Rotation Station: Implementing Complex Instruction

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Table of Contents

Introduction
Demographics
  ❖ School Demographics
  ❖ Classroom Demographics
  ❖ Academic Structure
Assessing the Status Order
  ❖ Table I Status Order Results by Child
  ❖ Focus Students
Complex Instruction
  ❖ Getting Ready for CI
  ❖ Norms
  ❖ Skill Builders
  ❖ Content
  ❖ Pre-Test
  ❖ Rotation
  ❖ Focus Students Revisited
  ❖ Post-Test
  ❖ Table II Complex Instruction Pre and Post-Test Data
  ❖ Conclusion
Appendices
Seating Charts A-F
Status Survey
Pre-Test Example
Activity Card 1
Activity Card 2
Activity Card 3
Activity Card 4
Individual Report Example
Multiple Abilities List
My Notes from an Activity
Post-Test Example
INTRODUCTION

When asked to perform an inquiry assessing student status in my classroom, I was unsure of the real implications gathering this type of data could yield. I am no longer ignorant to its benefits. After performing a mid-level assessment (in terms of both fidelity and authenticity) and implementing a complete Complex Instruction (CI) unit, I am increasingly more aware of how both academic and peer status can affect student learning.

Charlie Rathbone, Ph.D., presented the Complex Instruction project in our Principles of Classroom Management class at the University of Vermont. He challenged his new educators to consciously think of the many ways we, as teachers, could impact student learning. Was it possible to engage all learners? Was it possible to analyze the results and see if all learners learned as a result of my teaching? These were questions to ponder as I began the most intense semester of my career.

I was confident in Charlie's assignment. I have long admired his initiative to stay abreast of trends in education and try to implement them through his coursework. I also am in awe of his ability to learn alongside his students. He is exactly the type of educator I strive to become. Naturally, when he first introduced the lengthy plan of how CI would look, I was overwhelmed, but I listened closely.

Charlie had introduced us to CI during a math education course we took with him the previous year. He had us design a "pretend" unit and had us collaborate with fellow students in the course to do so. He was hitting two points here. We were learning how to create rich tasks with multiple abilities and more importantly, we were receiving hands-on instruction of CI in action by doing it ourselves. We knew the challenges of working in a group and we easily saw the rewards. This was the most helpful teaching tool he could have provided. I was nervous though! I had never attempted to implement CI alongside real students in an elementary classroom. My mentor teacher was also unfamiliar with this sort of cooperative learning. This was going to be a very involved process and a steep learning curve for all involved.

I remember thinking how deliberate CI sounded. Questioning my students on who they felt was smart or "cool" and then using their answers to arrange cooperative groups...could it work? I trusted Charlie's enthusiasm and the videos showcasing success in previous endeavors. I decided to give it my best and the results were more rewarding than I could have ever imagined. In the following steps, you will witness how I chose to incorporate the assignment into my heterogeneous 3-4-5, multiage classroom.

DEMOGRAPHICS

School Demographics

Sloan Elementary School was located in a middle class neighborhood in Northern Vermont. Some of its strengths reside with its dedicated faculty, diversity of learning levels and commitment to the community. Many parents were active participants in the education of their children.

Sloan consisted of students in third, fourth and fifth grade only. This made for a very intimate educational climate. Teachers and administrators knew students well and attempted to provide the most stimulating learning for all. Looking at some statistics from its "report card" help give a more detailed view of Sloan:

- Free/Reduced Lunch Program: 11.1%
- Median Family Income: $67,012
- Eligible for Special Ed.: 10.7%
Average Class Size: 20.2
Adults who graduated H.S. (includes equivalency): 29% in 1990

A wealthy district is not free from worries. There are students who are vying for attention both socially and academically, students overlooked by the system and classrooms unbalanced in terms of student number, race and gender. For a more in-depth look, let's delve into the dynamics of my classroom.

Classroom Demographics

In the fall of 2001, I began my semester long, full-time internship at Sloan Elementary. My classroom was an active place. I considered it to be a special environment and in itself, a little team in the making. At times, we worked together and the results were astounding. At times, we discouraged and criticized the work of members and this was detrimental to our growth as both individuals and as a group. We were unique though. This was the only learning situation at Sloan that combined grades 3, 4, and 5.

When the classroom was designed years ago, there was a student limit of eighteen imposed, due to the rigorous planning that accompanied teaching three grades simultaneously. We were at seventeen this year; though it often felt like 30! There were three adults in the room, the teacher (my mentor), the student teacher (me) and an individual student's Para-Educator.

One important aspect that deserves mention is the gender balance, or in this case, imbalance of our classroom. There were 11 boys and 6 girls. Gender imbalance can prove to be challenging when addressing grouping for many reasons. An uneven student count always allowed for an extra student on a team during groupwork, which usually was the cause for complaint from students. When you take into account that there were almost twice as many males, it can often make the females seem outnumbered. As a teacher of this age group, you are also always aware of what I like to call "the cootie factor". Some of my students were still apprehensive about working with members of the opposite sex.

Students were also in different age brackets due to the melding of grades. The breakdown was as follows: 6-3rd graders, 7-4th graders, and 4-5th graders. For the most part, students were good about working in groupings that were of mixed ages and gender.

Another interesting factor was that only 7 children in the room were living in a two-parent home. Some of them may have seen their other parent on weekends, if at all. Most commonly, it was the latter. This can be a stressful situation for a young child to deal with. Monday mornings, at Class Meeting, we had personal sharing. It amazed me to listen to them process about their living arrangements.

