's very hard to keep focused on a particular experience enough to really get inside it. What might really be great is to have a group that would meet and discuss what just one kid does over a period to get to be able to penetrate below the surface of reasons of ^{to} underlying structures more than we have in the past. So that purpose is subverted slightly by having a group with very different sorts of teaching getting to compare notes which is very necessary on a different level.

Ellen: My reason for bringing together people with very different sorts of teaching experiences, that we've been primarily focusing so far on sort of an introduction to LOGO, and would like to look at a more advance stage in the experience. Different kids at different levels.

Dan: I'd like to continue. I see what Ellen says not only from the point of view of looking ahead over the long range but also for my own training and development. The group has been a terrific focus for me..induced me to really think about what I was doing. So that to continue my own training my own learning about teaching LOGO I would hope that there would be something to continue to serve that function for me. I don't think this is what Seymour is talking about. I see this as a need for myself on that first level. So this experience could serve as a model for other teachers who are going to learn LOGO.

Bob: I guess what this amounts to is a question of how deep in the inter-relationships^{between people} are we willing to go. How deep will we be able to go in terms of the vocabulary of the teaching experience.

Dan: Just to separate different purposes and recognize that they be served with different approaches. [The reasons for studying one child over a year are different than a group exchanging their teaching experiences.] Or a broader purpose which is to learn about teaching.

Bob: I guess that is one of the things I was thinking about. The two things do come back together. If you only look at a very small part of behavior, as you have said yourself, there are so many different things going on at the same time, in one short period of time, you can't tell whether you have a problem. But if you can look at a more extended more longitudinal study a more accurate picture of what can be expected all the time for that child.

Andy: Just to think about a small point, one I generally think is a small point, that deal about we aren't nearly done with the issues about verbalizing, I don't mean particularly what happened long ago but what happened recently. I don't think we have finished really with ...(missing) there is so much more to discuss about that particular episode...I think there very important.

Dan: I certainly felt that also. You were trying to say some things there that I wasn't quite getting. I would want to talk to you about those things. There are alot of issues like that that came up all the time. One of the questions that raises for me is the question of the size of the working group. Maybe 6 or 8 people is an outside limit. Probably three or four is usually too small. You don't get enough cross fertilization.

Claudette: There are several issues...it's more than just two that should be explored. I think the protocols are really something that I would like to do. In our discussion last time where we were getting into different...we were realizing that students had different personalities and we had to adjust our teaching techniques to their personalities... getting into different ways of teaching, acting it out physically, that was Ellen's idea. and Dan had an idea of explaining a procedure with a

..(missing), seems like we ought to explore that too. Different approaches...as we go from trial to trial, we have to be flexible enough to reach that point.

Dan: A sort of menu, a list

Claudette: We were also talking about...I enjoyed Laurie's paper about egos, child psychology.

Dan: I guess there's a practical question that we ought to raise. Is there going to be a continuation of this process. Is it going to be something like Ellen talked about, something like Seymour suggested, which of us would want to be involved in something like that or do we have any feelings about how it should be structured, other people brought in, or ways of doing it differently.

Laurie: About the function of this group. Seems to me that one feature of this group is that different peoples have had different ideas about what the purpose of the group was. One thing that I noticed this morning especially, I think that you and I think that Kathy shares this with you, have quite a clear idea of what the nature of this group is. I think you're right. This is an opportunity for people to get together to think and share experiences about teaching in general and teaching LOGO so that they can gain more of an awareness of the teaching situation from all points of view... different kinds of teachers, different kinds of individuals, and different kinds of learners. Do you think that that's a fair statement? How do you see the primary function of this group.

Dan: I would add one other consideration. I would say as far as you went, yes. It has a broader purpose in beginning to develop a system of propagating LOGO further, maybe into a school and into a classroom. Partly as a model for how to do that, and partly as a working group that's going to do that...or could evolve into a group that is going to do that. That's how I see the group. How do you see it?

Laurie: I want to put it into a certain context. I started thinking about this right at the beginning of this session when Bob mentioned that when people come into this group, although they have a lot of different concerns beforehand, they start asking questions that seem irrelevant to the rest of us...this is because they have other concerns outside of the group. You said if I'm correct, that as long as we can all understand what we are thinking about then that's a valid contribution, but it's not a valid contribution when we're all mystified about why they are saying what they are saying.

