How the Self-Serving Attributional Bias Affects Teacher Pedagogy

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ABSTRACT  
In this paper, I argue that the Self-Serving Attributional Bias, which involves attributing success to internal features about oneself and failure to external factors, negatively affects the teaching practice known as “Closing the Loop” wherein teachers recognize issues in student learning and then adjust their approach to increase student learning. This practice requires teachers to recognize that the learning activity is to blame for both failure and success in student learning which the SSAB might prevent teachers from noticing. I detail what can be done to address this bias. I suggest that institutional structures and measures that are intended to serve as a check on biased reasoning would be an effective way to help reduce the negative impacts of the SSAB. I explore the possibility of increasing accountability in order to bypass the SSAB, but conclude that this practice would be counterproductive. Finally, I suggest that we need to eliminate the evaluative nature of standardized testing in favor of a localized model of assessment which would be a beneficial structure to help mitigate the negative effects of the SSAB on the teaching and learning environment.

KEYWORDS  
Teaching, Learning, Bias, Assessment
In this paper, I argue that the Self-Serving Attributional Bias, which involves attributing success to internal features about oneself and failure to external factors, negatively affects the teaching practice known as “Closing the Loop” wherein teachers recognize issues in student learning and then adjust their approach to increase student learning. This practice requires teachers to recognize that the learning activity is to blame for both failure and success in student learning which the SSAB might prevent teachers from noticing. This becomes problematic when teachers attribute the failure of a lesson to deficits in the students rather than recognizing the parts of the lesson that are in their control which they could change to better teach their students.

I detail what can be done to address this bias. One of the solutions involves educating teachers about this bias so that they can avoid it. Unfortunately, we cannot rely on teachers to recognize and monitor this bias on their own. I suggest that institutional structures and measures that are intended to serve as a check on biased reasoning would be a superior way to help reduce the negative impacts of the SSAB. I explore the possibility of increasing accountability in order to bypass the SSAB, but conclude that this practice would be counterproductive. Finally, I suggest that we need to eliminate the evaluative nature of standardized testing in favor of a localized model of assessment which would be a beneficial structure to help mitigate the negative effects of the SSAB on the teaching and learning environment.

TEACHERS ARE SUSCEPTIBLE TO THE SELF-SERVING ATTRIBUTIONAL BIAS

What is the Self-Serving Attributional Bias?

The Self-Serving Attributional Bias (SSAB) describes our folk psychological tendency to attribute our success to stable features of ourselves that we can control (e.g. our own efforts, or qualities such as persistence and diligence) and attribute our failures to features that we cannot control (e.g. bad luck or bias against us) (Spaulding 2018, 49). By invoking this bias, we feel good about our successes and brush our failures off onto other factors.¹ One example of this is a

¹ Shannon Spaulding suggests that this bias is a sign of healthy psychological functioning (Spaulding 2018, 49). The claims made in this paper are to demonstrate that this bias, although helpful in some cases, can be harmful in others.
student attributing their good grades to their hard work and their bad grades to bad luck or flaws in their teacher. Knowing that humans have this bias, we can use it to explain and predict what others will do in response to success and failure. Through this recognition, we also can reflect on our own thinking and change our approach if necessary. I will use this idea to demonstrate how we can predict what teachers might do in response to the failure of a learning activity which can negatively impact the continual improvement of pedagogic practices.

What is Closing the Loop?

Closing the loop is a common concept in teaching and learning. This entails a teacher deciding what they want their students to learn and designing a learning activity with this goal in mind. The teacher then implements that learning activity and provides an evaluative tool (e.g. a test, composition of an essay, etc.) which allows students to show their mastery of the learning target. Teachers then assess these completed assignments and from them gauge how well the learning activity helped students to meet the lesson objective. From this evaluation of data they adjust the next lesson accordingly to better address the learning target. This adjustment might be specifically for that particular lesson for the next iteration of the class, or different, future lessons in the same class depending on if it was the kind of activity that was problematic or just problems with the specific one done. This process has the goal of creating better learning activities which helps the teacher’s practices improve over time (Arcario et al. 2013, 21). Closing the loop works across disciplines and at a variety of levels (i.e. elementary schools, high schools, or colleges). All teachers design learning activities and provide assessments where they assess whether or not students learned the content that they were supposed to. The challenge is then applying that data to adjust future lessons in a productive manner.

The Self-Serving Attributional Bias Could Hinder Closing the Loop

Although closing the loop is a good way for teachers to recognize problems in their approach and adjust their lessons accordingly, the Self-Serving Attributional Bias could prevent teachers from recognizing the deficiencies in their lessons. Teachers might attribute the failure of students to learn from a lesson to external factors such as the students not paying attention, not putting in effort, or the students not being smart enough to understand what they were trying to teach
them. This external attribution places the responsibility on the students when the teacher should recognize that they are responsible for fixing the broken activity. The SSAB sometimes prevents this recognition of responsibility.

