Joy's Background Comments

The Student, Environments, Tasks and Tools (Joy's comments compiled)

The Student

What does the student need to be able to do? At this point, it is ok to be global. TALK.. WRITE.. whatever... would be appropriate here, though it is also fine elaborate somewhat. Later, in the Tasks section, we will consider more deeply, as it would be useless to pursue talking if we did not define "about what"? Mainly we want to begin to establish consensus among group members about what is important for this student to be able to do.

What are the student's special needs? Basically, this question is designed to generate conversation about the barriers which keep this student from doing whatever he/she needs to be able to do.

What are the student's current abilities? Keep in mind that, no matter how great the needs, EVERYONE has abilities! This question is frequently a BIG discussion producer and, in many circumstances, can be an area of conflict! Different people often identify vastly differing perceptions of the abilities a student currently has. Later in the process, we will need to explore the differences between assumptions and observations, but, for now, it is important to get everyone's thoughts on the table in a way that avoids judgments of their value. That comes later!

The Environment(s)

Keep in mind that we must consider this as multiple environments, as no student exists in only one environment! (Even the rare person who is only in one place all the time experiences a multitude of influences which can alter the environment - changes in the people setting up the environment, for one.) If we at only the school environment, we must consider the profound environmental differences between the classroom at different hours of the day, the playground, the cafeteria, the hallway, the bus stop, etc. In each environment, there are factors to consider.

Arrangement: What is the anticipated arrangement of the environment? Though discussion might include possible placement options, it should also include, when known, the setup. For instance, when considering a mobility system which must be used in a crowded hallway, a classroom close-set rows of with desks, a sand and grass covered playground, and a bus that currently has no left system, it is important to remember that each of these factors must be considered UP FRONT in order to come up with a functional mobility system. Environmental issues like those mentioned does NOT mean that power mobility or the like would not be considered, it just means that, in order for power mobility to be

functional in these environments, other PARTS of the system would be critical, like: identifying a lift system for the bus; some assistance for the teacher in classroom space alterations; training for the student and others in how to manage in crowded situations; some possible alterations in scheduling so that the student might avoid the halls at the most crowded moments, at least at the beginning of using the system. These should be a part of UP FRONT system selection, as, without them, the system will not meet expectations and will most likely be abandoned in favor of other workable - but perhaps less independent - strategies.

Support: Are there people in these environments who know how to support the student in using the system well and know how to invite the student to do so? How will support people be identified? Will training be needed? If so, in what areas? Many of these answers will change depending upon how the tools system is developed, but they must be identified NOW, as they can have a significant effect upon the cost and use of a system.

Materials and Equipment: What are the other students using? What materials and equipment are currently available for students to use that could be used by this student? If computers are being used and may be an option for this student, what platforms (operating systems) are in use? What software is currently available? What additional equipment is currently available to this student without additional purchases?

Attitudes: This area, perhaps more than any other, is a critical one because attitudes have an incredible influence on the environment! Within the category of attitudes is expectations. If I am the person who has the responsibility for developing environments where learning can take place, my attitudes and expectations have a great deal to do what I include in those environments. For example, during the years that I was a first grade teacher, it was my expectation that all of my students would acquire with the skills needed to eventually be fully participative in adult society. They would be able to attend college, be productively and happily employed and do whatever chose. With that in mind, I set about providing an environment where the necessary skills - at the first grade level - were readily addressed. Literacy was a primary focus for everyone all the time and the classroom setup and activities reflected this focus. Basically, woven throughout everything else that was done, literacy was taught and practiced ALL DAY LONG! It was never confined to one particular period of the day and one particular circumstance. It was far too important for that! What if, however, there had been some reason to suspect that among my students were those for whom college and adult productivity appeared to be a long shot? Would have worked as long and hard at developing literacy for those students, suspecting as I did, that it was highly unlikely that they would ever master the art receiving and giving information in written form? Would I have taken the time and effort to provide a print rich environment and drawn attention to its use at every possible moment? Though I would like to THINK that I would have, I know that this is highly unlikely. Chances are I would have selected more "meaningful" and "attainable" goals for students in this situation and given the development of literacy the backseat that it appeared to deserve. Given these expectations, I would have failed to offer invitations for my students to develop literacy skills. Thus, whether they were capable of learning to read and write or not, they would NOT DO SO, as they opportunity for them to learn these skills had not been sufficiently presented and acted upon! Scary, isn't it? Are attitudes and expectations important? You bet they are! But they are tough to deal with.