Dan: I wouldn't^{want} to make a strong statement at that. I think I can gain a lot in having a lot of things I don't understand at the time that they are first presented to me. But that is what I was saying.

Laurie: I know at least one other concern that I have that I think Bob shares and possibly other people. I have one outside concern which is the relationship between psychological theory and empirical research. I look at this group partly as one kind of empirical research. I think one of the reasons that a lot of discussion wasn't as useful as it might have been is because...for example, you have a

pretty clear idea as to what the group should be doing and other people were doing things that just were not that kind of thing. My problem was that I didn't know or I didn't share your idea as to what this group was suppose to be doing. And for this kind of group to be successful there must be certain basic ground rules that would probably be helpful if people shared them.

Bob: I don't know where that leaves us Laurie. I don't see where that takes us. What would be a better thing to do.

Laurie: A better thing than what?

Bob: Than what we have been through?


Seymour: I'd like to ask another question. Let's take an example The sharp difference between what you see and Dan's perspective.

Laurie: I don't think that I should answer that question. But before you arrived, Kathy you were making some comments about certain discussions that you didn't think were useful.

Kathy: I didn't say that they weren't useful I just said that my purpose in bringing up what I had brought up was somehow turned into a whole other discussion a very philosophical, abstract discussion where I really felt other people had missed the whole point of what I was trying to say. I found it very difficult to get that back to my initial purposes.

Dan: Let's see...I think maybe I can give an example and maybe we can work it back. There was a definite gap within the group between people who were actively involved in learning and teaching LOGO and those who were not involved in that question. I feel that that evidenced itself in the way that people entered into some of the

discussion. We started out at the very beginning of the group by saying "well all of us are going to be learning and teaching LOGO" in some sense or another some people never got into that part of the process or very minimally. And I felt that the concerns of those people went off in different directions very validly perhaps from their point of view. I don't feel that it is necessary to say that those people shouldn't have been in the group or shouldn't have raised those concerns. I think that learning happens often times in all sorts of mysterious ways and all points of view should be encouraged and even though I may sit through portions of a session feeling that what's happening I can't relate to very well, doesn't necessarily mean that I have to dictate how the whole thing functions. But I did feel that basic dichotomy. One of the things I think it lead to was some of the people who were not involved in immediate teaching but were very concerned with this question of language and what language we use in describing LOGO teaching, or in describing the research between research and psychology, teaching and psychology. I think that it is a very valid concern, but I couldn't share it. I just not there. When those things were happening I could not follow the discussion.

 Seymour: Isn't the point that we should have an example and we still don't have an example.

Bob: Should I use the example that I brought up this morning. Remember we were going to talk more about the protocols this morning. You raise the question about whether they have been read. They haven't been read. O.K. so we can talk about that next week.

And you asked if I could suggest a couple of ways that people might wish to look at them. I tried to do that. I sat down, I did that, and I said "O.K. ^{we'll} talk about the protocols next week", and we continued to talk about the protocols for about an hour even though they hadn't been read. I just thought that was crazy. Is that the kind of thing you wanted as a specific example.

Kathy: One, more specific, was I think in our second session, Seymour, when we got into the business of G0. O.K. I even hate to bring that up now, I'm sure people are sick of it... just trying to explain to people my misconception of G0 and then someone asked me a very theoretical question which really threw me off balance and I didn't really understand the relevance of it, and it kept going that way, and Dan would say on several points in the discussion "I think that all Kathy is trying to say is..." It all took off in such a direction...I even remember saying that I was so frustrated that I wanted to get up and scream and tell people to stop all this. That's the kind of thing that I was referring to. I am basically concerned with the very down to earth interactions and day to day things that are happening. I think the philosophical things are very important to talk about but when we sitting in a group like this and people are discussing and trying to help one another in their ideas and has to be more down to earth if you're going to get anything out of it.

Dan: Let me put that another way. I had alot of that same feeling at times. It gets to a point when people try to refine an abstract point, and they put out a point of view about something, and it is

clear that that point of view is not shared by everybody in the group, so they feel that it is necessary to refine it again...restate it. What happens is that that sort of leaves everybody behind... it becomes an exercise in minute clarification in a statement which is not rooted in something that we're all looking at.

