Dare to Imagine: Creative Scaffolding for Transformative Teachers' Praxis

Elina Lampert-Shepel, Touro University, United States
Sharon Sullivan-Rubin, Touro University, United States

Abstract

The purpose of the proposed paper is to generate the discussion of teachers' learning as transformative praxis that leads to the development of teachers' commitment to social change. In this interdisciplinary qualitative study such learning is conceptualized as a sequence of socially constructed and culturally mediated joint learning activities. Scaffolded with the mastery of such mediational means (Wertsch, 1998) and cultural tools (Vygotsky, 1987) as dialog, schema, narrative, and joint artmaking, purposefully designed reflexive learning activities allow teachers to collaboratively examine the problems of practice through dialog, joint artmaking, and co-writing. Such learning as transformative praxis, scaffolded the shift in values and consciousness of the beginning teachers and empowered them to act as transformational agents - question the status quo of the neo-liberal contexts of schooling, deconstruct the codes of the dominant cultures prevalent in their classrooms, and commit to action, advocate for the communities of practice, and create liberating and supportive learning that leads development. Presenters will share research findings and discuss the transformational potential of teachers' meaning making as aligned with the mastery of mediational means (dialog, narrative, artmaking) of reflexive praxis. This cycle scaffolded a disruption in thought, impacted the development of teachers' critical reflection, thus, emancipating them to act on the critical events in their classrooms. Interdisciplinary, technologically fluid, creative scaffolding inspired and supported teachers to deconstruct the dominant schooling practice and to re-imagine their practice and themselves.

Keywords: Transformative Praxis, Creative Scaffolding, Mediational Means, Joint Artmaking, Teacher Learning

Introduction

The purpose of this paper is to discuss the process of learning as transformative praxis that is socially constructed in joint activities, and culturally mediated (Vygotsky, 1987) with cultural tools of the mind. Teachers' learning as transformative praxis supports their development as transformative agents who can assure "quality education as a human right" (UNESCO, 2021, p.2). Such learning generates a different knowledge of teaching and learning as it stems from teachers' continuous inquiry of practice as distinctive and important way of knowing about teaching and learning, students, and their communities (Cochran-Smith, Lytle, 1993).

Although there is a growing interest of teacher transformative agency in teacher education research and policy, there is lack of research-based teacher education models that are designed to engage teachers in learning as praxis, continuous inquiry that empowers them to theorize their practice and transform it. Previous research shows that sustained opportunities for teachers' professional inquiry as a joint collaborative activity of teaching and learning to develop shared expertise through co-construction of shared meanings and knowledge, enhanced not only teachers' professionalism and agency, but also student learning (Cochran-Smith & Little, 2009; Lampert-Shepel, Sullivan-Rubin, Rabinovitch, 2021; McLaughlin, Talbert, 2001, 2006).

Authors also discuss research-based strategies to engage beginning teachers in learning as praxis, and use mediational means (Wertsch, 1998) and cultural tools (Vygotsky, 1987) to scaffold a continuous inquiry into teaching. The beginning teacher approaches to learning as transformative praxis were developed in a course of a qualitative case study that was conducted at Touro University Graduate School of Education, NY, USA. One of the findings of the study, a sequence of mediational means to scaffold learning as praxis, was also explored further with diverse professionals and generated similar findings. Thus, the findings and conclusions are drawn from the ongoing study with beginning teachers at Touro University Graduate School of Education and a workshop conducted with diverse professionals at 2022 Arts Education Partnership Annual Convening.

Call for teachers as transformative agents

With humanity facing major environmental challenges (Steffen et al., 2007), and the increasing complexity and uncertainty of the world we live in, the role of teachers as transformative agents becomes key to ensure their ability to effectively serve their students and communities, and to support continuous sustainable change in education and beyond. In addition, understanding how the agency of individuals can contribute to a sustainable future should therefore be a vital task of scholarship in the domain of resilience thinking (Westley, 2006; Folke et al., 2003).

