

Jane C. Lo, Gavin Tierney

Maintaining Interest in Politics: 'Engagement First' in a U.S. High School Government Course

- Putting students in roles can help trigger students' interests in political issues.
- While role-play can help trigger students' interest in politics, maintaining interest is tricky.
- Disciplinary specific scaffolding is an important part of maintaining triggered interest.
- To maintain political interest, students need follow-up opportunities to engage with political issues.

Purpose: Increasing students' political interest has been a longstanding goal of civic education. One way to trigger students' interests in political issues is by engaging them first in an attention grabbing activity (i.e., assigning them to roles). Because it is important to examine not only how roles may trigger political interest, but also students' political interest afterwards, we asked: What happens to students' interest in political issues after engagement first?

Methodology: Drawing from Schwartz and Bransford's (1998) *A Time for Telling*, we conducted a case study of three students, who experienced 'engagement first' activities in a class, and report on their interests about political issues in one particular activity.

Findings: While role-play can help trigger students' political interest. Our findings show that for students to maintain political interest, they need follow-up opportunities to engage in meaningful activities around politics.

Research implications: Role assignment is a good way to trigger political interest, but productive disciplinary engagement can be coupled with engagement first to extent students' political interest.

Practical implications: Classroom activities that hope to support students' political interest may need to include both 'engagement first' and further scaffolds for students to engage productively with politics.

Keywords:

Civic education, interest development, political interest, youth political participation

1 Introduction

The problem of low voter turnout, especially among young adults in the last few decades, has prompted scholars to examine how education might influence an individual's political behavior (e.g., Converse, 1972; Delli Carpini & Keeter, 1996; Niemi & Junn, 1998). Specifically, some scholars argue for a kind of "enlightened political engagement" (Parker, 2011), where students know disciplinary knowledge well enough to engage politically. Findings from these studies has led scholars to look more closely at how education not only influences adults' political behavior but also youth's future political behavior (e.g., Kahne & Westheimer, 2003, 2006; Torney-Purta et al., 2007). While past studies have found data for a connection between schooling and political behavior to be lacking (Langton & Jennings, 1968), more recent studies have found correlations between formal education, along with political knowledge, and political participation in adults (e.g., Converse, 1972; Delli Carpini & Keeter, 1996; Nie, Junn, & Stehlik-Barry, 1996). Large-

scale studies sought to better understand the relationship between political knowledge and political engagement. They found that education plays an instrumental role in influencing this correlation (Delli Carpini & Keeter, 1996; Nie et al., 1996; Niemi & Junn, 1998). This means that education can play a significant role in how much political knowledge individuals acquire, and subsequently, how much they engage politically.

While the political science literature touts education as an important predictor of political knowledge and political engagement in adults, does this trend apply to adolescents? More importantly, why should scholars care about adolescents' political knowledge and engagement if they are not yet part of the electorate? Positive Youth Development (PYD) (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004) suggests what youth know about politics and how they feel about political issues can determine how they behave politically as adults. Knowing how youth feel about political issues and what they know about politics is especially important for democracies, where youth are already members of a society that can be shaped and changed by their actions. To be true members of a democratic society, youth need opportunities to experience what it means to be a member of a community so that they might feel compelled, interested, and empowered to be a part of, and participate in, governance (Sherrod, Torney-Purta, & Flanagan, 2010). This means that education and classroom practices might pique students' interest in politics and help them engage as members of the political community.

Jane C. Lo is Assistant Professor of Social Science Education in the School of Teacher Education at Florida State University. Her research focuses on the political engagement of youth, social studies curriculum development, and developing measures of deep learning and collaboration. Email: jlo@fsu.edu
Gavin Tierney is a Post-Doctoral Researcher as part of OpenSTEM Research at the University of Washington, Bothell. His research focuses on youth identity development and engagement and the design of learning environments. Email: gtierney@uw.edu