Kathy: Andy, you and I have talked about this. Maybe you can say it in a better way that I am saying it.

Andy: I don't know that I can. Because I see this as a more complicated problem. I don't see it quite so much as a question of philosophy versus everyday pragmatism. I saw a lot of things in that discussion. A lot of kinds of things some of which might be classified as philosophical that might be useful, some of which philosophical that I thought were entirely useless. I did see that it got out of hand. A lot of people were left behind, were disgusted... but I don't know how to sort out what of those things were valuable or were not.

Kathy: Maybe that's a good way of saying it. When something gets out of hand and then becomes difficult. And maybe my choice of the word philosophical is not right. Because many of the things we talk about comes from our own raising of questions that people would call philosophical.

Andy: I don't know, but I think maybe what Dan said was very important. I think that lot of it is a question of group dynamics. It would be nice if it could be adjusted so that it could be more useful more generally interesting. Looking at these particular kinds of things, where people continue to restate, or when someone is trying to push a point, that obviously is being backed away from by an individual or even the whole group,

those times are more clear than making a distinction on the basis of philosophical or generally interesting things. Maybe we should be more aware and try to find ways to handle these situations.

Claudette: I felt that when we tried to structure ourselves by deciding in the beginning what we were going to cover for the rest of the session that we avoided some of that. I just felt a little more comfortable.

Seymour: And this distinction comes in as a procedure as you say part of it was dealt with, but part of it was not having any real agenda, or having points and not really sticking to them, and as Bob points out about the protocols...did provide a way to regulate what was going to be discussed... at least that's some
/kind of control mechanism. Laurie says he's interested in the relation between data and psychological theory, Kathy says that she had a problem about how to use GO, and all she wanted was an explanation of how to use GO. It isn't strictly accurate, she knew how to use GO, you had gotten the explanation you wanted to tell us about the...what happened and what the explanation was. And maybe you wanted an explanation formulated in a way that made you understand it better, more deeply...maybe in a form that you could pass on to a kid. You formulate the problems in terms of the assumption of very immediate and instrumental...something that you can use.

Seymour: Regarding the question of relating data to theory, psychological theory...well, first of all, it's very significant that you use the word. From a certain point of view, it runs very much against the social mores of the interactions in this society. You might say it's almost insulting to say "we don't really care what you meant...you said that and there's no reason why we should probe into why you said it"... This puts one in a very awkward area of relating to people. A very awkward area that smacks more of the psycho-therapeutic interactions between people. The normal interactions between people when somebody says "I didn't mean philosophical, I meant metaphysical" you drop the discussion on philosophical and then say "let's pursue all the same what you say is philosophical"...that's not part of the rules of the game. That does tie onto the questions about having other people present in the group. I think that's very important.

I don't believe that's an accurate description. You might say that what you wanted was to know how to explain GO to someone. Obviously, that's true. However there are other questions that come up, for example, why did you misunderstand it in the particular way you misunderstood it. And may be if we don't understand that we can't even give you the answer to the other one, because maybe how to explain it depends on the reason why the person does not understand it does not understand it. Maybe you don't even have to explain it if you understood properly the sources of the particular models that are shared. Now what I'm saying is about the theory how ideas grow in somebody's head, like the theory of instruction. So if we could remake them, then we would be satisfying Laurie's search for a way of relating data to theory.

Seymour (continued): But now we didn't. There was a dynamic that happened there, that happened repeatedly in the group. In such groups there's a dynamic that goes in two different directions. Of course what we want to do is bring together the immediate low fixed experiential data with discussion of theoretical issues. The two obvious deviations from that are, talking only about the experience in one extreme direction, and in the other, talking only about the theoretical forgetting about the data. [It not so much that there was a big theoretical construction and a small amount of data, that's perfectly O.K.. But that after a while the theoretical discussion had forgotten about the data. Then I would almost like to use philosophical. It became philosophical not because of the nature of the questions being discussed, but because the questions had lost our manner of discussing them in connection with the data.] If we were to start again from scratch, could that process become more explicit and clear at the beginning. It might be that LOGO is not a good subject matter to start with. You see better results happen when you start with all together different kinds of more tangible subjects when everybody is at a more equal level not knowing any more about the setting. [And maybe if we spent the first week not even talking about LOGO, learning to do something all together different and discussing the process of learning that, and so we could have worked out our problems about making our internal models, and particularly setting up relations with one another and between theoretical and data-driven discussions is perhaps a suggestion that might be something to try. Probably that's the central question and to do that it will require alot of things to be written among us, and discussion, I think there are times when it happened very lastly and times when it got off the track. And who knows what counts as very good.]