A few vignettes that may help to explain the extra “energy” in my room were all highlighted by what I consider a stressful and inconsistent home life:

*Girl 4 (G4) was a 3rd grader who could be quite obstinate at times and was constantly demonstrating attention-seeking and power behaviors. After encountering her during a few of these trying times, I sat next to her, put my arm around her, and gently whispered “are you tired”? She looked exhausted and began crying. She explained that Mom and Dad were fighting last night and she couldn’t sleep. Her situation was stressful because Mom and Dad were separated, but living together in the same house! Mom lived upstairs, Dad down. Apparently, a common occurrence was for one parent to turn on the TV rather loud as to annoy the other parent.

* #’s refer to students in Table I
According to G4, the other responded by blaring their TV even louder. G4 was the victim here. She often came to class lethargic; and responded by stubbornly refusing to do any work. If I tried to redirect her behaviors, she began throwing objects, screaming and often kicking. Her behavior not only interfered with her work and resulted in her removal from the classroom, it also disrupted many lessons. It was a constant struggle to get her out of one of her “moods”. When she was on task and working productively, she added a lot to class discussions and work times.

Another child that often vied for extra attention and claimed that he couldn't complete any of his work was fourth grader, Boy 10 (B10). He was in this class last year and often showed signs of abuse behavior. After being screened, it was revealed that he was in fact sexually abused and neglected as a young child. He just recently switched form the abusive home of his mother to calmer atmosphere of his father and stepmother’s home. B10 often engages in power struggles that could become exhausting if I continually played into them. I quickly realized that he needed space and could later speak of the situation. B10’s episodes were usually very public and disrupted many lessons. They became increasingly more intense this year, as he has begun to process memories of his past. He struggled with adjusting into his more stable home. He also had much to add when he was an active member of our group.

The last vignette is complicated in that Boy 4 (B4) has had the most jaded history. His parents abandoned him at the age of four. He has since been bounced from 5 foster family situations. This year, B4 was living with a foster father who claimed to be adopting him shortly (though he often threatened to be unable to keep him if he continued to behave as he does!). He had a foster mother in the picture, but she since left the home. The phrase “inconsistent family life” did not begin to describe his living arrangements. He was a 9 1/2 year old in 3rd grade who was our biggest “tester”. He had a difficult time forming attachments with people and doesn’t trust easily. The most compounding factor is that he engaged in all four of Linda Albert’s outlined problem behaviors in her book Cooperative Discipline: attention, power, revenge and avoidance-of-failure. This child really wanted to belong, make friends and wanted to form attachments. Unfortunately, he had already caused many classmates to regard him as a troublemaker. He was out of our room more often than not for exhibiting behaviors that endangered him and other children.

The three situations above help explain many of the behavior management issues that surrounded our classroom on a daily basis. If it were just those three students that engaged in them, it would perhaps be manageable. All of the students needed attention on an emotional and academic level and it was challenging as the classroom teacher to find time to be accommodating.

In terms of learning, my classroom was also quite needy. There were seven students on educational plans. B4 was on an IEP for learning and behavioral needs. There were 3 other students that were on IEP’s for specialized instruction in reading, comprehension and for help with specific learning disabilities. One student came to our class on a 504 plan for reading and is currently under reevaluation. She was progressing on or about grade level now. Two students received special services for speech and language (157 plans).

Academic Structure

I feel that my particular strengths as a teacher reside in my intuition about my students. I was aware of their ability level and needs and I tried my best to attend to these as diligently as possible. I worked well in individual settings as well as groups. While students were concentrating on completing an assignment, I could meet group
members or an individual to "check-in". It is so important to know where your students are at on an everyday basis. I would often ask students to meet with me at recess or after school so that we can clear up any misconceptions and get caught up on work. I didn't want them to lose out because they were not getting the instruction they deserve.

This classroom was based on choice and student freedom. Students were given a great deal of responsibility for their own learning and their own assignments. This can be overwhelming for third graders in our program; in fact, it still overwhelms some of the fifth graders! There was, what I consider, a loose structure in the classroom. Learners were not given firm deadlines for when projects are due; it was assumed that they would work at a different pace being that they were in separate grade levels. This method worked well for some of our students who were diligent about completing assignments. For those that needed more of a watchful eye, it was a harder task to manage.

Personally, I felt a more structured environment would be beneficial for all students. Many of the children in our classroom seemed to be struggling with inconsistency in their lives. It was my understanding, as I've viewed in other classroom situations, that students yearn for a structured school atmosphere. It was, therefore, my goal to implement this change during my solo teaching weeks.

As far as our daily routine, students had a diverse learning climate. It seems best to illustrate this with pieces of our schedule:

Morning Meetings began our day with everyone seated on carpet squares. This helped set the tone and welcome each day as a brand new start. The daily schedule was reviewed and students were encouraged to share their personal thoughts. Each day of the week represented a different theme: personal sharing, language lesson or news from the newspaper. In each instance, students were able to speak with one another in this informal setting.

Math began shortly afterwards. Manipulatives and hands on learning were a large part of our instruction. Students were rarely in their own seats; it was an active and lively hour in the room. There was little teacher lecture during math. Math was a good time to see students engaged in writing, drawing, seeing objects from different perspectives and of course, calculating.

