Teachers' Beliefs about Good Teaching

Margarita Pivovarova [1]

Gustavo Fischman [2]

Eric Haas [3]

Roya Fathalizadeh [4]

ABSTRACT

This article describes teachers' beliefs about the pedagogical approaches of very good teachers. Our exploratory factor analysis and analysis of variance based on the data from an online survey of K-12 public school teachers ($N = 179$) revealed two main findings. First, the teachers distinguished between relationship-emphasized and content-emphasized pedagogical approaches, and they believed that a very good teacher – defined as a teacher from whom you learned a lot – was more likely to practice a relationship-emphasized pedagogical approach, which embraced predominantly caring and supportive pedagogical approaches and had strong subject matter knowledge. Second, regardless of their political orientation or other demographic characteristics, the teachers in our sample valued a relationship-emphasized pedagogical approach over a content-emphasized one. Further, we found that teachers' political beliefs did not significantly influence their pedagogical approach to teaching, and teachers who held more conservative political beliefs valued a relationship-emphasized pedagogical over a content-emphasized pedagogical approach, similar to teachers with more progressive political beliefs.

Keywords: Teacher beliefs, Good teachers, Good Teaching, Pedagogical approaches, Relationships.

[1] Associate Professor, Arizona State University, Tempe AZ, USA, e-mail: margarita.pivovarova@asu.edu
[2] Professor, Arizona State University, Tempe, AZ, USA, email: fischman@asu.edu
[3] Professor, California State University, East Bay, Hayward, CA, USA, email: eric.haas@csueastbay.edu
[4] PhD student, Arizona State University, Tempe, AZ, USA, e-mail: lfathali@asu.edu

1 INTRODUCTION

Research on the current policy arena and media reports frequently conclude that there is a high degree of political polarization in the U.S. (see, e.g., McGregor, 2019; Seven Letter, 2020), including in education (see, e.g., Bulkley & Gottlieb, 2017; Galey-Horn & Ferrare, 2020; Hutton, 2023; Lin, Parker, & Horowitz, 2024). Others, however, question the extent of this polarization, wondering whether it is limited to those active in media and politics (Druckman et al., 2019; Iyengar et al., 2019; Klar et al., 2018). Our survey research on public beliefs about teachers supports this latter view, finding that the general public agrees on the pedagogical approach of very good teachers, which did not vary significantly across nearly every individual characteristic, including gender, race, and political orientation (Haas et al., 2023). In this study, we utilize a similar survey methodology and extend our examination of the beliefs of what makes a very good teacher to teachers themselves, including how these beliefs vary across race, gender, and political orientation, among other characteristics. Two research questions guide this study:

1) What are the beliefs of US K-12 teachers about the pedagogical approaches that describe a very good teacher (defined as a teacher from whom one learns a lot)?
2) Do teachers' beliefs about these pedagogical approaches vary by teachers' political orientation and other personal characteristics?

1.1 Review of the Literature

1.1.1 Ideology and Pedagogical Approaches
A key element in this study, specifically the second research question, asks, how does political orientation influence a teacher's approach to teaching? Some researchers theorize that teachers' ideological orientations likely influence their approach to teaching (Haas et al., 2014; Kumashiro, 2008); however, the influence of political belief on teachers' approaches to teaching has rarely been empirically examined (see, e.g., González-Espada, 2006; Zembylas, Aristidou, & Charalambous, 2023).

It is well established that their personal beliefs affect educators' teaching decisions (DeCuir-Gunby & Bindra, 2022; Denessen et al., 2022; Dos Santos, 2019; Fives et al., 2019). Studies of the relationship between teachers' personal beliefs and their teaching have focused primarily on beliefs about self-efficacy (see, e.g., Heckathron et al., 2023), how learning occurs (see, e.g., Kehoe & McGinty, 2024), racial bias toward students (see, e.g., Innan-Kaya & Rubie-Davies, 2022), and best teaching practices (see, e.g., Ng et al., 2010). Few studies examine the influence of a teachers' political orientation on their classroom practice (see, e.g., Souchon et al., 2020), and only two of which we are aware, examine how ideological orientation influences teachers' deeper

pedagogical approach to teaching and learning (González-Espada, 2006; Zembylas, Aristidou, & Charalambous, 2023).