Helping students engage with political issues has been a longstanding goal of civic and political education (e.g., Levinson, 2011; Westheimer & Kahne, 2004). In recent decades, scholars have sought to address the well-documented decline of youth political participation (in terms of voter turnout) by studying how coursework and classroom practices may influence students' commitments to participate politically (e.g., Delli Carpini & Keeter, 1996; Niemi & Junn, 1998; Nie, Junn, & Stehlik-Barry, 1996). Subsequent studies suggest engaging classroom practices (e.g., debates, simulations, and decision-making) can foster students' political knowledge and action (e.g., CIRCLE, 2013; Kahne, Crow, & Lee, 2013; Kahne & Middaugh, 2008). Project-Based Learning (PBL) incorporates many of these classroom practices as a way to help foster students' interest (Feldman, Pasek, Romer, & Jamieson, 2007). While PBL instructional practices are generally considered to be engaging for students (e.g., Darling-Hammond et al., 2008), little is known about what that engagement looks like and the ways it may help maintain student interest in politics. If a goal of engaging civic classroom practices is to help students learn more about political issues, it becomes important to examine how students' political interests can be developed through classroom activities. Data for this paper came from a larger Design-Based Implementation Research (DBIR) (Fishman, Penuel, Allen, Cheng, & Sabelli, 2013) study on the effectiveness of PBL in Advanced High School Coursework (Parker et al., 2011). Specifically, a PBL Advanced Placement U.S. Government and Politics course was designed with 'engagement first' in mind, where students were given reasons to learn before participating in the classroom projects (Schwartz & Bransford, 1998). Using a four-phased model of interest development, this paper reports on the ways students' interest in politics may be maintained following the moment of triggered interest.

According to Hidi and Renninger (2006), "interest is a psychological state that, in later phases of development, is also a predisposition to reengage content that applies to in-school and out-of-school learning" (p. 111). Outside of the school context, interest has also been investigated in the cognitive and social psychological literatures (e.g., Sansone, Weir, Harpster, & Morgan, 1992; Silvia, 2001). As a psychological state, education scholars have long suggested that interest can help determine students' effort and behavior (e.g., Dewey & Jackson, 1991; Hidi, Renninger, & Krapp, 2004). Interest occurs when students' affect (strong feelings) and knowledge build on one another as two main components of interest development (Hidi & Renninger, 2006). The four-phased model of interest development suggest that in order for triggered interest to be maintained, classroom activities need to support both affect and knowledge in the domain (Hidi & Renninger, 2006). Although interest can be triggered by practices like engagement first, sustained personal interest only develops if triggered interest is maintained (e.g., Hidi & Renninger, 2006; Nolen, 2007). For students to develop long-term interest in politics, their triggered interest in political knowledge and

participation must be maintained over time. While triggering and sustaining student affect has been more broadly studied within the motivation and engagement literature (e.g., Efklides, 2006; Pekrun, Goetz, Titz, & Perry, 2002; Pintrich, 2003), little is known about how students' interests can be maintained after they initially engage with the domain.

2 Background

2.1 Civics curricula in classrooms and schools

When exploring how civics curricula may influence students' political knowledge and participation, studies have shown that certain educational practices in the classroom help increase students' political knowledge (Niemi & Junn, 1998). This means that school and classroom practices could be important factors in supporting students' engagement with politics. Studies have also found that certain types of curricular approaches and opportunities could impact students' commitment to civic participation (e.g., Campbell, 2005; Kahne & Sporte, 2008; Torney-Purta, Lehmann, Oswald, & Schulz, 2001). These curricular approaches provide students opportunities to practice civic participation and simulated political participation firsthand. For instance, Kahne, Chi, and Middaugh (2006) examined the impact of certain engaging practices (including features such as simulations, role models, service learning, learning about problems in the community, learning how local government works, and personal relevance) on three forms of students' social capital: norms of civic participation, social trust, and knowledge of social networks. They found that these practices have the potential to increase students' disposition and capacity toward civic engagement. Interest development theory offers a unique way to examine how these engaging practices may influence students' political dispositions and capacities (Lo, 2015).