Consider the I.E.P. meeting where Mrs. Jones finds out that John, a student with severe physical disabilities will be in her classroom. Mrs. Jones is unprepared to deal with the John's special needs and her other students. She expresses her frustration and misgivings by protesting that John obviously does not belong in her classroom. She doesn't seem to realize that you will be there often to support John and her in the learning process. You realize that it is her fear and lack of understanding that is standing in the way! She has a very poor attitude about John and you know that that is really what is standing in the way! You address her directly, saying, "Mrs. Jones, certainly you have concerns, but it is your attitude that will stand in the way of John's success in your classroom. This committee has decided that he WILL be in your class, so will need to make some changes! I will help you all I can." Will this approach change Mrs. Jones' attitude? You think not? I think so. Consider this, before you confronted her, she did not want John in her classroom. NOW she doesn't want YOU either! And you were the one who was going to assist her in this venture! Attitudes and expectations! Areas rich with opportunities to invite growth and, yet, fraught with the potential for disaster! Attitudinal differences must be recognized, but must also be dealt with over time in ways that promotes the opportunity for growth by ALL parties so that STUDENTS will have the opportunity to learn and grow.

The Tasks

What activities occur in the student's natural environments which enable progress toward mastery of identified I.E.P. goals? What is actually happening here that will enable the student to move toward mastery of his/her goals? If the answer is "Nothing" then assistive technology will do nothing either. Assistive technology is simply a MEANS to participate in activities which build skills. Think back upon my comments about attitudes and what my expectations as a first grade teacher did to foster the creation of an environment in which progress could be made. If there are no tasks which provide meaningful practice, mastery cannot possibly occur.

I have been in conversation with people who have said, "Nothing is really happening here. All we do is feed and change." Well, in that case there are two areas to be explored: 1) How might the environment be enriched for ALL students?; and, 2) How can the students be more actively communicative, participative and productive within the daily feeding and changing tasks? It is a

far better thing to have some control in the tasks of the environment than just to be "done unto!" The person who has the opportunity to learn that s/he has some communicative power and personal responsibility within the environment, perhaps to use eye gaze to indicate a need for changing position, is in a far better position to have some impact upon quality of life than the one who does not.

What is everyone else doing? Though there are often compelling reasons to move away from "what everyone else is doing", it is important to BEGIN here! Keep in mind that participating in the same activities does not have to lead to the same results for all participants. For example, consider a fourth grader with significant mental retardation whose goals include categorizing, sorting by category, task completion, turn-taking, seeking help when needed and grasping and releasing a variety of items. There is little reason that I can see for having this student work in isolation on these tasks. In fact, there are several goals that could only be artificially addressed in a one-on-one situation where the level of prompts would be significantly different than the natural prompts in more generalized settings. Could not most of these goals be addressed when working with fellow fourth graders on an earth science lesson involving classifying, sorting, and charting various kinds of rocks and how they are formed? The actual items that would be monitored and measured for mastery would be different, but the TASK would be just about what "everybody else is doing." Move away from "what everybody else is doing" when necessary. But first be sure that it is really necessary.

Activities, Critical Elements, Modifications: What are the critical attributes of the activities? As we look at the activities in various environments, it is essential to remember that activities (Tasks) are not isolated skills, but clusters of skills which must be used together in order to participate in the activity. Can you think of ANY activity in which you participate that you use skills in only one area (motor, social/emotional, communication or cognitive)? I think it would be difficult or impossible to do so! With that in mind, we will look at activities with the idea that there may be modifications that can increase participation for students with disabilities while not really changing the critical elements of the activity for any participant.