Studies exploring the relationship between teachers' political or ideological orientation[5] and their classroom practice have examined how teachers have navigated political topics in social studies classes (see, e.g., Geller, 2020) and how teachers' political beliefs impact their view of students from underprivileged socioeconomic backgrounds (see, e.g., Souchon et al., 2020). To our knowledge, only two studies, González-Espada (2006) and Zembylas, Aristidou, & Charalambous (2023), have examined how teachers' ideological beliefs impact their fundamental approach to teaching. Both were qualitative interview-based studies, and both found some evidence that political or ideological orientation might influence fundamental approaches to teaching. In their research, González-Espada (2006) interviewed 21 Puerto Rican physics teachers to describe how their views on statehood for Puerto Rico influenced their use of a physics textbook and their inclusion of Puerto Rican culture in their physics classroom teaching. González-Espada found that teachers were mixed and varied, concluding that the

> Data suggest that teachers' ideological beliefs might be a factor that informs whether they make their teaching methodology contextual and culturally relevant. Teachers believed that pro-commonwealth and pro-independence colleagues might be more capable of modifying the physics content presentation to make it pertinent to puerto rican [stet] students. Also, closed-minded pro-statehood teachers are perceived as making some educational decisions based on their ideology, for example, being less critical of the textbook because it originated in the United States. (p. 113)

In their study, Zembylas, Aristidou, & Charalambous (2023) interviewed 21 teachers in Greek-Cypriot primary and secondary schools about their understandings of "the role of affects and emotions in manifestations of the nation and nationalism in schools" in the context of Cyprus, which is considered to be strongly ethnically polarized (p. 2). Similar to the findings of González-Espada (2006), Zembylas, Aristidou, & Charalambous found that teachers' political orientations influenced their perceptions of and support of the manifestations of affective nationalism in schools, such as national rituals and holiday celebrations. They found that most teachers who identified as conservative found these activities to be "normal educational practices" (p. 12), with some conservative teachers describing it as a "teachers' duty" and an "absolute necessity" to perform school celebrations of nationhood (p. 13) as well as positive emotional portrayals of events in Cyprus' history. By contrast, most teachers who identified as progressive found these national rituals and celebrations as problematic, concerned that "the intense emotional teaching of these historical events might fuel nationalistic ideologies" (p. 15) because it might escalate to inter-group anger. As a result of these concerns, progressive teachers focused more on promoting critical thinking about Cyprus' political issues, including alternative perspectives to dominant discourses, rather than instilling a love of the nation.

---

[5] Researchers both distinguish between and use interchangeably the terms "political orientation" and "ideological orientation" to refer to socio-political perspectives (e.g., conservative, progressive) and for which political party one would associate with (e.g., Democrats, Republicans). In this study, we use political orientation to refer to one's socio-political perspective along the continuum from very progressive to very conservative.

These qualitative interview-based studies suggest that ideological orientation can influence how teachers fundamentally approach their teaching, at least in highly polarized contexts, such as Puerto Rican statehood and the conflict over Greek and Turkish sovereignty in Cyprus. In this study, we deepen and extend the limited exploration of the influence of political or ideological orientation on teachers' pedagogical approach through the analysis of survey data of US K-12 teachers.

1.1.2 Relationship- and Content-Emphasized Pedagogical Approaches

In this study, we expand the survey research on public beliefs about what constitutes good teaching we previously conducted, but this time focusing on teachers themselves (Haas et al., 2023). In this and the previous study, we created survey items to explore beliefs about pedagogical approaches to teaching. Research on effective teaching generally can be divided into two levels of practice: pedagogical approaches and teaching strategies. Pedagogical approaches are the fundamental frames that guide how one understands and approaches learning, teaching, and schools (Grossman, 2013; Haas et al., 2014). Teaching strategies are specific actions, usually at the classroom level, through which teachers implement or operationalize their pedagogical approach (e.g., Lemov, 2021; Wong & Wong, 1997). As described in the seminal work by Hattie (2012), strategies that teachers decide to implement or that are promoted or required to be implemented by the educational policy will partially depend on the underlying pedagogical approaches.

In this study, we continue to explore beliefs about the pedagogical approaches of very good teachers for two reasons. First, pedagogical approaches can influence policy (and vice versa), so understanding teachers' beliefs about the pedagogical approaches of very good teachers can contribute to describing its relationship to current education policy. Second, we contend that focusing more narrowly on perceptions of specific teaching strategies can lose the forest for the trees of good teaching. Teachers can use the same strategy differently depending on their intent or overall pedagogical approach. For these reasons, we explore pedagogical approaches first, intending to build on the findings to develop subsequent surveys that may include teaching strategies.

Research generally describes classroom teaching as involving five core domains: Instruction, Assessment, Learning Environment, Teacher Qualities-Affective, and Teacher Qualities-Content Knowledge (Hattie, 2012; Instance & Paniagua, 2019; Stronge, 2007; Stronge et al., 2011). Further, research on mental models about education points to two fundamental pedagogical approaches or frames whose components map onto the five teaching domains: a Relationship-emphasized pedagogical approach or frame (Edwards Hedegaard, 2023; Kitchen, 2005) and a Content-emphasized pedagogical approach or frame (Haas et al., 2014; Hager & Hodkinson, 2009; Kumashiro, 2008) (from now on referred to just as Relationship-emphasized and Content-emphasized pedagogical approaches, respectively).

The critical components of the Relationship-emphasized pedagogical approach are

- learning is a process of the individual assimilation and construction of information into understandings;
- Socio-emotional relationships between persons and meaningful engagement with the subject matter are central to teaching and learning, and
- educational fairness involves providing challenges and support based on individual needs (equity).