The recognition of responsibility is hard for people because of the emotional component of the SSAB. Accepting responsibility comes with the psychological cost of blaming oneself for the failure. The shame that comes with failure causes people to become defensive, which gives rise to the SSAB. Spaulding suggests that the SSAB is actually a sign of healthy psychological functioning, so it’s not something that should be completely eliminated (Spaulding 2018, 49). The problem is that sometimes this self-preservation strategy gets in the way of good teaching. We don’t want teachers to blame themselves or consider themselves a failure, we want them to recognize their power to change the situation to better teach their students.

WHAT CAN BE DONE?

Teachers Could Educate Themselves to Avoid this Bias

One way for teachers to avoid this bias is for them to educate and monitor themselves in order to avoid it. Miranda Fricker (2003) and Jose Medina (2013) argue, independently, that people should train themselves to avoid biased reasoning and compensate for it in a variety of ways so that it doesn’t affect the situation negatively (Fricker 2003, 154-173; Medina 2013). This idea suggests that whenever teachers are evaluating a learning activity and they catch themselves placing the responsibility of the failure on the students, they should, after learning about the bias, recognize this problematic reasoning and change their mindset to place the responsibility back on themselves to adjust the learning activity. Teachers should train themselves to be vigilant about their thinking processes and avoid the harmful ones in order to help eliminate the impact of the SSAB in their teaching.

In order to recognize the SSAB and train oneself to monitor it, there must first be education about the bias. If teachers know about this bias and when they are likely to invoke it, they can come to recognize and avoid it. This education can come from a variety of sources such as research and targeted professional development.
Problems with Educating Oneself to Avoid the SSAB

One problem with education being the solution to the SSAB problem is that it relies on teachers to monitor themselves after they learn about the bias. Spaulding suggests that education is not enough to help people avoid biased reasoning. She says that this strategy requires individuals to police themselves or to recognize and compensate for their biases (Spaulding 2018, 89). This is problematic due to another bias that humans have known as naïve realism. Naïve realism is the tendency to think of oneself as unbiased or simply perceiving the world how it is (Spaulding 2018, 89). People often fail to recognize biased reasoning in themselves because of their tendency to think of themselves as unbiased. Spaulding says that Fricker and Medina’s solution might work in some cases, but it won’t be enough to recognize a majority of biased reasoning. This is because it will just be chance whether a person catches that they are using biased reasoning and corrects it in a particular situation. Patterns of biased reasoning are likely to go unnoticed which is problematic and suggests that this solution won’t solve the multitude of problems that we need the solution for the SSAB problem in teaching to solve.

Spaulding offers a second problem for the self-monitoring solution to bias: when people reach cognitive load they rarely invoke newly learned strategies. Worse, novel strategies are not invoked when the situation is so familiar to individuals that they are running on familiar, implicit scripts. Because of this, Spaulding suggests that although there are effective ways to educate oneself, this alone won’t be enough to avoid the problematic reasoning that comes with biases such as the SSAB (Spaulding 2018, 91).

Spaulding suggests that the best way to solve the problem of biased reasoning is to implement structures and institutional measures that are intended to serve as a check on biased reasoning. These structures take the responsibility of monitoring biased reasoning off of teachers who are already cognitively overloaded and puts the responsibility on an external, objective structure. The intention of this is to prevent the problems that come along with self-policing one’s own biased tendencies (Spaulding 2018, 91-92).
Increasing Accountability as an Institutional Measure to Reduce the SSAB

One pragmatic solution to the SSAB problem in teachers is increasing accountability in the form of standardizing materials used in schools. Historically, there have been two options in order to raise the standards in teaching. The first option is to improve the level of education among teachers and the second is to “establish bureaucratic control whereby supervisors ensure that performance standards were achieved” (Evans, Lester, & Broemmel 2010, 183). The second is the one that is most widely utilized and with this idea came the inclusion of standardized testing to increase accountability. Spaulding’s concern about relying on education, as the first option suggests, means that we should favor the second one, since the standardization of materials is a structure that might be beneficial to fixing problems in teaching.²

Raising accountability by implementing standardized testing could be thought to be a useful way to monitor the SSAB. When students don’t do well on standardized tests, or a particular aspect of the tests, teachers would feel pressured and obligated from external sources to adjust their approaches due to the penalties that could be invoked should their students continue to do poorly. This could help them to become more reflective on their failed learning activities as to why they actually failed to produce adequate student learning. It would also allow them to reflect on what is in their control about the lesson design or their teaching methods in general, thus bypassing their tendency towards biased reasoning.