During writing time, students usually had a 30-minute block to conference with the teacher or other classmates about how their piece was turning out. This illustrates how we relied on the social aspect of learning. It was an important skill for them to develop into better writers. The room was quiet enough so that those who are still composing could do so. Multiple abilities highlighted here were critiquing peer work, giving feedback, and drawing and designing projects. Students often shared their writing in creative ways such as posters, dioramas, slide shows or computer presentations. These were all attributed to different multiple abilities. The goal is to give them many choices so that they all may become engaged and find a way to report their work. It was nice to work in a classroom that allowed for individual students to showcase their specific talents. This also set the stage for Complex Instruction.

Language Arts work time was a 45-minute block where children were given the responsibility to complete spelling, vocabulary and reading—all at their own pace. This work time often seemed too lenient to me. Many days, students shirked responsibility and failed to complete all three of these assignments. My mentor teacher and I were often working with students who needed our assistance due to IEP's or other special learning circumstances. I felt, if this work-time were more structured, students as a whole, would get much more learning accomplished. They have lunch right after and could've saved some of the socializing for the lunchroom! I'm sounding very strict...I loved watching them work and converse with their peers. I just felt they were awarded that experience in many areas throughout the day. In this instance, I was watching too
many students take advantage of setting their own timeline for turning things in and it was not successful. It would seem to work better if we outlined the parameters more closely.

**ASSESSING THE STATUS ORDER**

As I began to get to know the children better, I tried imagining how I would go about having them rank each other both academically and socially. This information was crucial to designing a successful CI unit, so I had to be very careful about how I gathered my data. My mentor teacher was a bit reluctant to let me ask the student’s questions about who was “cool” and who was “smart” as she thought it would cause problems we didn’t need to add to our plate. I had to think of a way to satisfy her needs as well as what Charlie expected for our UVM assignment.

I designed an inventory to assess status in the classroom in survey format. I wanted it to be a useful tool for both the assignment and the classroom. I knew if this were not the case, my results would be biased. Students were very aware of how things worked since many of them were returning from previous years! Nothing got by them. With this in mind, I geared the questions around activities that would take place in the upcoming weeks.

My mentor was a staunch believer in student choice as I outlined through the academic structure. I agreed with her most of the time. Within her framework of choice, she also believed students should choose where they feel they will work best. Here is where we differed. I felt that students should be given many choices, but they would be more productive if their seating arrangements were more teacher-directed. I was witnessing many of them being distracted by peers as a result of the seats THEY had chosen. Language arts time, described above, was a perfect example. Students were affected by their seating choice and sometimes, in a negative way, both socially and academically. Students of this age group are very often driven to make choices that are dependent on social pressures.

In the structure of this assignment, I chose to add seating charts A-F (see Appendices). These help demonstrate how members of the class moved their seats during the first 5 weeks of the semester. I find it compelling to examine these charts in reference to the status order. It becomes apparent how the social structure can change over time. Attached, in the Appendices, you will also see the survey that students were asked to complete. It was a very serious process! Students even put up privacy folders so that no one could peek at their answers.
### Table I
Status Order Results by Child

<table>
<thead>
<tr>
<th>NAME</th>
<th>PEER STATUS</th>
<th>ACADEMIC STATUS</th>
<th>CO-STATUS</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boy 1</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Boy 2</td>
<td>5</td>
<td>7</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Boy 3</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Boy 4</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Boy 5</td>
<td>6</td>
<td>7</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td><strong>Emily Girl 1</strong></td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Girl 2</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><strong>Zack Boy 6</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td><strong>John Boy 7</strong></td>
<td>8</td>
<td>7</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Boy 8</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Girl 3</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Boy 9</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Girl 4</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Boy 10</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Girl 5</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Boy 11</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td><strong>Lucy Girl 6</strong></td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

- **N=17**
- There was a tie for 3rd, 8th and 10th place
- Denotes a Focus Student who will be described in depth
- All names have been changed to preserve anonymity
Focus Students

After conducting the survey and calculating the rank, I chose four students to concentrate on. These students were chosen because I wanted to see if changes would occur if I made intentional instructional moves to rearrange the status order in my room.

Boy 6, Zack, was a major red flag when I made this table. I couldn’t believe that he was awarded no status at all! If you look through the seating charts, you will notice Zack is always on the outskirts if the classroom. I had noticed this before and asked him numerous times if he would like to move his seat. He often replied that he was still deciding whom to sit near. I reminded him to watch the room, indicating that he could get a good idea of who made good choices and who did not. As a 3rd grader coming into this intimidating situation, I allowed Zack to take his time. I realized it went on too long. Things were well established in the room and he was already an outsider. I knew I had to try and get him involved. There was one small problem. He had the innate ability to grate on other’s nerves. Zack was a constant tattler; always telling on others and making up stories of people hitting him. Other classmates had caught him lying on numerous occasions, as had I. He also refused to take responsibility for his actions. It was the classic “boy who cried wolf” syndrome. I never knew when to believe him, even when I really wanted to. Academically, he was an able student who was engaged. Zack’s habits made others stray away from interacting with him. My guess would be that is why he did not get any marks for academic status either. It was now time to make a conscious decision of how to help change Zack’s status in the class. I knew I needed to adjust the seating structure to do this. CI was implemented during my solo teaching time. It gave me the perfect opportunity to move the room into four distinct tables without upsetting my mentor teacher’s style too much. It also allowed me to get Zack integrated into the classroom structure. I thought that assigning him competence might get others to look at him in a more positive light, so this was a goal as well. If students saw me acknowledging his abilities, they would hopefully see him as an asset to their group.