The critical components of the Content-emphasized pedagogical approach are:

- Learning is a process of absorbing information, which is universal, timeless, and transferred, to become direct understanding;
- Expert levels of content knowledge and exposure to large amounts of information are central to teaching and learning, and
- Fairness is providing the same opportunities and consequences to everyone (equality).

For each of the five teaching domains described above, there are associated positive and effective practices derived from the components of the relationship-emphasized pedagogical approach and the content-emphasized pedagogical approach. In addition, the work of Lakoff (2014, 2008, 1996) and others (see, e.g., Haas et al., 2014; Haidt, 2012; Kumashiro, 2008; Westen, 2008) suggest that these educational pedagogical approaches and the preferred practices which result from them will often map onto larger political identities. In other words, this research has shown that people, including teachers, do not view and therefore make decisions in isolation, but rather people, including teachers, make decisions based in part on how a decision relates to more significant ways that they see and understand how the world does, and even should, work (Graham et al., 2013; Haidt, 2012, 2001; Haidt & Joseph, 2004; Lakoff, 2008, 1996). These thinking structures are often called frames (Lakoff, 2008). Thus, taken together, these lines of study suggest that teachers who identify as more progressive would be more likely to support teaching practices derived from the logic of the Relationship-emphasized pedagogical approach, while teachers who identify as more conservative would be more likely to support teaching practices derived from the Content-emphasized pedagogical approach (Haas et al., 2014; Kumashiro, 2008; Lakoff, 2014, 1996). However, Lakoff (2008) cautions that most people, including teachers, are "biconceptual" (p. 69), holding multiple worldview frames, with one that is most dominant, while using other worldview frames in different areas. Therefore, it is possible that teachers' beliefs on the pedagogical approach of very good teachers may not align neatly with political identification.

2 METHODOLOGY

2.1 Survey Instrument

Consistent with our research questions, our focus in this study is to examine 1) the extent to which teachers prioritize what we call relationship-emphasized pedagogical approaches over content-emphasized approaches or vice versa in their beliefs about effective pedagogical approaches to teaching and 2) whether teachers' pedagogical approaches are influenced by their political orientation. To do that, we administered a survey which we previously developed, tested, and administered with a general population sample (Haas et al., 2023), but this time, we adapted it with language for teachers rather than the general public. We used the Qualtrics platform and the sample of graduates from two teacher colleges in two large public state universities in the United States as our sampling frame. We specifically focused on those graduates who taught in the US K-12 schools in the last five years before the survey.

For both surveys, we defined a "very good teacher" as "a teacher where you learned a lot." For the survey administered to the general public, we asked participants to think about a very good teacher they had as students in K-12 and to respond with their level of agreement to 10 survey items based on their recollection of this very good teacher on a seven-point Likert scale from "very definitely true" to "very false." For the teacher survey in this study, teachers were asked to "think about both your experience as a student and your experience as a teacher with your colleagues" in responding to these same ten items and the same level of agreement on a seven-point Likert scale (see table 1 for the survey item statements).

These ten survey items represent five main domains of pedagogy framed either through the relationship-emphasized or content-emphasized pedagogical approach and were drawn from the literature on effective teaching (see, e.g., Benavides et al., 2010; Casalaspi et al., 2018; Danielson, 2011; Hattie, 2012; National Academies of Sciences, Engineering, and Medicine, 2018; National Research Council, 2000; Rissanen et al., 2019; Sahlberg, 2015; Seidel & Shavelson, 2007). These items were presented to participants in random order.

Table 1: Very good teacher characteristic item statements

Statement	Teaching Area	Frame
S1. A very good teacher focuses on making what students are learning relevant to students and their life.	Instruction	Relationship
S2. A very good teacher focuses on covering a lot of material and this is useful to students.	Instruction	Content
S3. A very good teacher praises students when they get good grades and when they make improvements.	Assessment	Relationship
S4. A very good teacher uses competition and awards to push students to be the best in the class.	Assessment	Content
S5. A very good teacher makes students stay in for lunch or after school to make sure they make up missed work or to do extra work when students get things wrong.	Learning Environment	Content
S6. A very good teacher provides extra help and gives challenges to students who need or want them.	Learning Environment	Relationship
S7. A very good teacher knows their students, cares about them, and wants them to do well.	Personal Quality - Affective	Relationship
S8. A very good teacher has clear rules about behavior, and they give out the same punishments every time to every student regardless of the circumstances.	Personal Quality - Affective	Content
S9. A very good teacher knows the subject matter or class content very well.	Personal Quality - Knowledge	Content
S10. A very good teacher creates interesting activities for students to do as part of class.	Personal Quality - Knowledge	Relationship

We conducted a principal components factor analysis to identify common factors among these items and group these items into indices to represent a construct of the pedagogical approach of a very good teacher. Next, we statistically compared the average values of the construct in relation to teachers' characteristics (political orientation and demographics) using ANOVA and t-tests, depending on the nature of the independent variable.

