This lesson, that viewable as Lesson Plan (Final of Peer IV), was recited for groups of three to five students of Park Forest Middle School. My partner and I had the opportunity to teach this lesson to four of these groups of students on the afternoon of December 4th, 2008. These presentations, although only for the members of each small group, were in a room containing a total of approximately twenty-five students during each class period. The population of the room, and the activity of the other four teaching pairs with their respective groups and lessons did provide ample distraction to our own groups of students learners during our iterations of teaching. Some groups evidenced this distraction in greater levels than others, partly at the fault of myself and my partner as we continuously revised our lesson design and teaching strategies throughout and between each teaching opportunity. These revisions were for various reasons, such as, some were made to allow for a smoother flow, more were made in attempt to increase student appeal and interest, and a few were made to cut extraneous material in order to better fit our allotted time.

This last was a fairly chronic issue. The lesson slots were twenty-odd minutes in length apiece, so that we could teach two different groups during each of the two class periods for which we were present. This limited allotment of time to each lesson, in conjunction with an overzealous amount and depth of material, provided a sufficient roadblock to prevent us from ever truly completing our lesson in any of its various impromptu forms. We never once got to use our final evaluative exercise, the individual student submission, referred to as a worksheet in our lesson plan. During our first iteration of the lesson my partner and I attempted to linearly administer the lesson as defined by both the lesson plan and our PowerPoint presentation. We successfully reached the end of our recitation but this was quite obviously at the expense of the students understanding of the concepts as determined by in-lesson evaluative opportunities such
as teacher-directed questions of students about the material and its application. This form of the lesson reduced the students to having little, to no, active role in the lesson’s development outside of simply call and response. With so little involvement the students had no reason for any internal motivation to learn the material or take ownership of the lesson. This would explain, in part, this group’s tendency toward distraction and lack of assimilation of the introduced information. I believe the rest could be explained through the exceedingly brief form that all explanations were required to assume as a result of the limited time, it glazed the students in glossing over each concept.

The second iteration was the one observed by the professor, Dr. R. Duschl, of our Science Education 411 course. For this iteration Mr. Smolin, my partner, and I had abandoned attempting to absolutely follow our prescribed lesson plan, in full. We did however still attend its original order of material and complexity thereof, and we still tried to employ the PowerPoint presentation we had prepared. Taking the extra time with individual concepts did seem to improve student understanding of what concepts we developed, which did in turn appear to correlate to an increase in attention but only marginally. Dr. Duschl suggested bringing the material down a notch and attempting to increase the level of student interest by starting similarly to how we already had been, with some simple questions about students’ prior knowledge, but then continuing to attenuate the pace and with a greatly increased level of student involvement and direction. These suggestions came after the second iteration of our lesson and were employed in two different fashions in the following two opportunities.

For the third group that we had the chance to attempt to teach, we completely abandoned the PowerPoint and we used our original lesson plan only as a list of topics to cover if able to
proceed to the next degree of development as indicated by our students’ understanding as exemplified by their perceived comfort during group discussions of respective concepts and implications thereof. This particular group had representatives simultaneously of each end of the spectrum of attentiveness. It also contained one student that, as Mr. Smolin later noted to me, was possessed of some habits indicative of a very high-functioning autistic condition. This student was the one that in my opinion exemplified the greatest understanding and absorption with the material, thereby having a wondrous level of attention, albeit with some tendency toward preoccupation with whatever may be the present concept, often to the detriment of forward progress. The other student representing the opposite end of the extreme seemed as if it may have been due to tiredness, he had some signs indicating this but no mention was made. Mr. Smolin and I both just kept attempting to draw him into the group discussions by asking his opinions and interpretations of subject matter. This teaching opportunity was in my opinion the one that was the most successful with regard to teaching thus far, it made progress through only approximately two-thirds of the intended material but I feel confident that what was covered was absorbed and understood to a degree to which it could be recalled and used later.

All of the groups we had taught to this point were exclusively male. Our fourth teaching opportunity was to a group that was instead entirely female. This disparity made a surprising difference in the form that the lesson proceeded by. The level of group dynamic trebled, at least, with far more involvement from all quarters of the students. Allowing as much room for student direction as we had in the previous run-through quickly became evident to be slightly out of hand. The lesson began to proceed on seemingly random tangents as the young ladies made their own connections and provided questions to each other. This dynamic took the lesson completely awry from plan, but not to the detriment of the students. They stayed adherently to the realm of
the guiding questions of ice ages and their formation/decay, they just explored the topic in their
own fashion with our input as needed to guide them on to new topics or provide insight when at
a loss. This form of exploration and inquiry through a lesson makes it incredibly difficult, at
least as yet with my inexperience, to pass a judgment regarding the lessons success. I can make
arguments toward either verdict as they successfully covered again about two-thirds of the
material, and seemingly to all of a roughly equal level of understanding, but they did not really
use any portion of the lesson plan we had devised. As such the best that I can say is that this
教学 session experience was extremely successful, but the lesson plan failed miserably. It
was a lot of fun to see these young ladies take the ball and run with it, but the most really
touching part was to watch them stop and run back to help when one of them tripped. My
apologies for the analogy but I think imagery was the only way to, maybe convey that feeling.

The lesson plan included some but little opportunity for pre-instructional diagnosis of
prior knowledge or conception. In fact the only real example of this was our leading question
asking the properties of ice, which really was more a segue into a far too teacher-centered
lesson/lecture. The lesson provided ample opportunity to diagnose a singular student’s
understanding at any given time, at least in the fashion that we first employed it, by evaluating a
student’s response to a given question that we had asked. In its final form it actually provided
even better opportunities though, both more often and also of more of the groups’ collective
understanding as the members continually paused and reviewed in order to revise a flailing
student’s lack. In all forms I would say that the lesson could not offer support to (a) student’s’
misconception, however, in its earlier forms it could easily overlook a student possessed of one
and thereby not dissuade or address it. The next time I were to perform this lesson, if the
opportunity should arise, I will begin with a far more student-centered approach in an attempt to
recapture the level of interest present in both of the final groups but really outstanding in the last.

This student-centeredness also allows that the lesson develop at a pace with which the students are comfortable, so as better understand what has been covered and to be prepared for something new. In order to set up the circumstances allowing this to be effective I would revise the lesson’s opening questions in attempt to get students to perform what I will call a ‘cognitive download’, a mental reboot with a refocusing upon the lesson’s subject material.