The test-driven neo-liberal reforms in education around the world often focus teacher on efficiency and technical implementation, rather than on meaning-making and inquiry. As in the current educational context the view of a teacher as a technician has failed as simply ineffective, there is a need in teachers as critical educators, active agents, who are capable and willing to disrupt the dehumanizing contexts of schooling to transform educational practice for empowerment of students' learning and development.

Although the view of teachers as agents rather than technicians is not new in educational research and practice, there are multiple conceptualizations of teacher agency. Cultural-

historical psychology of Lev Vygotsky (1983) and activity theory (Leontiev, 1978) and their followers offer conceptualization of agency that is instrumental for its development. Agency is conceptualized as ability to be self-conscious, master one's own behavior, the generative capacity of humans to distance themselves from the constraints of immediate stimuli and generate in socially constructed and culturally mediated joint activities the visions and tools for transformative actions. Without agency humans would be "compelled to act by stimuli in the immediate situation" (Gillespie, 2012, p 32).

From such a perspective one could argue that development of transformative agency is supported with mastery of the mediational means and cultural tools embedded in human activities that can be mastered during continuous joint inquiry.

Conceptualizing creative scaffolding

How can we support the development of transformative agency? In our view, one of such supports can be a process of creative scaffolding, that is intended to provide a toolkit for an author and an agent of action to not only support the development of an emerging idea, but also to be able to transform it into the directions that might not have been anticipated. What kind of tools of the mind can mediate imagination and thinking and not only shape the emerging ideas for the project but also map the new directions for the development and transformation of the initial meanings?

Although widely attributed to Lev Vygotsky (1962), the term scaffolding in psychology and education was coined by Jerome Bruner (Wood, Bruner, Ross, 1976) around 1976. He grounded his conceptualization of scaffolding on Vygotsky's concept of the zone of proximal development, i.e. socially constructed learning that leads development. Bruner used the metaphor of scaffolding to describe the support the adult or a more knowledgeable peer can provide in the structured social interaction to facilitate learning. This process reminds scaffolding that supports construction of the building and is dismantled as the task is completed. In joint activity such understanding of scaffolding represents limiting the choices an agent of action might face to focus only on mastering a specific skill or concept. Thus, unlike the concept of scaffolding and the model discussed in this essay, Bruner's theory of scaffolding focuses on the auxiliary means to support a specific learning that vanishes when the task is completed. The appeal of Bruner's theory is that scaffolding can be applied across all fields, for all ages and for all topics of learning.

Lev Vygotsky (1962) distinguished psychological tools from mediational means (Wertsch, 1998). Mediational means are external; they can be thought of in connection with the human hand. With the help of the mediational means, we can transform *external* objects or processes. They are auxiliary and can help complete a certain task or perform a specific activity. Scaffolding with mediational means is temporary and, it vanishes when the specific task is completed.

Psychological tools, in contrast, are *internal* tools supporting thought in the same way physical tools support labor. Psychological tools, Vygotsky claimed, support an internal mastery - a mastery of oneself (Vygotsky, 1998). Psychological tools are semiotic and are products of cultural development. As semiotic means enable authors and agents of action to remain spontaneous but intentionally navigate multiple venues to explore an emerging idea. Semiotic tools (metaphor, image, concept, model) embed the cultural meanings coined historically and shared locally and sometimes globally. As abstract tools of the mind, they

have a potential of transforming the initial idea and empowering authors to discover and paint an array of possible venues they can develop the project. Psychological tools are signs that are socially constructed in joint human activities and when internalized and mastered, they transform thinking, imagination, memory and other higher psychological functions. They are multiple and inherently situated culturally, institutionally, and historically; they can be construed as the carriers of social, historical, and cultural transformations (Lampert-Shepel & Murphy, 2018). The mastery of psychological tools, "culminates in internalized ability to guide and self-regulate one's own activity" (Arievitch, 2017, p. 56). Psychological tools serve to transform the flow of thinking, changing too, the action itself and the agent. Thus, creative scaffolding has a transformational potential and enables the agent of action to internalize the cultural tools of the mind that are not situational but stay and can be applied for future actions.