2.2 Analytic Sample

Our analytic sample consisted of 179 teacher responses. The participating teachers were recruited through mass emails to teacher and administration education program graduates from two universities, one in Arizona and one in California. All responses were anonymous. Table 2 presents descriptive statistics of the sample demographics

Table 2: Descriptive Statistics, Survey Responses

		Mean (SD), or %
School characteristics		
School location, last five years		
	City or urban area	47.2
	Suburban area	41.0
	Small town or rural area	11.8
Type of school, last five years		
	Traditional public school	83.8
	Charter school	15.1
	Private school, religious	2.8
	Private school, non-religious	2.2
Student characteristics		
	English Language Learners	86.6
	Special Education	92.7
	Gifted Education	60.3
Teacher characteristics		
Certified teachers	Yes	96.6
Education		
	Some college	.6
	2 year degree (AA)	.6
	4 year degree (BA, BS)	21.3
	Masters degree	72.5
	Doctorate	5.1
Teaching experience		
	1 to 3 years	5.1
	4 to 6 years	10.1
	7 to 10 years	15.2
	10 + years	69.7

Subjects taught, last five years		
	Elementary school homeroom	27.9
	English Language Arts (ELA)	33.0
	Mathematics	32.4
	Sciences	30.7
	Social Studies	24.6
	Technology/Computer Science	11.7
	Arts and Music	4.5
Currently live in		
	City or urban area	34.3
	Suburban area	53.4
	Small town or rural area	12.4
Ideological views		
	Very progressive	18.0
	Somewhat progressive	44.9
	Moderate	25.3
	Somewhat conservative	8.4
	Very conservative	3.4
Race		
	Black/AA	2.2
	White	77.7
	Hispanic/Latino	10.6
	Multiracial	3.9
	Other	5.5
Gender		
	Male	18.4
	Female	80.4
	Non-binary	1.1
Age		46 (11)
N		179

Note. Respondents were allowed to select all options which applied to them for questions about the type of school they taught in, types of students they have experience teaching, and subjects they taught in the last five years. As a result, the relative frequency for those variables add up to more than 100%. For variable "Race", we combined several race categories into one, "Other". Each of the combined categories included only 2 respondents. These categories were American Indian or Alaska Native, Native Hawaiian or Pacific Islander, Middle Eastern, East/Southeast, or South Asian, and Other.

Overall, a typical teacher in our sample worked in a traditional public school (84%), which most likely was situated in an urban or suburban area (88%), and had experience teaching students who were English Language Learners (87%), receiving special education services (93%), and were in gifted education programs (60%). A typical teacher in our sample was more likely to be White (78%) - which is consistent with the overall distribution of race among the teaching workforce in

the US[6]. Eighty percent of teachers in our sample identified as female. An overwhelming majority of teachers were certified (97%), most of them had a master's degree (72.5%), and at least two-thirds of them had more than ten years of teaching experience (70%). The average age of teachers was 46 years, with the youngest respondent being 22 years old. Most teachers lived in urban or suburban areas (88%), and nearly two-thirds of them described themselves as having a progressive political orientation on social issues (63%).

3 RESULTS

To answer our first research question, we conducted a factor analysis to identify items sharing common variance from a set of statements representing five domains of pedagogy. We found two distinct factors, or as we call them, constructs (see Table 3), and one item that was not strongly associated with either of these constructs.

Table 3: Relationship- and Content-Emphasized Pedagogical Approaches

Relationship-Emphasized Construct	Factor loading	Content-Emphasized Construct	Factor loading
Instruction (S1)	.723	Instruction (S2)	.593
Assessment (S3)	.508	Assessment (S4)	.588
Learning Environment (S6)	.656	Learning Environment (S5)	.625
Personal Quality – Affective (S7)	.498	Personal Quality – Affective (S8)	.594
Personal Quality – Knowledge (S10)	.725		
Cronbach alpha	.631		.480
Construct mean (SD)	1.60		4.18

The first factor consisted of all five items framed as a relationship-emphasized approach. The second factor included four of the five content-framed teaching practices. While not high, the values of Cronbach's alpha indicated a relatively good fit of the items for the relationship construct (0.63) and lower consistency between items for the content construct (0.48). This suggests that teachers have a good practical understanding of the two pedagogical approaches and can professionally distinguish between practices that belong to either of them.

---

[6] Eighty percent of public-school teachers in the US in 2020-21 were White according to the U.S Department of Education (IES-NCES, 2023).

Table 4: Comparison Between Relationship-Emphasized and Content-Emphasized Items, by Domain – Paired Samples T-tests

Domain	Relationship, Mean (SD), [Survey Item]	Content, Mean (SD) [Survey Item]	P-value
Instruction	1.58 (.69) [S1]	4.27 (1.30) [S2]	<.001
Assessment	1.87 (.89) [S3]	4.03 (1.42) [S4]	<.001
Learning Environment	1.57 (.67) [S6]	4.65 (1.46) [S5]	<.001
Personal Quality - Affective	1.25 (.53) [S7]	3.79 (1.65) [S8]	<.001
Personal Quality - Knowledge	1.73 (.83) [S10]	1.70 (.89) [S9]	.734

The levels of agreement on individual items in our survey ranged from 1, which corresponds to "Very Definitely True," to 7, which corresponds to "Very Definitely False." On that scale, the average value across all five items in the Relationship-populated construct was 1.6 out of 7 and the average value across all four items in the Content-populated construct was 4.19 (see table 4). Overall, teachers believed that a very good teacher should be knowledgeable in the content of the subject matter they taught – the average value for that item was 1.7 - indicating a high level of agreement.