Another child I am now more aware of is Girl 6, Lucy. She was one of the three 4th grade girls in the room and her status was far below the other two. As her teacher, I knew that she was a gifted child. Students often failed to realize this because Lucy was much like Zack, pestering. She constantly battled with peers and often made public announcements that her answer was dumb or incorrect. Lucy’s insecurity caused classmates to think she was not intelligent. Truthfully, she was one of the brightest in the class! I thought changing seats would help Lucy as well, because it would have her in a less “cliquey” arrangement with friends. The third grade girls were not sure what to think of her as she often teeter-tottered from being their friend when it is convenient to disputing with them over something trivial. This was also apparent by looking at the seating chart. Lucy also moved often and also continually changed whom she sat near. I hoped that placing her in a more consistent environment would help. During CI, I decided to give Lucy the role of facilitator. I wanted students to see her as a leader, a role she was well equipped for with her creative ideas.

Boy 7, John amazes me. He was very well liked and had the highest status both socially and academically. This takes talent. The talent to be a loyal friend and a humorous and intelligent student were things John did not seem to work hard at. He was genuinely very caring towards others and was willing to help in an instant. It was no wonder so many wrote him on their lists. John was also one of the only people that were awarded status points by both males and females equally. If you examine the seating chart you will see that structure and consistency worked for him. He was always near Boys 1 and/or 5. They were his cronies, though he was not penalized for being what was often called the “Three Musketeers”. As a 5th grader and a well-respected member of our
community, I wanted to try and place people next to him that may need extra help, like Zack. I also structured his CI group carefully. As a class leader, John could help others realize their abilities.

The last student I focused on was Girl 1, Emily. In the seating charts, she is often mixed in among the girls towards the back of the room. As a new 3rd grader, she struggled with how to acclimate to the class routine. A sweet and happy student, Emily was a dreamer. She was very forgetful at times and students mistook it as her being unintelligent. She received help in the areas of comprehension and language and was often out of the room. I wanted students to realize her potential and not become absorbed with the notion that she needed extra help in some areas. I carefully assigned Emily to a group and wanted to make an effort to assign competence often. This would help students see her strengths and appreciate her contributions to the group.

**COMPLEX INSTRUCTION**

**Getting Ready for Rotations**

With the status order calculated and accounted for, I was ready to begin creating my interdisciplinary unit. We were doing a yearlong study on Vermont History, so it was a natural transition to plan around this. My mentor teacher was very open and allowed me to take the reigns for planning and assessing the project. Not only did it take place during my solo teaching weeks, my mentor also gave me leeway because she was unsure of how Complex Instruction worked. I was there to teach both her and the students, which added a level of excitement to the project. Rotation Station was a “kid friendly” term I borrowed from Laura Candler and my students were able to easily relate to the idea. Stations were set up so they could do a rotation; learning about a given topic and sharing it in a creative way with the rest of the class. Rotation Station was the only name they knew it by, for me it was dubbed Complex Instruction, and yes it was complex!

**Norms**

To prep students for this new type of learning, I hung up collaborative norm signs around the room that stressed group cooperation with saying such as:

- Everybody helps
- No one is as smart as all of us together
- You have the right to ask anyone in your group for assistance
- You have the duty to assist anyone who asks for help
- Pay attention to what other group members need
- Everyone is good at some of the abilities

I referred to these signs (that were hung on my "All Aboard at Rotation Station" bulletin board in our classroom) during our daily routine and during groupwork activities that preceded Complex Instruction. Students, in turn, were comfortable with hearing the norms and accustomed to working with them in groupwork. It also helped them understand that cooperating would help us build a stronger community, not only while studying Vermont History, but also for all our learning experiences.

**Skill Builders**

Another step that ensured the success of Rotation Station was introducing students to the individual roles they would acquire in groups. I was very deliberate in carefully
discussing that roles didn’t define us; we each added to the group in our own way, they helped to keep us “on task”. We practiced these roles with Elizabeth Cohen’s activities of Broken Circles and Master Designer. Both of these allowed students to get used to wearing role badges and being accountable for the group’s project.

After getting a feel for this, I had students participate in groups during the introduction to my interdisciplinary theme on Change. Students worked together during geometry and social studies. These lessons formed the groundwork for Rotation Station. I had students begin working in 4 distinct stations while doing the same activity for 2 days. On following days, students practiced working in groups (switching roles) on different tasks simultaneously. I believe that without these steps, Rotation Station would not have been as valuable for my group of learners.

I planned to have the Big Idea of my Complex Instruction unit focus on “How have children’s lives in Vermont changed from the 1800’s until now?” Again, this unit was embedded within a larger theme of “Change”. I wanted students to get a feel for how different Vermont was over 200 years ago. Most challenging was that I am not a Vermont native. Born and schooled in New York, the history of Vermont was more foreign to me than it was for my students! I went into research mode to gather information. With the help of my mentor and Charlie, I read a variety of sources and quickly learned the material I was to cover.

Another challenge came to light. Being a multiage classroom, some learners were more aware of the Colonial period that preceded the 1800’s while others were not as knowledgeable. In my eyes, the only way to eliminate some of the bias was to review this material. One problem. No time. I suggested to my mentor that I would create a learning center where students could choose one of six activities daily in order to gather more information about the time period. These activities spanned math, science, art, literacy and social studies. Most of all, they were fun and could be completed individually. I introduced them prior to the beginning of CI and students worked independently on them while I conferenced with their peers. They served many purposes and I was glad to have made them to compliment the unit.