Seymour (continued): I'd want to keep this discussion also open to debate. About the GO thing. I do thing that part of the GO thing was the question of being explicit about what the computer was doing...what does it know, what can we expect it to know. The start of the big philosophical point was when the discussion got into the two kinds of GO, the LOGO GO, and the Kathy GO... which would seem the more natural. The Kathy GO seemed more natural to Kathy, and the LOGO GO seemed more natural to Andy. What made the Kathy GO seem more concrete to Kathy the other one to Andy was very definitely rooted in their experiences with computers. And the fact that that sort of thing happens...there's ambiguity in everything and ambiguity get's resolved one way or another way depending on what you knowledge state is. You should note that understanding these series of resolutions is maybe the developmental process that is as much a contact between data and theory as one can see, but maybe we should have possibly called it back since we obviously stopped there and my conjecture is that we had stopped there we would come back to that groupfully in the next session or the next session. By not stopping there we all got a bad taste about that particular issue and just because it was very central...that very central issue didn't get discussed. And that that did in fact influence the ways...perhaps we could calculate the subsequent lack of the group. I think that also is what happens.

Dulce: So what's the proposal for continuing the group. What makes it good when all these questions will arise again with different people, different experiences. Or just a group of teachers teaching LOGO for initial experiences.

Dulce (continued): Then the group will be restricted to some discussions of how students talk about things. It makes a group easier. Just a beginners group. I don't know. Even though sometimes we fly away and we don't understand the discussion, that is the way it should be...discussions about everything. Although we will just be at the beginning every time we meet...we won't go on.

Claudette: [It seems like all of our discussions were just beginnings. I don't feel as though we have resolved a great deal. It's more or less opened up areas to look at.

Bob: Maybe that's not such a bad achievement for first starting out.]

Dulce: Sure it is.

Seymour: I'd like to give another way of describing that, and another function of that. If we weren't pursuing the deeper side of questions at all, the fact of opening those beginnings serves the role of placing the questions about LOGO and about teaching in a context of ways of looking at it that we carry around with us even though we don't know what we are talking about.

Bob: Something that I think would be a very nice thing to do. This sort of ties in with something you said you would like to do, Kathy...you were talking about wanting to keep up contact with the people in the group here. It would make sense for me if we were to, say, meet on a slightly different basis. Say, after you've been working back at the Walden school for a couple of weeks, if you were perhaps to come back here for a day and tell us what experiences you've learned ...I think that would be a very valuable thing for us. If Dan continues to work with the two kids he's working with now, there seem to be such different personality types in the way you look at it... If we keep track of the differences

Bob (continued): in their development and try to think about the different ways that different children interact with the system and your teaching, that could be a very valuable specific, concrete research project as well as a teaching experience. That's one of the kinds of things we all need information about and might be a very good thing to focus on. And as far as working with different kids at different ages, I suspect that the work that Hal and Andy have done already would give us a pretty good perspective what differences there are between children at different ages. [If there were a series of meetings that would follow up some of the concerns that we've seen growing up with this group, it might be a productive thing for all of us. I guess what I'm doing is offering that as a sort of sensible format for the kinds of concerns we all have.]

Dan: I'm not sure I understand. Are you suggesting an ongoing meeting once a week or something where we continue with the kinds of issues we have. Or are you suggesting that we pick certain issues, focus on them, and when one of us... when Kathy comes back, or when I've gathered some data...we call a meeting and present something.

Bob: I guess I mean a balanced mixture of those two things. Something that is scheduled with enough regularity that we can all count on it, and yet topics sort of worked out in advance.

Dan: Perhaps a possible compromise which is if there's a two hour time-span for the session, 1 hour, say, be devoted to a topic, something prepared in advance; and that the other hour be devoted to things that have come up for people related to the same kinds of questions we've been talking about. For me it's been very important to have the group as a part of the reason to think more about what I was doing. I get caught up in a large network of different desires and responsibilities, having the group has helped me focus more specifically

...on how I thought about my teaching. And that's been good for me.