2.2 The Four-Phase model of interest development

Hidi and Renninger (2006) offer a four-part framework of interest development that may be used to examine how students might become more interested in political knowledge and participation. As a motivational variable, interest "refers to the psychological state of engaging or the predisposition to reengage with particular classes of objects, events, or ideas over time" (Hidi & Renninger, 2006, p. 112). It is important to note that interest also results as an interaction between individuals and a specific content (Hidi & Baird, 1986; Krapp, 2007; Krapp, Hidi, & Renninger, 1992; Lipstein & Renninger, 2006), meaning interest is always tied to a specific subject area even for students who are generally motivated (Krapp, 2000; Renninger, Ewen, & Lasher, 2002). For this paper, we are especially interested in the specific disciplinary focus of interest development, creating citizens that are both knowledgeable *and* interested in politics—*enlightened* political engagers.

The four phases of interest development are sequential and distinct: triggered situational interest, maintained situational interest, emerging individual interest, and well-developed individual interest (Hidi & Renninger,

2006). The present study focuses on the first two phases of Hidi and Renninger's (ibid) four-phase model, triggered situational interest and maintained situational interest, specifically. According to Silvia (2001, as cited in Hidi & Renninger, 2006), interests are defined as:

"Self-sustaining motives that lead people to engage in certain idiosyncratic and person-specific activities with certain objects and ideas for their own sake.... Interests serve long-term goals of adaptation such as cultivating knowledge and promoting diversified skills and experience. (p. 119)

These skills and experiences can help students continually re-engage with the content of interest. As students' interests in political issues develop, not only will they know more about politics but they will also be more likely to engage in political activities.

Knowledge and affect interact together to prolong an individual's personal interests in a domain, as her interest level enters the later phases of the model (Hidi et al., 2004). In the later phases of interest development, the interaction between knowledge (in terms of how much a student knows about a domain) and affect (the strong feelings a student has towards a domain) can lead to an increase in the amount of work students complete in a content area, and also help them engage with that content in new ways (Renninger, 1990; Renninger et al., 2002; Renninger & Hidi, 2002). Examining students' civic participation through this four-part framework allows consideration of how certain classroom practices can support the development of students' interests in politics as a way to increase their political knowledge. Within the four-phase model of interest development, the triggering and maintaining of interest has the potential to help students develop personal interest in disciplinary areas. For this study, we recognize that students have varying individual interest in politics when they enter into a course. However, we are interested in the interaction between specific disciplinary thinking and how students' interests are triggered and maintained, rather than their general interest in things related to politics.

Triggered situational interest can be characterized by short-term positive changes in students' feeling towards and thinking around a certain subject area (Hidi & Baird, 1986; Mitchell, 1993). Environmental features that appeal to the individual can often trigger situational interest (Hidi & Baird, 1986; Hidi, Weiss, Berndorff, & Nolan, 1998). We view triggered interest not just as something that pulls students into specific disciplinary content and practices, but as moments when students are active participants in the process with pre-existing interests, opinions, and identities in school. Classroom practices like 'engagement first' can trigger situational interest for students because of how it invites students to engage with the disciplinary content. In a civics classroom, assigning students to roles as a way to give them a reason to learn about political issues could trigger their situational interests. The roles help students inhabit aspects of the discipline, pulling on their individual experiences and knowledge to make the roles their own. Once this interest is triggered, it can be sustained or

maintained if activities continue to be meaningful to the students (Hidi et al., 1998; Mitchell, 1993; Renninger, Ewen, & Lasher, 2002). However, the maintaining of triggered interest inhabits a tricky space between situational triggering of interest and internal development of personal interest—a space that may be mitigated by supporting students' affect towards and knowledge of the specific subject. Additionally, while there is value in triggering interest through 'engagement first' and giving students disciplinary roles, student agency in these roles also creates a tricky space where students may develop some interest, but not interest that is directly tied to the specific disciplinary content and practices of the lesson. In short, general interests might be developing through the roles, but these interests might be outside the targeted disciplinary context of the lessons. It may be viewed that any political interest that is developed is of value; however we emphasize the connection between students' political interest and their disciplinary knowledge.