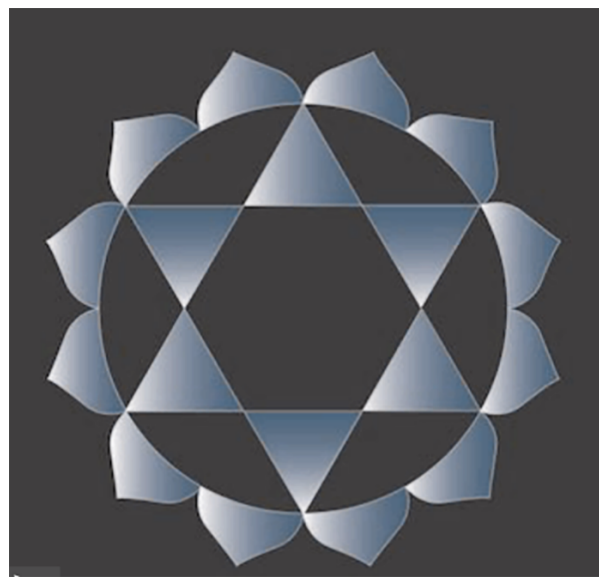**Creative Scaffolding Model**

Figure 1. Creative Scaffolding Model. Created by Clive Jacobson, 2021

The model presents the process of internalization of a semiotic cultural tool (triangle shape), that is quite flexible (points in at least three different directions), and, therefore, allows the agent to explore various venues for the development of an initial idea. The dynamic movements of the multiple triangles support the scaffolding itself, but at the same time represent the symbolic flow of thought that shapes a new idea as a circle. Scaffolding with semiotic cultural tools of the mind, as triangles in the model, does not vanish, but is rather transformed into internal ability to apply them at author's will.

The process of creative scaffolding of transformative praxis

The researchers used the process of creative scaffolding to design teachers' learning as praxis. The sequence of scaffolded culturally mediated and socially constructed joint activities were organized for the participants as a cycle of inquiry into practice with additional initial purpose in 2019 to explore how beginning teachers' master mediational means and cultural tools of reflective practice. During the study, we discovered that a particular sequence of scaffolded joint activities mediated by different cultural tools engaged the participants into the sequence of meaning making and empowered them to not only

envision the multiple ways of conceptualizing the problem of practice, but also plan and implement different future actions to address it. The model below represents the four stages of meaning-making embedded different types of activity that was mediated by a different mediational means.

The Process of Creative Scaffolding

Meaning Articulation:
Problem Articulation of Critical Event in Practice.

Meaning negotiation:
Dialogical Reflection Developing Co-vision.

Meaning Deconstruction:
Joint Activity of Artmaking.

Meaning communication:
Visual Narrative Presentation- re-negotiation through symbolic representation

Figure 2. The Process of Creative Scaffolding

Stage 1. *Meaning articulation.* Participants describe in writing the critical event in practice that puzzled them and that was important for them to address. Verbal narrative was a mediational means at this stage.

Stage 2. *Meaning negotiation.* Participants were asked to have a dialogical reflection in pairs and create a co-vision of their critical events in practice, i.e. find out the underlying bigger issue that could be common for their different critical events in practice. The mediational means at this stage was a co-vision dialog.

Stage 3. *Meaning Deconstruction.* Participants engaged into joint activity of artmaking that was facilitated with The Collective Image Graphic Organizer (CIGO) (Sullivan-Rubin, 2021). CIGO guided participants in creating metaphors of their co-vision and engaged participant in using the language of art to deconstruct the initial understandings of the critical event in practice as they unearthed their assumptions, dissonance, and ambiguities about issues in their professional practice. As a result, each pair of the participants used media/art materials to create an artistic representation of their co-vision of the critical event in a form of a collage or tryptic. The mediational means at this stage was the CIGO and the joint activity of artmaking.