Dulce: Its critical...that you just understand something really when you try to explain it to someone else. You are then forced to summarize and bring your experiences to some conclusion in a clear form.

Bob: Not entirely, but yes basically.

Dulce: I must be forced to write, because if I don't write I will never learn english.

Andy: I thing there's something beyond that in that the effectiveness of the group depends on the continuity within the group. Just having a get-together with somebody coming in to talk about issues that have come up or pre-set issues, doesn't speak to the question of continuity. I think also there is a more or less concrete continuity lying around...that is, LOGO next year, teaching teachers and teaching kids in a very different situation that has been in LOGO in the past. I have always seen that as one of the main lines of continuity in this thing and I think that we should at least try to maintain that. I don't know how long or well that can be maintained but I think it's worth an effort.

Dan: Can spell that out a little bit more about how the line of continuity has fit in to your perception of how this group has worked or how it might work in the future.

Andy: I think what it means about the future is some fairly practical things. I think that we should be limited, and think that we should not address abstract and philosophical questions, I think the group should be directed toward some of these obvious questions that we haven't come to yet, which is "how do we handle a larger classroom" and those kinds of things.

Laurie: I disagree with what you just said, which is that the group should ignore abstract or philosophical questions. That's one thing that is of concern to me and I think the kind of people that tend to participate in this kind of group can kind of savor that sort of question that would be very useful to me.

Andy: I didn't mean to say that. When the abstract discussion stops being measured by the actual experience that's one way of seeing that you've gone beyond the point of practicality.

Seymour: Maybe when we say the abstract or the philosophical..., we jump on the abstract and make it philosophical.

Dan: To clarify it, for my point of view, you would like to draw up a list of priorities of which you've offered one, "how to teach a whole class of kids". That the group would in some way try to center around that.

Seymour: I'm not sure... how do you avoid it being abstract. We're not talking about any relation to any alternative research.

Dan: Well, I think we would be attempting to do so Andy is saying, I think. Or being to look at how to attempt to do so. Is that a fair...

Seymour: I'm not sure...maybe I don't see clearly what Andy has in mind... Well, I'd like what ever else it is, I'd like it to be at least some group defined by the characteristic that it's prepared to look very closely at actual experience of teaching LOGO. It doesn't mind being philosophical or abstract. This group should engage in various different LOGO teaching processes and maybe non-LOGO teaching processes including working with a larger number of people and talking about how we manage that. Now, to

Seymour (continued): ...distinguish that from several other things that have been mentioned. For example, a general discussion of what would happen in a larger classroom with people reporting on other experiences or experiences teaching kids at different ages or somebody spending an hour or what ever in a way, like in a conferece, that doesn't allow, where it's not appropriate to get involved in the detail because everyone doesn't know the particular situation as a group. I think that's a distinction.

[I think there has to be a group looking closely at experiences and it better not be too big, and this group is probably far too big.]

Dan: Seymour, could I just ask you...I think I share your interest in looking very specifically at detail and I think that when we have been able to do that it's been very valuable. And I'd like you, if you can, to make specific the connection between that and planning for next year's experiment or beginning the experiment.

Seymour: I think there's a certain kind of planning that one can do in the context of make a schematic plan, the lay out, the color scheme, and so on... I think that needs a different kind of function a different kind of group and I'm not even sure that it's particularly well served by group process in the sense of...well, you don't get people very easily to do....(unclear). So, I think all that needs to go on. [I see the real question about working with this class as only answerable by doing something like it and talking about what actually happened there. And so what I think we will have to do is maybe, after Christmas, or when ever it has to be, we have to decide on some less than 15 or 20 but more than 2 kids and bring them in simultaneously and do a LOGO teaching experience with something more like a large group setting.] I would say that maybe we ought to have 8, and work with them for a few weeks and see how that goes.