Hidi and Renninger's (2006) framework suggests maintained situational interests can help students increase their knowledge about a subject, which can help foster prolonged personal interests in specific subject areas (Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000; Hidi & Baird, 1986; Lipstein & Renninger, 2006; Mitchell, 1993). To the extent that situational interest is maintained, students can move into the emerging individual interest phase, where individuals become more curious about the domain and seek to engage with it (Renninger, 1990; Renninger & Hidi, 2002). For civic education, if students move into this third phase of interest development, they begin to develop their own interests in politics that are grounded in disciplinary knowledge—interests that are sustained by the students themselves. Students who reach the fourth phase of interest development, well-developed individual interest, can sustain their curiosity over time as they engage and reengage with the domain (Hidi & Renninger, 2006; Pressick-Kilborn & Walker, 2002; Renninger & Shumar, 2002). When students reach this level of interest in political issues, they exhibit high levels of political knowledge and active civic participation. Since maintained situational interest may be a precursor to more developed and stable forms of interest (Lipstein & Renninger, 2006), engaging practices might lead students to develop more stable individual interest in political matters by creating multiple opportunities to participate in situationally interesting activities. A more stable interest in politics may contribute to a student's capacity for and commitment to civic participation.

While each phase has the potential to lead individuals to the next phase of interest development, the progression is not guaranteed (Hidi & Renninger, 2006). Most learners require external supports to help them maintain interest in objects, even when interest has been triggered long enough for individual interest to develop (Csikszentmihalyi, Rathunde, & Whalen, 1996; Renninger, 2000). Multiple triggers and meaningful opportunities to engage with the disciplinary content are likely to be

required to maintain situational interest. One potential trigger is the use of 'engagement first.'

2.3 Engagement first

'Engagement first' occurs when students begin project work and role-play *before* they are presented with lectures and readings. In this model, students ask questions about the topic through their roles, which may help them develop a need to know important content information (Schwartz & Bransford, 1998). Since students take on roles first, the roles can serve as a trigger for situational interest in the topics that students will simulate throughout the tasks, providing them with reasons for learning information. Each project also includes tasks and activities that can serve as triggers for situational interests (e.g., videos, debates, and group work). In this paper, we examine the ways triggered interest play out following the initial engagement first via role assignment in a political debate.

In *A Time for Telling*, Schwartz and Bransford (1998) suggest that giving students reasons to know something before telling them (or giving them more information) about it is an important way to prime students' learning. In a sense, students who have reasons to know information tend to create a space for that information so that when they come into contact with the information, they recognize its importance. This differs from traditional lessons where teachers often give lectures or tell students to read a chapter *before* they participate in an activity. In other words, 'a time for telling' challenges teachers to present students with information during a perfectly timed moment when it matters most to students' learning, rather than before they need to know it. We also see this set up for 'a time for telling' as a way to trigger students' interest in the subject matter, because a reason to know can pique their interest in the subject that they are to learn about. A well-timed lecture is an easy way to understand a 'time for telling'. For example, a student who is asked to build a winning soapbox car will pay close attention to a lecture on gravity, mass, force, and friction. In order for the student to succeed at her task, she must know how the weight, shape, and materials of her soapbox car will help her win.

While lecturing is a useful form of 'telling', there are other ways for information to be presented to students at a well-timed moment. For example, if a student needs to act out the historical Lincoln and Douglass debate, she will attentively research what actually happened during that debate. In this case, the 'telling' of information comes not from a teacher's lecture, but from information that the student gathers herself. Other forms of telling can include information that students learn from one another or experiences through participating in activities that inform students' learning about a topic. The format of the 'telling' is not as important as the timing of the telling: it generally occurs *after* students have been primed for the information. In other words, students need to have reasons to pay attention to the 'telling' no matter what form it takes. Through engagement first, the project design provides students with these reasons for

knowing so that the 'telling' (information) can be most meaningful, much like the metaphor of striking the iron while it's hot.

