Teachers Noticing Student Interest: A Micro-interactional Foundation for Interest-driven learning

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Abstract: This study shares a descriptive framework for noticing student interest, building on extensive scholarship in teacher education on Teacher Noticing. Scholarship presented here documents differences in educator narratives of student interest, which has implications for how they then go on to sponsor it in their immediate learning environment. The overall contribution of this work is a nascent framework for operationalizing educator noticing skills to support student interest.

Introduction

The concept of teacher noticing, or the awareness educators bring to features of student understanding, has been taken up heavily across the field of teacher education (as a resource for preservice and in-service teacher development, e.g. van Es & Sherin, 2008) and the learning sciences (see Walkoe & Luna, 2020, for a review and critique). However, as Russ (2018) points out, these efforts have concentrated on domain-specific constructs, like skill and conceptual development, and not as much on domain-general constructs, like interest. The guiding logic of teacher noticing holds that educators cannot appropriately respond and adapt to student understanding unless they first notice it.

Background

Van Es & Sherin (2002) theorize teacher noticing in three parts: identifying what's important, making connections between what's happening in the classroom and existing pedagogical knowledge, and reasoning within the given context. Following Russ's observation that teacher noticing literature often ignores domain-general constructs, like interest, we attempt to remedy this by building a descriptive framework showcasing what teacher noticing might look like. We argue that noticing student interest is the first step toward sponsorship of youth interests (Ito, et. al, 2020), and therefore warrants further examination.

Methods

We draw upon interview data with out-of-school educators collected as part of a program evaluation performed during the summer of 2021 in partnership with Design, Make, Learn, an arts nonprofit in Long Beach, CA. We adapted van Es & Sherin's (2002) framework to include noticing student interest, in line with a constructivist grounded approach (Charmaz, 2000). Following two rounds of grounded open coding, we matched educator stories of student interest with the emerging descriptive framework.

Data: Descriptive Framework for Noticing Learner Interest
Summary Table

Framework: Level of Expertise and Rationale	Educator Narrative of Noticing Student Interest	Analysis and Next Steps
Expert: Teacher stories are fully analytical, supporting their noticing with evidence, interpretation, and empathy.	**Frida:** So I was thinking that doing leaf prints would be fun. I just had them bring out paper and pencil and collect leaves. And we sat down here, you know, on the steps, and basically did leaf rubbings and talked about artists that came up with that kind of kind of art, you know, so like Max Ernst and all the Dada surrealists, so I talked a little bit about the historical context about that. Some students had never done [leaf rubbings] before so I thought it was interesting and then we went into "let's figure out what else makes a print?", so the kids tried dandelions--you know, the yellow? The dandelion or the grass [became options]... They tried dirt and soil and bark, random other leaves and flowers. [cut for length]	Frida's noticing story demonstrates d/Discourse of both interest and educator noticing. She begins by empathizing and projecting about student interest ("I was thinking that doing leaf prints would be fun"), which she uses as the foundation for her educational design. Then, she describes the embodied implementation/practice of the educational design. And, in the course of that implementation, she noticed youth interest in the materials, and how their use could be extended to meet the original design objectives (leaf-rubbings). This noticing results in collective exploration of new, ambient materials (dandelions, grass, dirt, soil, bark, leaves, and flowers) as (literally) organic extensions of the original learning objective.

Proficient: Teacher stories call out student interest and support with corresponding evidence and interpretation, but may also judge these moments as "good or bad"	**Cesar:** ...we were using paint markers and lettering alphabets and tracing paper. We had a student...and he's like, this is something that my brother does, and then he got super into it. So I showed him all these different tools. And so [we were doing] old English lettering, which is like a big part of LA culture. But it really grew out of protest art and it was based on, you know, medieval lettering. So you know, that's all part of the discussion. But the thing is, it's so ingrained in the culture here that kids don't even know where it comes from. So he's just like, Oh, my brother does that. Let me learn what my brother does... it's one of those things where it's like, all I'm doing is serving your culture back to you.	Like Frida's story, Cesar's story shows a clear design intention for learning, evidenced by the choice of tool and activity as relevant to the historical/social context of implementation. Additionally, Cesar notices the youth's connection to their family as signaling interest, which he feeds for the student by situating the interest in history and immediate cultural uses ("...old English lettering is a big part of LA culture"). In this way, Cesar follows student interest to historically and socially contextualize the students existing knowledge and family practices as instrumental to domain-specific learning in art.
Intermediate: Teacher stories call out student interest, but lack "corresponding evidence or interpretations".	**Nathan:** We were doing an improv workshop for an organization that dealt with at-risk youth. ...there was one young man who started and he was literally kind of slumped back in the corner with his arms crossed the hoodie on.... And then the very last exercise we did was called, it's called freeze tag...So this young man came up and tagged one of the teachers and then stepped in and he started rapping. He just created this whole improv rap, that was a story... Just watching the progress of him, very quiet, individual to just being the center of attention.	Nathan identifies the activity itself as the source student interest, and is surprised (positively) when the student uses the activity to play to an area of individual strength (interest). Nathan is able to interpret student body language as dis-interest, and participation as interest. However, the introduction of interest-based student learning is happenstance, and largely due to the risk-taking of the student, which Nathan notices and appreciates, but does not elicit.
Novice: Teacher stories are predominantly descriptive, describe students becoming interested only, without rationale. There is little pedagogical response.	**Carter:** We had a concert, I played drums and [another teaching artist] was playing guitar and flute. And we had a bit of a performance at the end of the day, and this particular student. However, after that specific concert workshop, I remember he came up to me as like, 'oh, wow, that was really interesting. I'm kind of interested in like, learning how to play an instrument, or drums or something.'	Carter is able to identify student interest when they explicitly articulate it, but does not relate any plans to feed, broaden, or extend that interest. Additionally, Carter interprets student interest as activity-based (e.g, related to drumming), when it may actually be broader or more specific than that.

Discussion & Implications

Our analysis shows that van Es & Sherin's framework for teacher noticing can be usefully adapted to include noticing domain-general constructs, like interest. This work has several potential implications for educator learning. First, it is notable that this data on educator noticing comes from an out-of-school learning environment (a summer STEAM program), because an important extension of scholarship on teacher noticing would be to include pedagogies at work in informal environments. Second, this framework adaptation to a domain-general construct represents an important step forward for considering teacher noticing. Third, and most importantly, this framework opens a pathway into understanding how youth interest does or does not get noticed by educators, which we theorize as an essential first step to the sponsorship of youth interests.

References

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