I was still having trouble making the content fit CI. I went to Charlie. One of the most important things he reminded me was to keep it simple. Social studies required students to research, read and absorb a lot of material. It wasn’t as hands on as math or art could be. I really had to put a lot of thought into making the tasks as rich as possible so that students with a wide array of abilities could succeed. Charlie helped me do just this. He challenged me to focus on four aspects of children’s lives. After our meeting, I was ready to embark on designing my activity cards to fit the categories of school, home life, work and play. In the Appendices, you will see the final product of the cards students worked from during Rotation Station.

Pre-Test

Ready, set, pre-test! Charlie asked that we collect pre and post-test measures during our units so that we could better assess how CI worked in our classrooms. It was also a new Vermont license requirement to be able to show what children had learned over time as a result of my teaching. I remember scrambling on this part; I almost forgot to give a pre-test in the midst of getting ready the first day! With some quick juggling, I wrote four questions on the overhead projector and asked students to jot down any facts they could remember about the categories of school, home life, work and play. Many of
the students used their prior knowledge to answer how life had changed for children in Vermont over the years. My third graders did struggle a bit more. Even with the addition of the colonial times learning center, it was hard for them to find facts that illustrated how life was different. While grading their answers, I awarded student's 1 point if they could name at least one relevant fact for each category. The highest score therefore, was a 4. I then converted these scores to a 100-point scale. All students, except one, participated in both the pre and post-tests. In the Appendices, you will see samples of a student’s tests. I have also included Table II to show the student's growth from pre/post-test data.

Rotation

In the design of Complex Instruction, students participate in activities along with their group while other groups are simultaneously working on another activity based on the same Big Idea. In my room, four stations were set up daily.

On the first day, after giving the pre-test, I held a 10-minute orientation on how Rotation Station would work. They were familiar with roles and norms from the Cohen activities we had done previously. Orientation allowed me to quickly explain each task card and give a timeline for the wrap-up. This was where students "report-out" what their group had learned and they shared their knowledge with the class in a creative way. Students each had a role badge on depicting their group job and my mentor and I wore badges as well. Ours read "Special Agent" and we walked around the room writing notes on a clipboard. Our main goal was to reside on the outside of the learning circle and jot down any abilities we witnessed students using. There is a page in the appendices where you can view clipboard notes. These would later serve as the examples we would use to assign competence with. This 1st day was very chaotic. We did not finish in the allotted time and I was discouraged since I had planned our remaining time accordingly. In retrospect, it was a great first day! I didn't realize, until later processing with my peers and Charlie, that the first day is crazy no matter what. It rarely runs smoothly and without a hitch, but that's what makes the remaining days even more special!

Day two was exciting because students were able to report what they had learned the previous day. I began again with a quick orientation and made sure to assign competence to low status students I noticed during the previous day. It was awkward to do this. I felt funny using encouragement stems to publicly announce what I saw happening during groupwork. I also didn’t think it my students would be that affected. I was wrong. Immediately, students began raising their hands and telling me what they did to help their group. It actually turned out really well because it allowed me to segue into writing down multiple abilities needed to complete the tasks. I started the sheet out with the following abilities that I had written down as I walked around the room: "working on a rap song" and "gathering information from the tape". These helped launch more abilities and students were the contributors to the list. The most meaningful part of this day was watching students watch each other as they did their report-outs. Many chose to do a song or play in order to present their material. There was laughing and student groups were anxiously waiting their turn. We did run out of time again, but I felt more prepared to adjust accordingly.

Day three was intense. We began orientation with adding to the abilities list and I asked students to give groups doing their previous task some pointers. This was perhaps the most powerful of all. Students were honest and gave feedback with tips such as “don’t forget to do the individual report” and “don’t waste too much time on the tape”. We began right away, but an unexpected event arose. One of my students threatened a group member and ruined a presentation that students were working on. This resulted in him leaving the room. My mentor continued to write clipboard notes and
assign competence while I dealt with the situation. We were again unable to finish entirely, so we decided to do report-outs the next morning during meeting so we wouldn't lose any additional time.

Day 4 was smooth; we had completed the report-out in the a.m. and were all determined to finish a full activity in the afternoon. It worked! It was refreshing to see how CI was affecting these learners. They constantly talked about it during other parts of the day and really looked forward to the activities. Students were eager to share the material in different ways than the group who had completed it previously. This helped keep the report-outs new and exciting. Some did encounter problems this day though. One group was down 2 people who were out sick with the flu. This made it increasingly more difficult to carry out roles, so I spent a bit of time helping them. Another group argued a majority of the time. They were frustrated with their facilitator who was taking over the project.

Issues like these kept my mentor and I busy guiding the groups so that they could continue on their learning quest. Day 5 consisted of discussing how these topics affected how we worked. Orientation prospered from having the students give each other feedback on how the two groups might handle their situations. I liked that we brought these issues to the table and solicited student opinions to solve the crises. It spoke of the classroom community and the mutual respect we had for one another. Rotation Station was not only beneficial for our class as a whole; it also increased participation for individual members of a group. The next section highlights the effect it had on each of my focus students.

Focus Students Revisited

The results were awesome! I really saw an improvement with each successive activity that students engaged in. Students that were previously low in status were working, talking, laughing and learning. Equally important, so were students that were previously involved. I saw my students "gelling" to produce excellent work.