In an effort to examine whether interest is maintained after engagement first, we investigated student interest and engagement in political issues *after* their interests were triggered by engagement first. This study extends the work of Mitchell (1993) and others in investigating both supports and barriers for students sustaining interest in discipline-specific ways. While maintained situational interest does not necessarily lead to the development of personal interest in political issues (Harackiewicz et al., 2000; Hidi & Baird, 1986), it can help focus students' attention toward the information they are learning and increase their acquisition of political knowledge. In the context of civic education, if engagement first can trigger situational interests in politics and political issues, while meaningful activities maintain them, students could be more likely to learn the content (political knowledge) and develop value for that content. This developing interest in politics might explain how an increase in political knowledge could lead to civic participation. For this study, we wanted to know: What happens to students' interest in political issues after engagement first?

3 Methods

Drawn from a larger study of Project Based Learning (PBL) in advanced high school coursework (Parker et al., 2013), we analyzed the interactions of three students in this paper. In this case study, students participated in classroom activities after an initial engagement first moment of being assigned to roles in a historical debate.

3.1 The course

This study was completed as a part of a larger Design Based Implementation Research (DBIR) project examining how PBL can contribute to deeper learning in an advanced coursework platform (Parker et al., 2013). Using ideas from *How People Learn* (Bransford, Brown, & Cocking, 2000), the team worked with scholars and teachers to iteratively design, implement, and test a PBL U.S. Government and Politics curriculum. True to the DBIR framework, the goal of the research was to iteratively refine and test an implementation within the classroom setting that addressed the needs of multiple stakeholders and developed theories related to learning (Penuel, Fishman, Cheng, & Sabelli, 2011). The goal of the broader research study was to use an iterative approach that provided adjustments to a curriculum and its implementation to address the practical needs of classrooms. At the same time, the researchers hoped to develop practical theory about PBL and how students learn. The course was structured with projects as the spine, where students learned all content in the context of five major projects. Each project provided students with a role and multiple simulated tasks that mirror actual political processes (e.g., students as legislatures going through the process of how a bill becomes a law). The course also utilized engagement first as a design



principle, taking every opportunity to provide students with reasons to learn *before* they were introduced to the activities or materials. Often these reasons are given through the role assignment, other times they are provided through the introduction of the activity and strengthened by the role assignment. This was often accomplished through assigning students to integral roles or providing them with enticing classroom activities. The analysis for this paper occurred during a period of time when the overarching research project was examining the implementation of the project-based AP course in urban settings (the course having originally been designed and implemented in a well-resources suburban school district).

3.2 Setting and Participants

Data for this study were collected during the first unit of a PBL Advanced Placement (AP) Government and Politics course at Taft High School. Taft is a diverse, urban public high school in Greenville Public Schools, a large metropolitan district in the northwestern U.S. The unit, "Founders' Intent," introduced the constitutional underpinnings of the government of the United States, including the structure and function of the U.S. branches of government through a variety of activities, including lectures, watching videos, reading, and small group debates. We chose to focus our analysis on the "Founders' Intent" unit in order to understand interest development at the beginning of the course, when students were new to the content and the project-based learning design features, such as 'engagement first'. A key concept that students grapple with in this unit is federalism, the sharing of powers between the national and state governments. To help students understand federalism, activities in the unit include discussions of political issues around states' rights. In the larger study, our research purpose was to analyze students' participation in activities to determine how their engagement was supported or constrained. This information then fed into the main DBIR effort, informing the ongoing modification of the curriculum and materials. In the course of this analysis, we attended to the ways in which students' interest was triggered and maintained. The findings of this study contribute to the ongoing redesign of the curriculum as well as teacher training.

The case study consisted of three African American students who were seniors at Taft High School: Amanda, Ian, and Tim. The teacher was Mr. Perez, a Latino male in his 12th year of teaching and his second year working with the PBL curriculum for this course. Mr. Perez allowed the students in this multi-racial class to self-select their groups. The group was originally selected for filming due to its unique make-up of all African-American students.