As an example, let's consider a very important game which is often played in preschool and early elementary classes - Musical Chairs. If you are like most people, when asked to quickly name two things that are critical elements in the game of Musical Chairs, you would most likely say MUSIC and CHAIRS.

Well, in a classroom I once frequented, there was a student who was in a power wheelchair. That student's goals included learning to safely manipulate the wheelchair in crowded situations. The teacher made a modification in the game. The chairs were removed and mats were placed on the floor. Other than that there were no changes made in the game and everyone played as before with

one exception - the student in the wheelchair played right along with everyone else! A modification was made, but, because it did not prohibit or significantly change the action of ALL of the students, it would be safe to say that CHAIRS are not a critical element of musical chairs!

A bit later in the year, a student who was deaf enrolled in the class. In order to include this student in the enjoyable learning activity, a light was purchased for a small price at a nearby electrical supply store. When the tape recorder used to play the music was turned ON, the light began to flash and continued flashing as long as the tape recorder was in the ON position. Thus, the student who was unable to hear the music was able to participate fully in the activity. Once the tape was inadvertently not put into the recorder at the start of the session. The ON button was pushed, there was no music, but the light began to flash. Can you guess what happened? Right! ALL of the students began to march around the mats as the game began right on cue! So, again, we find that MUSIC - something that would appear at first glance to be a critical element of Musical Chairs, really isn't after all.

So, what ARE the two critical elements of Musical Chairs illustrated here? First, there have to places to "light" (as in get upon) and there has to be one less place than there are participants. Second, there has to be a signal whose presence indicates that it is time to start and whose absence indicates that it is time to stop!

That analysis, though aimed at something quite simple, gives us a lot more opportunity for problem-addressing and problem-solving than if we had just looked lightly at the critical elements and drawn what we now see as inaccurate conclusions!

In conclusion, as we look at identifying and analyzing tasks, we must keep in the forefront the ideas on activities that George Karlen has identified in his work with Environmental Communication Teaching. Chiefly, most tasks contain a multitude of steps. Once the steps have been identified - as ANYONE WOULD DO THEM - we can begin to look at what elements of the tasks would be difficult or impossible for our student to do without significant assistance and begin to develop a system of tools which can be used to address those elements. As to the OTHER parts of the activities... at the risk of being trite, "If it ain't broke".. well, you know the rest!

The Tools

Remember that Tools are not just things! They are both devices and services! They are no-tech strategies as well as low-tech and high-tech devices and supports. They are SYSTEMS designed to include all that is needed for a student to move forward on tasks in customary environments. More often than we would like to think - even when ongoing training has been provided - for want of a

simple extension cord, a laptop computer fails to meet expectations! In a well-thought-out system, the extension cord would have been included!

What no-tech, low-tech, and high-tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments? To me, this is the critical question of the SETT Framework. What we have been doing to this point is just finding out what we need to know in order to begin to seek answers to this question!

It's rather funny, but if you'll recall the "hardware store story" from the SETT article, you'll see that what we have to be led to do as we consider assistive technology, comes quite naturally for ALL of us in a common hardware store! Ironic, isn't it! We have known it all along!

What strategies might be used to invite increased student performance? Without inviting strategies that invite a student to see himself as being capable and able in using the tools for purposes important to HIM, tools have little positive effect unless just HAVING the tools is some sort of achievement or status symbol! I have many such tools around me as I sit here and work... unfortunately, there is little they are doing to maintain or improve my performance, as they were not acquired with that in mind. I just WANTED them. There is nothing wrong with that, if that's how I want to spend my money, but it has little if anything to do with what is REQUIRED for me to have in order to make progress in my work (MY identified tasks!).

How might these tools be tried out with the student in the customary environments in which they will be used? Whenever possible, before tools are purchased, they should be tried out by the student in customary environments while doing naturally occurring tasks. In order to be useful, the tool system must be student-centered, task focused and environmentally useful.

There are increasingly varied resources for trying out tools. some might be: 1) rental programs through manufacturer; 2) loans from a district's tool library; 3) short-term loans from centralized sources such as Regional Service Centers, Intermediate Units, or any number of private sources.