Problems with Increasing Accountability

(1) Policy Makers Are Susceptible to the SSAB. Along with the push for accountability in the form of standardized testing came an increased focus on what teachers and schools needed to do to improve. If schools were failing to improve their test scores, policy makers placed the blame on teachers and principals. If schools failed to implement stringent measures in order to improve their students’

² This representation of standardization is intended to be the most charitable version of the intentions of policy makers. I note that this might not be the most accurate interpretation of policy makers’ intentions and behaviors, but this is the most charitable way that it might be justified.
learning, there would be detrimental consequences such as reduced funding or being shut down (Ravitch 2014, 3).

Placing the blame on teachers and schools for their students’ failure to do well on the tests that the policy makers mandate demonstrates the SSAB in the policy makers. Whenever decisions were being made to implement even more standardized testing, it was because the blame for the failure of schools was placed on teachers and principals (Ravitch 2014, 3-4). What policy makers didn’t take into account was the harmful nature of standardized testing. Not only is this form of testing filled with implicit biases that favor middle to upper class students (Popham 1999, 8-15), it also increases stress in teachers and schools, making them less effective. In addition to this, it takes away time from valuable learning experiences and focuses on test prep which is mistaken because students would learn more if they were given more of these things, not less. The responsibility for the failure of the students to achieve proficiency on standardized tests should fall on policy makers, but this is not what happens. If policy makers didn’t externalize the failure of students onto teachers, then perhaps they would recognize that there are problems with the policies that they are invoking. That is, if policy makers were able to recognize their own implicit SSAB, we may have a better system of accountability all around. This is not happening, and students, teachers, and schools are suffering.

(2) Teachers Are Susceptible to the SSAB Once Again. One of the big problems with using standardized tests for accountability purposes is that even if they did help teachers bypass their SSAB in their creation of lessons, it causes a much more problematic SSAB in them. Imposing an external standard on teachers invites their SSAB, since all problems with student learning could be associated to the tests, and much of this responsibility is correctly externalized. Because of all of the problems with standardized testing, it is easy to see how teachers might feel as though these tests are responsible for many problems in teaching. Whenever the tests are themselves embedded with biased reasoning, curriculum is mandated, and their abilities are put into question, teachers will certainly resort to placing the responsibility of their failures onto the external standardized tests, whether justified or not.

3. These problems with standardized testing are widely acknowledged. I provide the detailed arguments in an expanded version of this paper, but due to space constraints, they are not included here.
Because of this new SSAB in teachers, any chance of them recognizing their failure to close the loop in their teaching will be overshadowed by their newfound loathing of the learning “experience” that they are now forced to endure. Although much of the externalizing done by teachers due to standardized tests is rightfully done, some of the problems with student learning are the teachers’ responsibility to fix and the SSAB could prevent them from recognizing those things. If teachers blame the tests for their students’ failure to perform or learn from their teaching methods, they aren’t internalizing the need to improve student learning and are likely to externalize even more than if they weren’t being held accountable for their students test scores.

**HOW TO REDUCE BIASES IN THE TEACHING AND LEARNING ENVIRONMENT**

Longino’s Theory of Objectivity

Helen Longino, in her book *Science As Social Knowledge*, offers her theory of what makes a science objective. This theory of objectivity is offered specifically for scientific practices, but it is also useful for other kinds of endeavors. She offers four criteria that a science must meet to be considered objective and she says that methods of inquiry are objective to the degree by which they allow for transformative critique (Longino 1990, 76). A field of inquiry must not just listen to criticism, it must also apply this criticism in productive ways to make itself better. Her four criteria are (1) there must be recognized avenues for criticism, (2) there must be shared standards among individuals working on a project, (3) there must be community response to criticism, and (4) there must be equality of intellectual authority (Longino 1990, 76-79).

Longino’s first criteria for objectivity requires that there be some way for presenting ideas so that they can then be critically evaluated by others. She suggests that public forums such as journals and conferences are crucial to this practice as this allows ideas to be shared to a wider audience, thus allowing for more ways in which an idea could be put up to scrutiny. The more people working on an idea, the more objective it will be (Longino 1990, 76). The second criteria requires that the members in a community abide by the same rules and standards. This allows for people with different viewpoints the opportunity to say useful things about the proposed ideas since there is a similar foundation from which they are
working from (Longino 1990, 77). The third criteria is the community who presents the idea should remain attentive to the criticisms offered by other people and communities and they should work to dislodge their complaints. This work might produce a change in the theory, or it might produce a better supported theory. This criteria requires that people are listening to others and working to make their theories better in response to the critique (Longino 1990, 78). Longino’s fourth criteria for objectivity is that there should be equal intellectual authority among qualified practitioners. This means that those who have power shouldn’t automatically win the fight and it requires that those voices which are often marginalized be heard and taken seriously (Longino 1990, 78).