3.3 Data Collection

We filmed all interactions of the focal group during the first unit of the course (approximately 15 hours over 3 weeks). Data included video recordings of whole class and small group work, completed as part of the

Founder's Intent unit, using one camera with a remote microphone. In order to focus, in depth, on the process of student engagement and interest development, we selected one case study group from the class, collecting video data and documents from the case study group, as well as video data of whole class activities, lectures, and discussions. Through researcher notes and video of whole class activity, we captured data to compare the case study group to the other students in the class. We also conducted brief interviews with students immediately following some group activity and interviews with the teacher. Artifacts including handouts and PowerPoint slides used by the teacher were collected throughout the unit. Video and audio records were transcribed verbatim.

3.4 Analytic strategy

There were two distinct phases of analysis. In the first phase, we utilized a grounded theory approach (Corbin & Strauss, 2007), focusing on task negotiation and student engagement as foundations for beginning codes. Coding began with open coding the video recorded class, from the beginning of the course and leading up to the mock debate. We focused in particular on moments of group work, since those moments provided the most student discourse and, thus, examples of student thinking. This coding included defining episodes and determining the nature of the activity in which students were engaged. Episode boundaries marked significant shifts in activity. We then included an initial set of code categories based on our initial research question, including *interest*, *negotiation*, *positioning*, *tool use*, and *teacher moves*. We identified students' triggered interest based on affective and cognitive evidences. For the affective component, we noted physical posture, hand gestures, voice intonation, and attentiveness that all suggested students were interested in the classroom activity. For the cognitive component, we noted prompted and unprompted on-topic discussions among students about the content that were reoccurring. From the larger case study analysis, we then identified an episode of group work, where the engagement first design principle had been used, seeking to trigger students' interest by assigning them roles and then deepening their learning and maintaining their interest through a debate. The episode exemplified students' experiences with classroom activities in Mr. Perez's class and also captured what students did after situational interest was triggered by engagement first.

In the constant comparative method (Creswell, 2007) phase, we recoded the episode with attention to content objectives to understand how classroom activities after engagement first supported or constrained the maintaining of student interest. Coding was iterative and collaborative, with research group members proposing new codes and code categories, negotiating codes and their definitions, and co-producing analytic comments and memos. Analysis proceeded until no new codes were needed to characterize the data. Since triggered interest is not always maintained, nor is it discipline specific (one

can imagine students who are interested and engaged in things that are not associated with learning goals), we looked for student conversation and behavior that were indicative of maintained interest in the specific content topic. In remembering that maintaining triggered situational interest often involves meaningful tasks and personal involvement, we looked for evidences of students bringing in on-topic information to the task from their own background knowledge.

4 Findings

The case study examines subsequent classroom activities following an 'engagement first' moment, where students were placed into roles. The roles provided students with a need to know information about a historical political debate. In examining the engagement first moment and the following debate, we did not seek to make causal claims about engagement first and interest development, but instead to uncover some of the complicating factors that exist when political interest is being developed in a complex social environment, such as a PBL classroom. However, this case does exemplify the experiences of students in the PBL course in our study, being put into roles and asked to complete classroom activities in those roles. The case shows that 'engagement first' helped trigger the case students' political interests in the issue of states' rights and their engagement in the activity; however, students' interests in the issue were not maintained and shifted through subsequent activities, due to a combination of complicating factors, which we will discuss.

4.1 "We were getting down!"

We videotaped the students participating in a simulation of the Hamilton-Jefferson debate on the establishment of a national bank. The historical debate showcased a power struggle between the national government and state governments during the first decade after the creation of the United States. The main question of the debate was whether the national government had a right to create a national bank? The essence behind this question continues to be debated today in contentious issues like the legalization of marijuana and same-sex marriage. The activity spanned two days with a day in between where students did an unrelated activity.

On the first day, students were introduced to the debate. In groups of three, the students were first asked to collaboratively read and discuss the Hamilton-Jefferson debate, with a goal of everyone in the group understanding the arguments that were made. As the groups finished their small group discussions, the teacher randomly handed out a small piece of paper to some of the student as a way to pique their interest. On the pieces of paper were an odd number, an even number, or nothing at all. The teacher left the meaning of these pieces of paper hanging in the air as the whole class discussed the debate, attempting to make sense of the arguments that were made and what was at stake in the debate. The teacher then led a whole-class debrief of the Hamilton-Jefferson arguments. A few students partici-

pated, but most of the class remained silent. Just as the class period was ending, the teacher pulled the trigger on his engagement first moment by writing "Odd, Even, and None" on the board and then wrote the roles next to them: Odd - Thomas Jefferson, Even - Alexander Hamilton, and None - George Washington. Students in the class spontaneously began talking about their roles in their small groups, a noticeable shift from moments earlier in the whole-class debrief. Their interest in the topic had been triggered because they now had specific roles to play in the debate.