Teachers agreed with the Relationship construct as being true of a very good teacher where you learn a lot at the overall level between "Very Definitely True" and "True." In contrast, they did not agree with the Content construct, at the overall level between "Neither True Nor False" and "Somewhat False." We used paired sample t-tests to compare how each teacher ranked these statements. For all items, except Personal Quality – Knowledge ("A very good teacher knows the subject matter or class content very well" [S9]), we found significant differences in rank of the same practice but framed differently with teachers giving preference to items from the relationship-emphasized approach. This suggests that teachers consistently favored a pedagogical approach consisting of relationship-emphasized elements over a pedagogical approach of content-emphasized elements. Taken together, we label the construct consisting of the five Relationship-emphasized items plus one of the Content-emphasized items, strong content knowledge, as "Elements of a Very Good Teacher" and the construct consisting of four of the Content-emphasized items as "Elements of a Not So Good Teacher" (see Table 5).

Table 5: Elements of Relationship-Emphasized and Content-Emphasized Constructs

Elements of a Very Good Teacher (Survey Items)	Mean	Elements of a Not So Good Teacher (Survey Items)	Mean
Instruction - Relationship (S1)	1.58	Instruction – Content (S2)	4.27
Assessment - Relationship (S3)	1.87	Assessment – Content (S4)	4.03
Learning Environment - Relationship (S6)	1.57	Learning Environment – Content (S5)	4.65
Personal Quality – Affective – Relationship (S7)	1.25	Personal Quality – Affective - Content (S8)	3.79
Personal Quality – Knowledge – Relationship (S10)	1.73		
Personal Quality – Knowledge – Content (S9)	1.70		

Once our teacher respondents identified the pedagogical practices consistent with their view of a very good teacher, we asked them about what they believed the general population thought about the share of such very good teachers in the teaching workforce in the United States. Specifically, we told them that in our previous survey, we asked respondents to provide the percentages of very good, good, competent, bad, and very bad teachers that they encountered while in school. Then we asked our teacher respondents to estimate these reported shares.[7] We found that teachers' responses were quite accurate – on average, they guessed that our previous respondents reported having on average 76% of very good (20%), good (29%), and competent (27%) teachers and only 23% of bad and very bad teachers. We present the reported shares in Figure 1. In the actual survey of the general population, the overall share of very good (37%), good (30%), and competent (20%) teachers was 87% and the share of bad and very bad was 13% (Haas et al., 2023). Teacher respondents slightly overestimated what the general population reported as the share of very bad and bad teachers and underestimated the opinion of very good teachers the general population respondents encountered.

---

[7] The exact survey question was as follows: "In another study, we asked the **general public** about the percentage of teachers they have encountered who were Very Good, Good, Competent, Bad, and Very Bad. Below, please indicate **your best guess** of the percentages of Very Good, Good, Competent, Bad, and Very Bad teachers you believe have been reported by the general public. Remember the total of all your percentages must add up to 100."
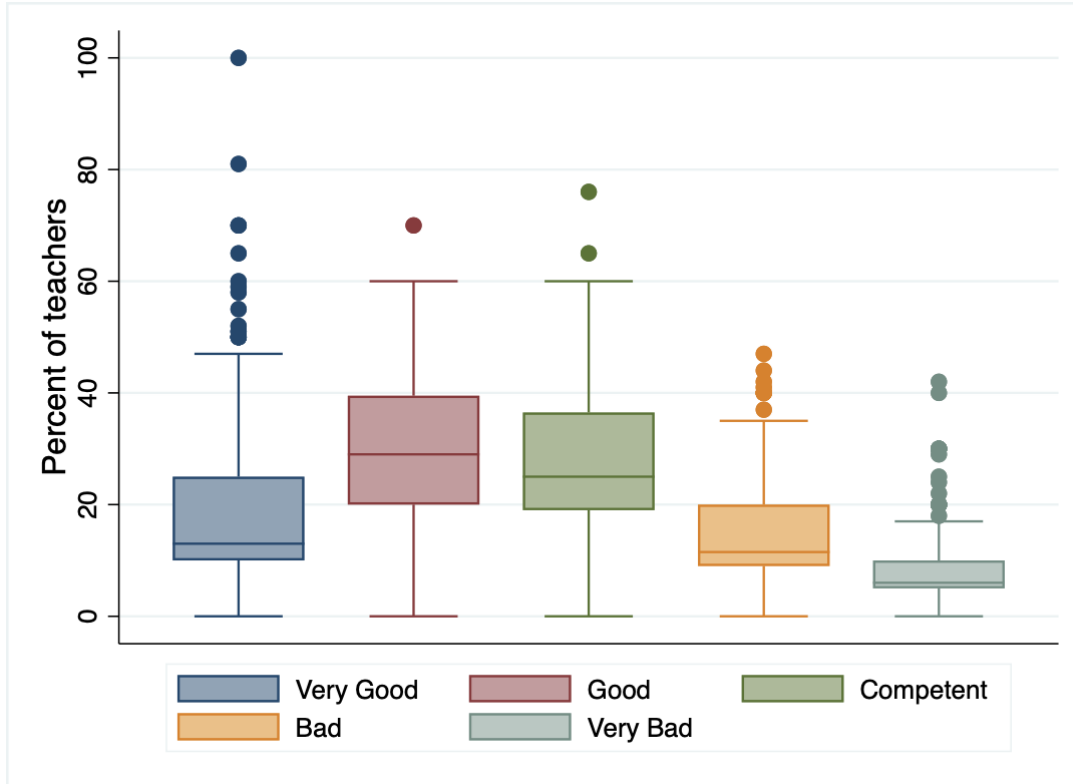
Figure 1: Distribution of Teacher Quality as Believed by Respondents