Zack was my "0" status child. It was my goal to make sure that this changed by the time I left in December. CI helped me make those changes. First, I made sure to integrate him into the structure of the room. I had all students keep their seating arrangements (they had already chosen who THEY wanted to sit near) and I placed them into groups of 4 or 5 desks. Zack was now part of our community and was adjusting well. I made sure to put him in a rotation group that had another 3rd grader, a 4th grader and a 5th grader. I thought that this combination would decrease the intimidation factor. I also gave Zack the role of recorder. He was always a good listener, loved to write and had impeccable handwriting. This gave him a chance to show others some of his talents. As I took clipboard notes, I consistently noticed things that he was adding to the group. By assigning him competence, it gave others the notion that he was a valuable member of the group. My favorite memory is of watching his group plan out their puppet show. Zack was busy jotting notes down and giving feedback to the facilitator about people talking too fast. The facilitator, in turn, asked group members to slow down so Zack could write. This made Zack smile. I also walked by and watched him laughing out loud as his group thought of silly sayings for their puppet characters. He was engaged, others were including him and I could finally see him shine as a member of our community.

Lucy, Girl 6, was one of three fourth grade girls in the room. She had much lower status then the others. It was another goal of mine to help her grow both socially and personally. I say this because she was very gifted and academically above grade level in many areas. Her low self-confidence and insecurity made others uncertain of this.
though. Changing seats helped Lucy as well as Zack. It gave her a consistent place and even allowed her to be the oldest girl in the group. She loved to take on the leadership role and she was very creative. I allowed her to be the facilitator for her group for this reason. They were definitely all grasping the material. Unfortunately, Lucy was so excited about being facilitator that she became very demanding. She even began taking over other people’s roles. One of her group members even called her Napoleon! In a way, I was excited that she felt so tied to the task. I wanted them all to share the responsibility though. I was constantly pulling her to take the opportunity to remind her of ways to approach her group. It was hard to increase her status because she was so resistant to change. I made sure to assign competence whenever possible, but there was a lot of tension surrounding that group. Next time, I will make sure to give someone like Lucy a role like reporter. She will still get the spotlight she craves, but will not take over the whole show. Even with these processing issues, the group’s performance was powerful. Lucy’s score increased by 50 points and members of her group increased by at least 47 points!

John still amazes me! Not only did he receive the highest status in the class, but he also achieved marks equally from males and females during the inquiry. John was a superb group member. I allowed him to be the reporter—he loved to talk. As I observed and took notes, John was constantly reminding his group of the norms. They took off. Each activity was well planned and carried out. Their group consistently got all of the pieces of their task completed. One of my favorite memories was walking past when he was informing the group that one of the members needed help understanding the activity card. He made his statement in a respectful way so as to not embarrass or take status away from the student in need. He truly is a fair and just leader, even while not assuming the leadership role.

Emily has made important leaps in our community. Together we have worked on a success plan to help her to remember things she may have forgotten in the past. This has helped her gain status because students don’t see her as “flighty” as they did before. During CI, I made sure to put her in a caring and nurturing group. She has many diverse learning needs and I wanted her group to be able to give her as much support as possible. I also tape-recorded any readings for the rotation. I wanted to be certain that students like Emily had as much opportunity to understand and grasp the material as anyone who could perhaps read better. This turned out to be one of the best parts of Rotation Station. Students loved going to the activities with tape recorders. I had an actor friend help do voices and we both stayed in character of a child of the 1800’s. The smiles from Emily and others were well worth the effort. Her gain score was 60 points! That is amazing considering all the extra help she leaves the classroom for. Her peers were able to provide her the help she needed to succeed. That is more rewarding than anything else!

Post-Test

On the last day of Rotation Station, I informed the class we’d be taking a test. They were all quite nervous since they did not normally have traditional written exams. I assured them that they were familiar with the questions; they had answered them during our pre-test. Many were still apprehensive as they were unsure of how to speak of what they learned during the rotation. One boy said, “I just had fun with it. I didn’t think we were gonna get a test. What if I don’t remember anything”? I reminded them to do their best and the results were astounding. In the Appendices, you will notice a chart that showcases the increase in scores from the pre-test. Overall, student’s learning increased by 45.6%!!
Table II
Complex Instruction Pre/Post Test Data N=16

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Growth</th>
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<tbody>
<tr>
<td>Boy 1</td>
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<td>100</td>
<td>62.5+</td>
</tr>
<tr>
<td>Boy 2</td>
<td>67.5</td>
<td>100</td>
<td>32.5+</td>
</tr>
<tr>
<td>Boy 3</td>
<td>25</td>
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<td>62.5+</td>
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<td>25</td>
<td>87.5</td>
<td>62.5+</td>
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<td>N/A</td>
<td>N/A</td>
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<td>100</td>
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<td>75</td>
<td>100</td>
<td>25+</td>
</tr>
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</tr>
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</tr>
<tr>
<td><strong>Girl 6</strong></td>
<td>37.5</td>
<td>87.5</td>
<td>50+</td>
</tr>
</tbody>
</table>

** Denotes Focus Student
Average Gain Score=45.63%
CONCLUSION

My students were very engaged throughout our Complex Instruction rotation. They loved reporting-out and even began to plan this portion of their activity right when they reached their station. It was a very successful and meaningful teaching tool in my room. Most notably, my mentor teacher, a veteran of 30+ years, found it beneficial as well. She has done a large amount of work with cooperative learning, but the status structure data interlaced with the groupwork ideals, was new for her. She enjoyed watching the children and hearing the “buzz” of the room. So much so, that I helped teach her the ins and outs of CI. She was able to use this knowledge to construct a unit on “Famous Vermonters” that complimented this rotation. Before I left Sloan, I assisted in carrying out this second CI rotation. It was amazing to see how much the students learned and what they were assimilating into this new round. They really got the hang of it! I also learned a great deal more by being asked to explain CI to my mentor. We also experimented a bit with the second round by asking students to switch roles for each activity and by structuring the report-outs more. All of these changes have helped me better understand the process and awarded me experience with what can work and what does not work with this particular group of learners.