Seymour (continued):

Laurie: I don't entirely like the vocabulary...the "how to" kinds of questions as opposed to "how is" kinds of questions. "How to" kinds of questions would be "I want to know what to do in a situation, how shall I do it". As opposed to the question "here is a situation, how is this person functioning and what is this person thinking". Using that kind of vocabulary, [what I see as what this kind of group can do, or ought to do and what needs to put to the group to make it satisfying for everyone is that there has to be some sort of contract among everyone that first of all we're prepared to think seriously about both kinds of questions, and secondly we're willing to think about how other people in the group whose experiences are going to be different from our own, can help us to deal with the kind of questions we're most interested in.] I think that other than that, what has happened in this group has happened in other places and that is that the discussions become dominated either by one view or by the other view. I don't think that's fruitful. It has to be clear to everyone that there are the two different kinds of questions.

Seymour: And it's not like all the other questions but is something that should be seen in a sort of theoretical background. That is, should you just say a "how to" statement about it namely that it should be discussed before another group will be available. Let's look at a sort of "how is" kind of statement about it sometimes called accommodation and assimilation and maybe its not quite that, but I think its a worth while way to see the question. (tape runs out)

Seymour: I think the point is...yes

Kathy: I guess sometimes you have to really start the "how is" question before you can before you can really address yourself to the "how to" question.

Dulce: You have to define the situation before you can define the goals.

Seymour: Maybe thats the definition of these two clicks. For some people its ^{the} one that defines the goal....and the other....(laugh)

Isn't that the case? For some people its starts with a "how to" looks like there is a well defined goal...surely that's not true in all people.

Dulce: I think one question raises the other.

Seymour: I think the main vision and naming of phenomena like the one we just found a name for...why would we rather call it "how is" rather than theoretical is a bit like the Kathy GO, Andy GO, there's something to pursue. I think that's the spirit of the discussion...to pursue the psychological personal sense rather than which is appropriate methodologically etc..

Kathy: I personally understand that Seymour.and I agree with you 100 percent. I'm not getting across...I understood very clearly what Andy was saying to me the other day. And in fact, he said it in the sense that "you have a way of looking at words and you're taking words literally, you have your own personal frame of reference, however, you must remember that the computer also has its own frame of reference to the way it looks at things, and I just want you to be aware of that". That was fantastic.

Kathy, continued: He really summed it up beautifully...I understood it. I'm not saying that I don't agree that that kind of thing should happen, it has to happen. Otherwise, this whole exercise would be meaningless. I just talking about what happened between all of that.

Seymour: What constitutes the closure. In one sense the closure is when you understood it when you raised the question. In another sense, having gotten that closure it just opens a whole set of other questions...like why was that a good answer for you, would it have been a good answer for somebody else in your position.

Kathy: The only problem was that it wasn't only a problem for me, because many people after that meeting felt very uncomfortable.

Seymour: That's clearly what I mean.

Dan: In a way, the whole discussion of that I feel has missed the point. It was not the issues being discussed as such that were the question, it was sort of the manner of the discussion the process...and that's why I brought in that paper about the group process. I thought the problem with that discussion was not the content but the process that we went through. All the people that spoke with all different assumptions and expectations about what the group was about.

Seymour: Well, of course, that's all important data and again something that we have not really discussed from a "how is" point of view.

For example, I think that kind of "getting-out-of-hand of a discussion with a group of people" is very much like the way things get out of hand in an individual's head....thought processes with different agendas, switching from one to another, and understanding of the confusion clearly, the fusioning process.

Andy: You know I honestly wished we had had a tape recorder at that session. We could go back and look at it. There has been a lot of discussion about it. We still don't know what the whole dynamics was.

Dan: Maybe what we ought to do is have a few people here agree to get together and some point and start up something else. Or do we leave it into your hands Seymour? You started this group do you want to take responsibility for initiating what happens next, or do you want to set up a small group to do that. I don't think it's up to us now to make a decision about what happens next but I feel that there's been a lot of input and now that decision should probably be made by a few people, or by one person.

Seymour: I would like to have a breathing space of a week or 10 days and think in terms of (a) using that time for however wants to have maybe another debriefing meeting...I would like to put together a collection of papers that have come to give everyone an opportunity to contribute a final sort of discussion, put it together, have it bound so that each of us has a copy and make it available to people outside of the group if they want to see it.

Dan: It could include a transcription, a sort of edited transcription of this discussion.

Seymour: Maybe we think of next week as reflection and a time to produce some papers. (The remaining discussion was directed towards setting up times, deciding on lengths of meetings, avoiding schedule conflicts, the question of circulating papers to people in and outside of the group, etc.)