These criteria can be met to different degrees by different sciences, and the more that a community abides by these criteria, the more objective that the ideas from this community will be. For standardized testing to be viewed as an objective way to judge teachers and schools and improve education, the community which put this forward ought to abide by Longino’s criteria as well. If they do not, then we cannot consider it an objective measure. The standardized testing paradigm, including the design of tests, interpretation of results, and so on, fails to meet even the most minimal requirements for being objective set out by Longino, therefore it should not be considered as an improvement to education without major improvements.

The most important reason that standardized testing fails to meet Longino’s criteria is that educators aren’t included in the decision making about standardized testing even though they are the ones who the tests and policies impact. Educators are experts in student learning (i.e. the ones who have the greatest experience and training in measuring student learning), and they are constantly arguing for less testing by citing the harmful effects that it has on student learning. Although this is the case, they are not being listened to, rather the policy makers remain steadfast in their intense accountability approach. This demonstrates that the policy makers are failing to give equal intellectual authority to qualified people and also that they are not responsive to the critiques that they are getting regarding their tests and polices.

Although by utilizing Longino’s theory we could improve the implementation of standardized testing, this doesn’t mean that it should be the tool selected in order to improve education for students and/or reduce problematic SSAB on the part of teachers. If we started following Longino’s suggestions regarding the kind
of community of practice required for objectivity, the amount of criticism on the practice would likely lead to a reform which would reduce or eliminate the use of standardized testing, especially the use of them as an evaluation of teachers and schools. Since these two things are likely the case, rather than considering further what Longino can do to make standardized testing more objective, I will move up a level and consider how Longino could make all of the decisions made about education more objective.

How “Longino Style” Objectivity Could Improve the Teaching and Learning Environment

Longino’s theory of objectivity demonstrates problems with the way decisions about education are currently being made. The biggest problem is that educators are not being taken seriously in decision making, which is harming them and inadvertently harming students. The denigration of the profession is causing unnecessary harm and increases the chances that seasoned educators will leave the profession due to the lack of respect they are receiving. Newer educators are sometimes deciding that teaching is not for them. As well, due to the demanding and demoralizing nature of the profession, new and potential teachers sometimes shy away from completion or using their degree. I suggest that these things would not be as pervasive if Longino’s theory were utilized when making decisions about education.

Currently, policy makers utilize their power to push their agenda and sometimes educators might be listened to, but it is obvious that this listening isn’t widespread enough to enact any meaningful change in the policy makers’ decisions. Arguments against standardized testing have been numerous, yet the amount of testing and accountability continues to increase. This can be attributed to the SSAB found in policy makers.

Although Longino’s theory isn’t currently being utilized, if it were, one can see how this could improve the education system for all stakeholders. The first thing that needs to be done is remove the emphasis of the evaluative nature of standardized tests. This is in line with the complaints from educators and demonstrates Longino’s requirement that the decisions about education be open to transformative critique. If standardized tests are included at all, they should be used merely as an assessment for the teachers’ and schools’ use in order to target areas where their students need improvement. This practice should not include
any kind of punishment for teachers, rather they should work in groups of teachers from the school to brainstorm and work to implement better teaching practices. If teachers participate in the development of teaching and learning practices and the evaluation thereof, it is not (as) possible for them to externalize the results of student performance. That is, it minimizes the opportunity to evoke the SSAB.

Standardized testing could even be completely eliminated in favor of a localized assessment plan where the educators within the school districts determine how to assess their students’ learning and then from that assessment data, develop and implement an improved approach to target those areas which need improving. This local approach would allow educators to focus on the needs of the students within their schools without requiring that these students fit into a generic model of what a student their age should be. Those children who live in poverty need different things than those students who live in wealth and a localized assessment and improvement model would allow for this to be taken into account. This model would provide a way to monitor the SSAB in teachers with regard to lesson design.

If everyone adhered to a standard of social objectivity in decisions about education, many of the problems in the teaching and learning environment would be solved, or at least improved. With communities of practice, teachers would recognize when their SSAB is getting in the way of improvement of their pedagogy, since they would have a community who is working together to recognize actual reasons for student failure. This collaborative endeavor would prove beneficial for test creators (should we keep standardized tests around) because their implicit biases would be easier to take notice of and change their approach to the creation of test questions. Finally, policy makers, if they listen to those who are in the classroom every day, would be able to implement policies which would actually improve the schools in the country like they claim that standardized tests mixed with intense accountability, would do. Obviously implementing Longino’s standards of objectivity would minimize only some of the current problems with the educational system, but I think that we should start there.

**CONCLUSION**

Longino provides us with a new way to think about decision making in education and I suggested in this paper that this model could help mitigate the
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SSAB in teachers and policy makers. Although I only addressed one type of bias, I believe that Longino’s model would be useful for many different things within the field of education. There is still further research that could be done to address how else Longino’s model could improve the teaching and learning environment and this is just the first of many projects that could be done around this idea.

REFERENCES