Now equipped with powerful insight into the minds of students, I know I can affect student learning in my classroom. This semester, I was challenged by Charlie to provide an equitable learning environment where students could cooperate and gather information on a given unit of study. Simultaneously, they would work towards breaking down the social and academic biases they held for one another. After witnessing Complex Instruction’s success on a daily basis and analyzing the data I collected, I am confident that I will continue to use CI in my classroom. It has truly changed my outlook on how powerful groupwork can be.
REFERENCES


Appendices

Seating Charts A-F
Status Survey
Pre-Test Example
Activity Card 1
Activity Card 2
Activity Card 3
Activity Card 4
Individual Report Example
Multiple Abilities List
My Clipboard Notes from an Activity
Post-Test Example
Seating Charts A-F

The following charts map out the classroom as the weeks prior to Complex Instruction unfolded. The students were allowed to change their seats whenever they felt it necessary. We usually moved desks during snack so as not to disrupt learners. It was a significant change that seemed to mirror the effects of the status order in the room.

A-Week 1

Key:
- B, G #’s
- Refer to Table 1
- ^ = Low Status
- * = Focus Student

<table>
<thead>
<tr>
<th>G5</th>
<th>G3</th>
<th>*G6^</th>
<th>G2^</th>
<th>*G1^</th>
</tr>
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<tbody>
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<td>R3^</td>
<td>R9^</td>
<td>R7</td>
<td>R4</td>
</tr>
<tr>
<td>*R6^</td>
<td>R5</td>
<td>B2</td>
<td>R8</td>
<td>R10</td>
</tr>
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</table>

B-Week 2

Key:
- B, G #’s
- Refer to Table 1
- ^ = Low Status
- * = Focus Student

<table>
<thead>
<tr>
<th>R9^</th>
<th>R3^</th>
<th>R4</th>
</tr>
</thead>
<tbody>
<tr>
<td>R11^</td>
<td>G1^</td>
<td>G3</td>
</tr>
<tr>
<td>*G6^</td>
<td>G2^</td>
<td></td>
</tr>
</tbody>
</table>

| R2 | R8 | R10 | *R6^ |

Me

Computer Center
E-Week 4

Key:

B, G #'s
Refer to Table l
^ = Low Status
* = Focus Student

Me

Computer Center

G4
G3
*G6
G2
G1

R2
R3
R4

R7
R1

Para

Teacher

B6

B10

F-Week 5

Key:

B, G #'s
Refer to Table l
^ = Low Status
* = Focus Student

Me

Computer Center

G4
G2
*G6
G3

R2
R3
R4

R1

Para

Teacher

B6

B10

B5

R7
R8
R5
Please help us in answering these questions:

We are going to be taking a few fieldtrips in the next month. Please write four people you'd like to sit near on the bus.

1. 
2. 
3. 
4. 

Math pursuit is a contest we will hopefully begin soon. Your goal is to work on a team to answer questions. Who would make the best teammates for you?

1. 
2. 
3. 
4. 

Please be aware that this survey will help Ms. Clark and Ms. Kolodny make these choices with you. We may not be able to honor them all. We will make every effort to try and give you one that you have chosen.
"Just do what you do best"
- Red Averback

Vermont First
In 1791, Vermont became the 1st state to join the original 13 colonies.

Hello, Everyone! Today we will not be working in groups.

1. It has gotten easier. We have people to make food and supplies for us.
2. In the 1800's they had to do real chores like farm work. Now we just have to do fake chores like making art and stuff like that.
3. They got whipped back then now we just stay up for recess (farmers much more lax now)
4. They didn't have video games and board games and we do.

5.
Vermont History

Big Idea: How have children’s lives in Vermont changed from the 1800’s until now?

Activity 1: Lyddie at the Mill and other Jobs

Activity Card

The Burlington Free Press wants to hire you as reporters! In order to be picked for the next breaking story, they want to test out your interviewing skills. They’ve asked you to listen to a pre-taped recording of a young girl named Lyddie. Lyddie lived in Vermont and moved to Lowell, Massachusetts to work in a mill. They’ve also given you some diary entries from children working in Vermont in the 1800’s. Your task is to think of a creative way that you can tell your boss about the information you’ve collected. You might want to pretend Lyddie and the others are visiting Vermont. What would you do to show them what you learned about working in the 1800’s? You might want to concentrate on thinking of the different things children do to make money today. In those days, children had to leave their homes to work. The money was needed to support their families. Think how this may be different from what you earn money for today.

Materials:
* Lyddie by Katherine Patterson
* Lyddie’s Tape
* Tape Recorder
* Diary entries from people working in Vermont in the 1800’s at Tyson Furnace, Kent Boot Shop and Merino Wool
* Blank Venn diagram

Procedure:
- Listen to Lyddie’s tape and describe in pictures or words what it was like to leave your home for work as a young child. Listen for Lyddie’s description of her working conditions.
- Look closely at the descriptions for the workers at the Vermont businesses. How is their life different from yours? Discuss this with your team.
- Use the Venn diagram to show how working conditions for children in Vermont have changed from the 1800’s.
- Find a creative way to share this information with your classmates.

