

Final Observation Paper

Over the summer I had many opportunities to watch children of different ages learn how to play chess. These children were self motivated to learn the game and did progress in their knowledge and skills throughout the weeks that I was able to observe them. My first formal observation was with one of the more promising older players named Ty and a younger player name Bashir. The second observation was with a younger girl name Desiray and an even younger boy Tyreese who was still struggling to learn all the rules. I observed many individual differences when it came to these students' strategies for learning and remembering the game rules as well as strategies for winning. The most compelling conclusion I reached through these various observations though was about the value of peer-teaching and collaborative learning.

All the opportunities I had to observe the children learning chess involved two children playing each other. Even when an adult/teacher was present it was as a mediator/coach off to the side not as an active participant in the game itself. Due to this situation, there were many instances of children learning from each other. The learning that occurred between the children seemed to be of three types. The first I saw was children learning through observing the other children. They watched and absorbed other children's techniques/strategies and listened to each other's reasoning for the decisions they made in the game. The second involved children learning as a result of being critiqued or evaluated by their peers whom they were playing with. The third and more subtle learning came about as a result of the children teaching the other children how to play the game. These children through taking on the teaching role were able to test out their own understanding of the game through communicating what they had learned to other, often younger or less familiar players.

In my first observation you can see that Ty is the player who is actively being taught through a

reminder of a rule about how pawns can attack. However, ultimately the other child, Bashir picks up and acts on this affirmation of knowledge after observing the evaluation of Ty's mistakes.

Bashir: (moves a pawn to a space directly in front of one of Ty's pawn pieces)

Ty: (smiles and immediately picks up his pawn and knocks Bashir's over) "I got him"

Mr Chris: "Sorry Ty but remember pawns can only attack diagonally"

Ty: (sighs loudly and puts the two pieces back where they were) "Where can I get him then" (shrugs his shoulders and gestures emphatically)

Mr. Chris: "If he attacks diagonally, then what do you think?"

Ty: (picks up his pawn, moves it diagonally with a swiping motion and then looks at Mr. Chris)

Mr. Chris: "That's right, so it's still your move"

Ty: (places his pawn back in it's original space and picks up his bishop piece again and moves it to a space two diagonal spaces away from it's current position, looking up at Mr. Chris holding it above the space, waiting)

Mr Chris: (nods) "you can do that"

Ty: (puts the piece down on that space)

Bashir: (takes a pawn and swipes it diagonally, knocking over Ty's bishop piece)

Ty: "What? You can't do that!" (replaces his piece)

Mr Chris: "Yes he can. Remember, pawns attack diagonally" (gives Ty's piece to Bashir)

Ty: "Oh yeah, yeah, that's right, ok"

This was a learning moment for Ty obviously but Bashir was quietly learning as well by simply observing and absorbing Ty overcoming the struggle to understand how the pawn pieces attack. This was evident in many of the games I observed. Children were definitely learning from each other's mistakes as well as successful decisions. Ty became one of the best players in the camp and even though he was sure to beat the other children, they often wanted to play him because they knew they

would have a chance to get better and learn ways to maybe beat someone else. The social and collaborative aspects that come out through playing the games together allowed many more opportunities for learning to occur than if we were in a situation where children were learning the game on their own.

In my second observation Desiray who is older and more confident than her opponent Tyreese feels compelled to evaluate and critique his playing. As mediator and coach I saw this as a teaching moment for both players to be reminded of the rules of the game. What followed was not only a reminder for Tyreese but an important moment for Desiray where she was allowed space to expound upon her own thinking and become self aware of her own strategies.

Tyreese: (picks up a rook piece and tries moving it by jumping over the pawn in front of it)

Heather: "Remember it's not checkers there's no jumping pieces allowed"

Tyreese: (puts it back and then moves the Rook diagonally out of the space)

Desiray: "No that piece doesn't move like that"

Heather: "Tyreese do you remember how that piece moves, what the rules for it are? It moves in two directions, front and back and then side to side" (motions with her fingers what she means by front to back and side to side)

Desiray: "It's like a plus sign, you can go forwards, backwards and then to either side as many spaces as you want. So really it's like four directions not just two" (Looks at Heather for affirmation of her understanding)

Heather: "Yes that's right, that might be a better way to explain it, Desiray, thank you"

Desiray through vocally evaluating Tyreese's decision was able to use language to affirm and make sense of her own understanding of the rules for how pieces move. The compulsion to help other children learn the game forced many children to without realizing it, sort through their own knowledge acquired of the game thus far and make sense of it to construct an explanation for the other player. All

of this is reinforcing their own learning and could even help them evaluate their own understanding to see if there are any gaps still.

It was also an important moment for me as a teacher. As you can see in this observation, I came to realize that it can be extremely useful for teachers to allow children to help explain things to other children if mediated. Sometimes children seem to better relate to the struggles other children are experiencing (perhaps they struggled in similar ways) and can not only voice what the problem may be but also communicate a solution that works better for the children than what I could come up with. Obviously, there still is a benefit from having an adult mediator/coach to be able to affirm the child's explanation is a correct one but a fellow child can be a very helpful mediator between you and the other children at times.

I would argue that the children who were most vocal about sharing their knowledge of the game with the other children were in fact actively re-constructing and reinforcing their own understanding of the game. These children therefore became better players and learned the most from their experience with playing chess this summer. It is important to note that although this reinforcement of learning and deepening of understanding seemed to be taking place in these children, I do not believe they were necessarily self regulating. I don't think they were consciously utilizing their "teaching" role to monitor their own learning. They did however seem to modify and take note of ways to adapt how they communicate their own understanding so that other children could learn from them. I also think that through communicating their understanding out loud to a peer, they are able to come at their own learning from a new perspective and even identify gaps in their own understanding. The child that is teaching can then use this as an opportunity to turn to the teacher/coach mediating for assistance and increased instruction if needed.

I think the conclusion that there is value in children learning with and from one another has a lot to do with the influence of the social aspects of learning. There is definitely a strong connection between the social environment and situation for learning and the learning that actually takes place

with the children involved. They learn things from each other's "teaching" but they also are able to influence each others' cognitive thinking when they disagree about strategy or even when interpreting the rules differently. These arguments are often constructive and useful especially if mediated by the adult. Also the children will bring more to the table when collaborating or interacting with other children because they feel the need to perform and compete. This performative aspect causes an increase in effort and strategy because they are aware that they will be watched or share the experience with another student. I believe encouraging children to help teach the other children will keep those that may feel they already "get it" engaged. Allowing these children to take on that responsibility of teaching others gives them a sense of purpose and can often encourage them to become re-invested in the subject and their own understanding of it.

These observations and this conclusion about the value of children learning through teaching and collaborative learning has important implications for me as a teacher. I hope to create a classroom environment where students can learn not just from me but also from each other. I need to allow space for that co-teaching to happen and encourage observation, open discussion and evaluation of each others' thinking and decisions. I also as a teacher need to be open to learning from my students how best to reach them and other students. Sometimes observing students successfully explaining things to each other can help me understand how to teach best with my own instructional strategies and maybe even be more successful impacting the class as a whole.