To answer our second research question, we conducted a series of ANOVA tests to estimate whether teachers' beliefs about the teaching strategies of a very good teacher differ by teacher characteristics (see Table 6). We did not find significant differences in average values for both relationship and content constructs in either of the characteristics apart from gender. Compared to male teachers, female teachers expressed less agreement with content-emphasized teaching practices as practices of a very good teacher.

Focusing on the influence of political orientation on pedagogical approach, we emphasize that we found no significant difference among the political orientations from very progressive, somewhat progressive, moderate, somewhat conservative, and very conservative.

Table 6: Teacher Characteristics and Relationship- and Content-Emphasized Constructs

Relationship-Emphasized Construct		Content-Emphasized Construct	
Factor	ANOVA (p-value)	Factor	ANOVA (p-value)
Race	.103	Race	.497
Gender	.378	Gender	.012*
Experience	.787	Experience	.263
Education	.174	Education	.739
Ideological views	.832	Ideological views	.122
Location	.798	Location	.381
School location	.332	School location	.060
Age (correlation)	.445	Age (correlation)	.226

Note. * indicates p-value < .05, ** p-value < .01, *** p-value < .001. Age was the only continuous variable among teacher level factors; to test for relationship between average values of relationship and content constructs and age, we estimated a correlation between the two using simple regression. The value provided is a significance of the coefficient from that regression. For education variable, we collapsed some of the categories which included one observation per category only. Similarly, for race, we combined categories which included only one responded in one category, "Other".

3.1 Limitations

Our approach has its limitations, which have implications for the external validity of our study. First, and most importantly, our sample might not be representative of all teachers in the United States but only those who graduated from the two Universities we used for the sampling frame. This restricts the population to which our findings could be applicable. At the same time, the demographics of our sample are consistent with the demographics of the teaching workforce nationwide, with the exception of a slightly higher rate of certified teachers and teachers who worked with students with special needs. The second limitation of our sample is its non-random nature – given that respondents voluntarily participated in our survey, we have the data only on those who self-selected to participate. Under assumption that such selection is associated with specific views of good teaching and pedagogies, our results might be biased towards an approach valued by that selection of teachers and can potentially overestimate the opinions of an average teacher about good teaching. Lastly, the response rate to our survey was low. What it means is that we might not be able to capture the complete views of all teachers representing the teaching workforce in the United States, but a selective sample of those teachers. Despite that, we believe that we were able to capture the views of quite a demographically diverse and representative group of teachers. What makes us confident is the consistency of results from this teacher survey with that of the general population we conducted before (Haas et al., 2023).

4 CONCLUSIONS

Overall, our findings from a sample of US K-12 teacher respondents indicate that teachers can proficiently distinguish between two pedagogical approaches: relationship-emphasized and content-emphasized. On average, teachers in our sample believed that a very good teacher helps students learn a lot when they know and care about their students, create engaging learning activities relevant to their students' lives, and know the subject matter. Also, and quite significantly, the factors associated with very good teaching identified by the participants in this study -- prioritizing relationships, affective connections, and mastery of content -- coincide with those identified in the relevant research literature (National Academies of Sciences, Engineering, and Medicine, 2018) and are aligned with the recently published recommendations of the UN High-Level Panel on the Teaching Profession.

We labeled the six elements from our survey, five relationship-emphasized elements, and one content-emphasized element, as "Elements of a Very Good Teacher." This construct and elements were largely consistent with our previous findings of the general public's beliefs about what makes a very good teacher (Haas et al., 2023). By contrast, teachers believed that a very good teacher did not use competition and awards to motivate students, use punishment-based responses to missing and incorrect student work, treat students the same regardless of circumstances, and focus on covering a lot of subject matter content. We labeled these five elements of the same construct as "Elements of a Poor Teacher."