Stage 4. *Meaning Communication.* Participants presented their artwork and discussed the new meanings and plans for future actions to implement the new visions of practice. The mediational means at this stage is a visual narrative of the artwork created and communicated.

The following examples explore the participants' journey through these four stages of meaning making sequence to come to different visions of problem of practice and enact them in the future. The participants felt empowered as agents of action to transform their practice.

In this first example two participants, who are beginning teachers, describe their critical events in practice to each other in the co-vision dialog and understand that their critical events, although different, both focus on student engagement and motivation.

> Participant 1: My journal entry was about a kid who I thought could vocalize [make utterances], but he doesn't say anything about what's going on around him… I don't know if he's speaking English when he mutters… It might be a different language that they speak at home. I found him in the class singing the greater-than-less-than-equal song that I presented for my lesson, and he was doing the movements. And I was … wow I got through to this kid, I taught him something. I don't know if he understands conceptually/mathematically what it means, I don't know if he'll be able to apply it, but there was something in the lesson that appealed to him, something that he retained when the lesson was done and something that he was still repeating when the lesson was over. So, I felt like I made an impression on this kid, I was able to *engage* him.

> Participant 2: I had a situation where we were doing a social-emotional unit and we were talking about motivation, what motivates us, and the kids didn't really have anything to share. They were not motivated to do anything related to the [task]. They seemed unmotivated to talk to you [engagement], and when I was telling them about my own assignment [clinical observation] I had to do for tomorrow, because I tried to share, as much as possible in the socio-emotional unit. They started getting super excited to be a part of it and help-out. It makes me wonder, why would they be motivated, for me, for my benefit, but not [for themselves], and how do I instill that [*motivation*]?

The critical events were different for each participant, but through meaning negotiation they reinterpreted the original event through a broader lens of motivation as they worked towards the second stage of the co-vision. The co-vision was first explored through dialog and then revisited in the CIGO through symbolism and metaphors. The first participant who thought that his issue was engagement and concluded that it was motivation with a different interpretation and vision of what that meant.

> When [Participant 2] first told me the story of his critical event, my impression was that it had a very clear theme. That theme, which he identified, was "motivation." At the time I thought of it as a good theme to work with but hadn't really contemplated its implications. I was struck by the fact that [he] seemed to think of it through the lens of a lack of motivation, whereas my feelings about the topic of "motivation" are more positive. When I think of "motivation," I think of empowerment. I planned to use the iconic image of the Superman shield. I am now thinking more about the ongoing struggle, which it takes to establish and work towards goals. I am reminded of a famous image of Superman bursting out of Kryptonite chains. I think I am thinking of "motivation" more as a struggle.

However, Participant 2 discussed how he sees motivation to view students' inner ability to motivate themselves as lacking, and that he has to find ways to motivate them. He notes that students have personal challenges, which inspires him to consider the connection to his instructional decision making.

> Planning for the piece made me rethink what an utter struggle finding motivation can be for many students. Planning the piece also helped me conceptualize my role in

instilling motivation in the students. Verbally I could not articulate what I should do, or what questions I should ask. But visually, I began to see the students as whole beings who come with many inner challenges and struggles that do not linger on the surface. They are buried deep inside. Considering all these different elements helps me better plan my *interventions* and making lessons more engaging for all students.

Thus, both participants at the date of meaning deconstruction, not only deepened their understanding of motivation, but also planned their ways to transform their practice. Through the sequence of joint activities of meaning making, using metaphors, they note how they interpreted their individual circumstances with students differently, but at the end of the process, become empowered with the plans for transformative future actions for working with their students.

> Participant 1: Superman symbol, which stands for motivation, pure intrinsic motivation, the empowerment to do anything. But it's breaking out of a brick wall…kryptonite chains. So, there is a struggle, the idea of being held back, getting stopped with the red, with the brick, with the chains. There's also this idea that motivation is intermittent, which is why everything is kind of breaking up, and you've got motivation, so you keep on moving. There's a lot of motion in it with the empty space between the bricks and the alternating colors of the bricks...