Evaluation Criteria

Great interview questions should:
- Explain what you’ve learned through listening, reading and looking at pictures of working in the 1800’s.
- Give details about how work has changed for children in Vermont now.
Vermont History
Big Idea: How have children's lives in Vermont changed from the 1800's until now?
Activity #2: Roxana's House
Activity Card

You have been hired as News Channel 5 reporters to cover a breaking story about a time capsule found in Peacham, Vermont. Isaac, the son of Roxana Brown Walbridge Watts wrote about what home life was like in Vermont in the 1800’s. In order to show your boss you’re an expert, you all must research what Isaac said about his home life. Gather ideas from the pictures in the scrapbook, too. Your job is to write a news report describing what life was like at Roxana's house and how it may have changed from life at home today.

Materials:
Isaac's time capsule (recorded on tape)
Tape recorder
Scrapbook of pictures
Blank Venn diagram

Procedure:
- Using Isaac's tale and photos, describe activities that happened at Roxana's house.
- Use the Venn diagram provided to show how these activities are different or have stayed the same from what happens at your homes.
- Write a news report that tells a SHORT story about how life has changed for children in Vermont from when Isaac was a child until today.

Evaluation Criteria
A great news report will:
- Share facts about Isaac's home life
- Explain how home life has changed in Vermont since the 1800’s in a creative, fun way!
Vermont History

Big Idea: How have children’s lives in Vermont changed from the 1800’s until now?

Activity #3: School Rules!

Activity Card

You have been hired by Founder’s to create an Old Time School Exhibit for the Learning Center. Teachers want to bring their student’s in to see how much school life has changed for children in Vermont. Your job is to research what has changed and share this information with the school in a fun way!

Materials:
One-Room School House by Bobbie Kalman
Poster Paper
Blank Venn diagram

Procedure:
- Look through the book to find any ways in which school has changed for students throughout the years.
- On your Venn diagram, make sure to show what has changed in school and what has stayed the same.
- Make a poster that advertises your exhibit and draws students and staff in to the Learning Center! Be creative and be sure to draw some examples from the exhibit!

Evaluation Criteria

A great poster/advertisement will:
- Be creative! It will show facts you learned that are good examples of how school has changed in Vermont.
- Draw people in...your goal is to get people excited about visiting the exhibit!
You have been hired by the Flynn Theater to put on a puppet show for children. They are interested in finding out the differences among games that were played in Vermont in the 1800's to games played by children today. You can do a super job! Remember to be creative!!

Materials:
Puppet Theater
*Games From Long Ago* by Bobbie Kalman
Blank Venn diagram
Other materials for puppets (as needed)

Procedure:
1. Look through the book and try and concentrate on 2-3 games that were played long ago.
2. On the Venn diagram, list games that were played long ago, games we play today and ones that fit both categories.
3. Create a skit that shows games from each category.

Evaluation Criteria
A great skit will:
1. Include facts about games played in the 1800's and games that are still played today.
2. Be creative, easy to understand and fun for the audience!
Multiple Abilities List

Creating a song
Gathering information
Performing a skit
Listening to the tape to get facts
Looking for information in encyclopedia
Reading from the resources
Creating interview questions
Deciding which materials were needed
Working together to design a poster
Drawing a comic
Taking notes on an activity
Organizing Venn diagram
Cooperating to plan report outs

My Notes On The Second Day Of Rotation Station

**Group 1**
- Working on Rap/report-out
- B7 reminding others to help G1 with notes
- Coloring poster
- B4 drawing newspaper

**Group 2**
- G2 checking to see if everyone understands
- Working on Venn diagram
- G4 looking through games book to get ideas
- B1 explaining differences with games of today

**Group 3**
- B8 explaining why he wants to use information and how it can help presentation
- Arguing!
- B11 trying to take notes-frustrated
- G3 waiting for instructions

**Group 4**
- 1-minute stop sign
- B10 leaves group since no one is listening to his idea-goes to read a book in loft
- B2 Rereading procedure to refocus group
Individual Report

1. Name two things you learned from your task today. Make sure they show how children's lives have changed in Vermont since the 1800's.

   They had to get up early to do chores. They do chores we do now, going to school, feeding animals.

2. Explain how Rotation Station worked/didn't work for your group today.

   It worked because everybody helped.

3. Tell what abilities your group needed to complete the task.

   Writing abilities, making Venn diagrams.
You’re the experts! During Rotation Station, your groups have worked on four areas of children’s lives in 1800’s Vermont. Please show what you have learned in each of the activity stations.

An excellent assessment will show examples and detailed answers.

1. Explain how **HOME LIFE** has changed for children in Vermont since the 1800’s. At home children had to work in farms, sew, cook, make candles and much more.

2. Explain ways that **WORK** has changed for children in Vermont since the 1800’s. Growing crops, market work, working with sheep, working at mill, working with a blacksmith and much more.

3. Explain how **SCHOOL** has changed for children in Vermont since the 1800’s. Quill and ink, parchment, slate, dirt floors, tables and benches, not desks.

4. Explain how **GAMES** have changed for children in Vermont since the 1800’s. New: video games, educational games, sports, dominoes, marbles, pickup sticks, nancala. Then: pitch no smiling.