We also found that despite some of the emerging qualitative research findings that teachers use different strategies conditional on their own ideological beliefs, at least in highly charged political contexts (González-Espada 2006; Zembylas, Aristidou, & Charalambous, 2023), that was not the case in our data at the fundamental level of pedagogical approach.

Teacher respondents rated the elements of the relationship-emphasized pedagogical approach significantly higher regardless of their individual and professional characteristics such as age, gender, race, years of experience, education, and – most importantly - their political orientation towards social issues. This result was also largely consistent with our previous findings about the general public's consistent beliefs about what makes a very good teacher, regardless of race, gender, and political orientation, among other characteristics (Haas et al., 2023). Overall, the results of our complementary research projects on the general population and teachers suggest that descriptions of extreme polarization in education may be more likely limited to those highly involved political activists and those very active in ideologically charged social and mainstream media than either teachers or the public at large.

5 REFERENCES

Benavides, F., Dumont, H., & Istance, D. (Eds.). (2010). Nature of learning: Using research to inspire practice. OECD Publications. Retrieved from http://www.oecd.org/education/ceri/50300814.pdf

Bulkley, K.E., & Gottlieb, J. (2017). Policy images of teachers: How influential actors construct images of teachers. *Teachers College Record, 119*(4), 1-34.

Casalaspi, D., Hutt, E., & Schneider, J. (2018). Identifying good teachers: Expert versus ordinary knowledge. *International Journal of Education Policy and Leadership*, 13(4), n4.

Danielson, C. (2011). *Enhancing professional practice: A framework for teaching*. Association for Supervision and Curriculum Development.

DeCuir-Gunby, J. T., & Bindra, V. G. (2022). How does teacher bias influence students?: An introduction to the special issue on teachers' implicit attitudes, instructional practices, and student outcomes. *Learning and Instruction*, *78*, 101523. https://doi.org/10.1016/j.learninstruc.2021.101523

Denessen, E., Hornstra, L., van den Bergh, L., & Bijlstra, G. (2022). Implicit measures of teachers' attitudes and stereotypes, and their effects on teacher practice and student outcomes: A review. *Learning and Instruction*, *78*, 101437.

Dos Santos, L. M. (2019). The relationship between teachers' beliefs, teachers' behaviors, and teachers' professional development: A literature review. *International Journal of Education and Practice, 7*(10), 10 – 18.

Druckman, J., Klar, S., Krupnikov, Y., Levendusky, M., & Ryan, J. B. (2019). *The illusion of affective polarization* (Doctoral dissertation, Stony Brook University).

Edwards Hedegaard, A. (2023). *Taking children and young people seriously: AcCaring relational approach to education*. Cambridge University Press.

Fives, H., Barnes, N., Chiavola, C., SaizdeLaMora, K., Oliveros, E., & Mabrouk-Hattab, S. (2019). *Reviews of Teachers' Beliefs*. https://doi.org/10.1093/acrefore/9780190264093.013.781

Galey-Horn, S., & Ferrare, J.J. (2020). Using policy network analysis to understand ideological convergence and change in educational subsystems. *Education Policy Analysis Archives, 28*(118). https://doi.org/10.14507/epaa.28.4508

Geller, R. C. (2020). Teacher political disclosure in contentious times: A "responsibility to speak up" or "fair and balanced"? *Theory & Research in Social Education*, *48*(2), 182–210. https://doi.org/10.1080/00933104.2020.1740125

González-Espada, W. J. (2006). The influence of Puerto Rican physics teachers' political beliefs in their pedagogical practices/La influencia de las creencias políticas de los maestros de física puertorriqueños en sus prácticas pedagógicas. *Journal of Science Education*, *7*(2), 109–113.

Graham J., Haidt, J., Koleva, S. P., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. *Advances in Experimental Social Psychology, 47,* 55–130. https://doi.org/10.1016/B978-0-12-407236-7.00002-4

Grossman P. (2013) Research on pedagogical approaches in teacher education. In M. Cochran-Smith & K. M. Zeichner KM (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 425 – 476). Routledge.

Haas, E., Fischman, G., & Brewer, J. (2014). *Dumb ideas won't create smart kids: Straight talk about bad school reform, good teaching, and better learning.* New York: Teachers College Press.

Haas, E., Fischman, G., & Pivovarova, M. (2023). Public beliefs about good teaching. *Research in Education*. https://doi.org/10.1177/00345237231207717

Hager, P., & Hodkinson, P. (2009). Moving beyond the metaphor of transfer of learning. *British Educational Research Journal*, *35*(4), 619–638. https://doi.org/10.1080/01411920802642371

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Vintage.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychology Review,* 108, 814 – 834.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus,* 133(4). 55–66

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning.* New York: Routledge.

Heckathron, J., Jang, B. G., Hromalik, C. D., Wiens, P. & Chou, A. (2023). An examination of preservice teachers' self-efficacy and teaching performance. *Teacher Education Quarterly, 50(*4), 7-29.