> I wanted the centerpiece to be all this struggle, from the brick, from the chain, from glasses, to be overcoming it. I wanted the students in the center of the image. In Participant's 2 image with the arms crossed in our head down - we want to enable people to fly.

> Participant 2: I have a picture of one of my students in the middle. And he's got his head down on his desk and on the left side, we have a bunch of different positive **motivators** that are pulling to one direction. It seems more positive using bright warm colors. Some of the ropes are broken because those motivators are not working. One is a piece is his report card, and the other is a graduation cap, but there's still a thread that's still connected. So, the coil pieces of rope represent the strategies that I haven't thought of yet, that we haven't tried yet… The other strands that go off the canvas are unknowns, different things that are going on with the child that we don't know about. While I was creating, I realized, there are some traumas and experiences that we will never know, that the child will never share with us, and we must remember that.

In this example, we begin to see the emergence of the use of symbols and the language of art as a scaffold to think and act differently such as "more positive using bright warm colors. Some of the ropes are broken, because those motivators are not working, which leads his thought to broaden to "there are some traumas and experiences that we will never know, that the child will never share with us, and we have to remember that". And "**motivation is intermittent**, which is why everything is kind of breaking up… I wanted the centerpiece to be all this struggle, from the brick, from the chain, from glasses, to be overcoming it. I wanted the students in the center of the image". In Participant's 2 image "with the arms crossed and our head down - we want to enable people to fly".
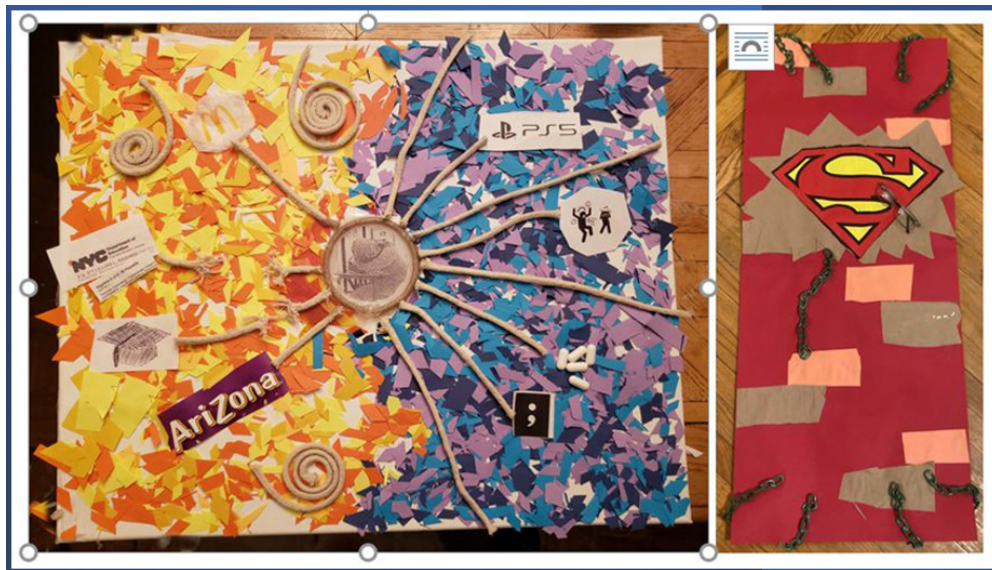
Figure 3. Left – Participant 2 Artwork. Right – Participant 1 Artwork.

At the meaning deconstruction and the meaning negotiation stage of creative scaffolding sequence, the development of participants as transformative agents and their mastery of mediational means becomes more evident. The participants use the first 3 steps in Feldman's (1987) art criticism model to describe, analyze, and interpret to scaffold and organize the presentation of their artwork. It is double stimulation since participants use both symbolism and metaphors as a linguistic tool of the mind, and image representation of the metaphor they created. The dialog during the presentation led to opening different meanings, meaning communication encouraged to go deeper, see and think differently.