Hutton, Z. (2023, November 30). Has polarizing school board election politics begun to fade? *Governing*. https://www.governing.com/education/has-polarizing-school-board-election-politics-begun-to-fade

IES-NCES. (2023, May). *Characteristics of public school teachers* [webpage]. Retrieved June 9, 2023, from https://nces.ed.gov/programs/coe/indicator/clr/public-school-teachers

Inan-Kaya, G, & Rubie-Davis, C. M. (2022). Teacher classroom interactions and behaviours: Indications of bias. *Learning and Instruction, 78*, 101516. https://doi.org/10.1016/j.learninstruc.2021.101516

Instance, D., & Paniagua, A. (2019). *Learning to leapfrog: Innovative pedagogies to transform education*. Brookings Institute.

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual Review of Political Science*, *22*, 129-146. https://doi.org/10.1146/annurev-polisci-051117-073034

Kehoe, K. F., & McGinty, A. S. (2024). Exploring teachers' reading knowledge, beliefs and instructional practice. *Journal of Research in Reading, 47*(1), 63-82.

Kitchen, J. (2005). Conveying respect and empathy: Becoming a relational teacher educator. *Studying Teacher Education, 1*(2), 195-207. https://doi.org/10.1080/17425960500288374

Klar, S. Krupnikov, Y., & Ryan, J. B. (2018) Affective Polarization or Partisan Disdain? Untangling a Dislike for the Opposing Party from a Dislike of Partisanship, *Public Opinion Quarterly*, 82(2), 379–390. https://doi.org/10.1093/poq/nfy014

Kumashiro, K. K. (2008). *The seduction of common sense: How the right has framed the debate on America's schools.* Teachers College Press.

Lakoff, G. (1996). *Moral politics: How liberals and conservatives think*. University of Chicago Press.

Lakoff, G. (2008). *The political mind: Why you can't understand 21ˢᵗ-century American politics with an 18ᵗʰ-century brain*. Viking

Lakoff, G. (2014). *The all new don't think of an elephant: Know your values and frame the debate*. Chelsea Green Publishing.

Lemov, D. (2021). *Teach like a champion 3.0: 63 techniques that put students on the path to college (3rd ed.).* Jossey-Bass.

Lin, L., Parker, K., & Horowitz, J. (2024, April). *What's it like to be a teacher in America today?* Pew Research Center.

McGregor, S.C .(2019). Social media as public opinion: How journalists use social media to represent public opinion. *Journalism*, 20(8), 1070-1086.

National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington D.C.: National Academies Press.

National Research Council. (2000). *How people learn: Brain, mind, experience, and school: Expanded edition*. Washington D.C.: National Academies Press.

Ng, W., Nicholas, H., & Williams, A. (2010). School experience influences on pre-service teachers' evolving beliefs about effective teaching. *Teaching and Teacher Education*, *26*(2), 278-289. https://doi.org/10.1016/j.tate.2009.03.010

Rissanen, I., Kuusisto, E., Tuominen, M., & Tirri, K. (2019). In search of a growth mindset pedagogy: A case study of one teacher's classroom practices in a Finnish elementary school. *Teaching and Teacher Education*, *77*, 204-213.

Sahlberg, P. (2015). *Finnish lessons 2.0: What the world can learn from educational change in Finland?* Teachers College Press.

Seidel, T., & Shavelson, R. J. (2007). Teaching effectiveness research in the past decade: The role of theory and research design in disentangling meta-analysis results. *Review of Educational Research,* 77*(*4), 454-499. https://doi.org/10.3102/0034654307310317

Seven Letter. (2020). *Insight: 2020 voter priorities survey.* https://www.politico.com/f/?id=00000175-f4af-d692-a975-fcff0b650000

Souchon, N., Kermarec, G., Trouilloud, D., & Bardin, B. (2020). Influence of teachers' political orientation and values on their success prediction toward students from different

socioeconomic background. *European Review of Applied Psychology*, 70, 1–10. https://doi.org/10.1016/j.erap.2020.100553

Stronge, J. H. (2007) *Qualities of effective teachers* (2nd ed.). Association of Supervision and Curriculum Development (ASCD).

Stronge, J. H., Ward, T. J., & Grant, L. W. (2011). What makes good teachers good? A cross-case analysis of the connection between teacher effectiveness and student achievement. *Journal of Teacher Education, 62*(4), 339–355.http://doi.org/10.1177/0022487111404241

Westen, D. (2008). *The political brain: The role of emotion in deciding the fate of the nation*. Public Affairs.

Wong, H.K., & Wong, R. (1997). *The first days of school: How to be an effective teacher (revised ed.).* Harry K. Wong Publications.

Zembylas, M., Aristidou, X., & Charalambous, C. (2023). Teachers' understandings of affective nationalism in a conflict-affected society: Pedagogical and political implications. *Research Papers in Education*, 1 - 24. https://doi.org/10.1080/02671522.2023.2238300