Participant 2:…seeing a challenge represented visually definitely opened me to more avenues of looking at it and reflecting upon it. Particularly the first one, with the threads… and some of them are partially broken…because I find there's just some situations at work where I'm at my wit's end, but knowing that I have multiple avenues to attempt, you know, different strategies and… seeing that represented visually made me feel more confident that… I'm not out of options, but there's always other threads to pull on.

> Participant 1: I would say my perspective on both of my critical events is shifted. I will say that for my first critical event, I worked with participant 2 on both of them. For my first critical event our theme was motivation, and I will say that I see it differently. I think before I was thinking is motivation, if something that you do once and then you're done, the students should just be motivated. But I realized that it's a constant ebb and flow, and that you must be motivating your students through the entire process. And for my second co-vision we talked about flexibility, and I just became aware of different teaching strategies, different tactics to use, and when to be aware [of] which one [worked].

In another example of meaning articulation and meaning negotiation stages of creative scaffolding, 2 higher education art educators were discussing issues surrounding the limited amount of time allocated for art in K-12 schools. The pair made broader connections to policy issues impacting schedules and curricular decision making. Through dialog and meaning negotiation, they move toward the co-vision and explore it further using metaphors and symbols.

LG: Stephanie and I were on the table that was talking about the issues we have where we all watching arts time decrease in schools. It was largely in an educational context as we see *erosion* happening [and] what we're noticing is that the arts policies that are in place aren't stopping any of that. There's nothing preventing administrators or school boards from taking time away.

They refer to the metaphoric/symbolic language and image connection, which helped them unpack and articulate the bigger underlying issues of the policies.

LG: I came up with a few metaphors, we use the word erosion and then also talking about the distance, so we created a visual distance between a bunch of little kind of package policies [pointing to the packages on the drawing] around teacher preparation or about graduation policies or about the amount states might have. So, what we decided was that the things that are eroding some arts experiences for students are traditional views about what students need, and some outdated assumptions about those things, [such as] academic preparedness… [and] they need more time for core subjects that are not included in the arts, [these are the reasons] that they would take time away and accountability pressures.

Figure 4. Higher Education Art Educators LG and SLF from
Arts Education Partnership Workshop 9/14/23

LG: …tested subjects [are] receiving some priority in the hiring - so these kinds of things are starting to eat away at the arts…. What we were hoping for, which is representative of this flag, is maybe there are ecosystems and barriers, and other things that folks can put up to stop erosion. There are strategies that we have, and we were just thinking about policy as a strategy to keep that erosion from continuing to happen, policies that would demand a certain level of accountability from stakeholders. We started to visualize the distance of the erosion.

What is also significant about this example is we begin to see where the application of visual symbolism begins "We started to visualize the distance of the erosion". Thus, even within a limited workshop time of one and a half hours, the art educators using creative scaffolding process and mediational means embedded in it, managed to start envisioning steps to

prevent" the erosion from continuing to happen", to look for the ways to ensure that art education is a part of the curriculum for K-12 children.

Conclusion

Transformative agency is the capacity of humans to distance themselves from their immediate surroundings and restrain from reactive behavior. It implies recognition of the possibility to intervene and transform the meaning of situated activities. Transformative teacher agency is not the state or ability of the individual, it is a socially constructed, culturally mediated collaborative activity of meaning making and joint action. Developing transformative agency depends on the opportunity to engage in learning as praxis, experience of continuous culturally mediated collaborative inquiry into practice, and mastery of the mediational means and psychological tools of transformative praxis. Creative scaffolding can be applied in multiple professional contexts to generate spaces for learning as praxis. Creative scaffolding of joint activities with a particular sequence of mediational means – narrative, dialog, artmaking, visual narrative – supports the development of ongoing inquiry into practice and empowers agents of action to question, disrupt, and dare to imagine teaching and learning different.

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Contact email: elina.lampert-shepel@touro.edu