True to the engagement first principle, the roles and the role-assignment were designed to engage students and trigger their interest in the debate around the concept of Federalism (or the division of powers between the state and federal governments). Students playing Hamilton and Jefferson in each group were given the task of debating, while the student playing Washington moderated and decided who won the debate. Even though students participated in a different activity the next day, they were given a debate planning sheet, as homework, to help them organize their knowledge of the topic and the main arguments. The homework stressed the importance of using Constitutional reasoning and evidence for the basis of their arguments. Amanda and Tim were both present when the teacher handed out the homework and gave directions on how to use it. Ian happened to be absent on the day of instruction and did not realize homework had been assigned in preparation for next day's debate.

On the day of the debate, Tim (as Jefferson) opened the debate with a Constitutional argument, claiming that the Constitution says that the U.S. does not need banks: "Under the United States Constitution, the government is not allowed to create a bank to collect taxes. It is completely unnecessary and unconstitutional." Additionally, Tim engaged in the disciplinary skill of Constitutional reasoning to craft his arguments:

Tim: So I was looking at the good old Constitution a couple of days ago and do you know what Amendment number 10 says? It says that the powers are reserved to the states to create their own banks.

Tim presented Jefferson's perspective, while engaging in Constitutional reasoning, explaining the ways in which the Constitution does not support the adoption of a national bank.

All three students prepared for the debate and participated enthusiastically, suggesting that the engagement first role assignment triggered their interest, while their homework guide may have helped sustain their interest in the disciplinary content and the activity. As Tim presented some pre-planned Constitutional points, Ian spoke 'off the cuff,' relying heavily on his 'real world' knowledge of banks and banking rather than the Constitution. This ultimately moved the group's debate away from disciplinary engagement in Constitutional argumentation:

Ian: I believe that we need a bank because what happens if you lose money? What happens if the government loses money?
Tim: (With disbelief) What do you mean if we lose money?
Ian: If we put money in a bank, it would be safe.
Tim: We already have banks, operated by the people.
Ian: But, you never know, they could get robbed, they could lose money. You never know what could happen. If you keep it in a government, a federal government bank, it would be safe... A federal government bank, with top-notch security, I think it would be much more safe.

In this exchange, though Tim (Jefferson) had presented a Constitutional argument, he quickly joined Ian (Hamilton) in a back-and-forth style of debating in which each student responded to the last statement, based on a general knowledge of how private sector banks work. At one point Amanda (Washington) intervened, reminding the students of the required format of each student presenting a full argument:

Amanda: Oh no, pause, pause, pause. I'm sorry. Aren't we supposed to do this more structured?
Tim: We were getting down! We were getting down...
Ian: [Giggles] We WERE getting down.
Amanda: Ok, excuse me. [To Tim] Let's hear your whole argument and then we'll go to him. You guys don't talk while you're debating.

While Amanda's reminder of the structure helped refocus both sides, the disciplinary content of the debate was again derailed by Tim and Ian discussing ideas that did not draw on Constitutional reasoning. This is can be seen when Tim expanded his argument by bringing in subject matter he had learned elsewhere, perhaps in the Economics class he took concurrently with AP Government:

But the economy and the way banks work and they give out loans and, you know, they make profits off that, right? Because the way to stimulate an economy is through giving money to the people to encourage consumer spending, right? But if the government is holding up all the money, how are we going to get that consumer spending back in?

While engagement first triggered interest by placing students in roles, the debate task, in practice, was not sufficient to maintain their triggered interest in the disciplinary content. As the debate unfolded, Ian and Tim may have been developing their general interests, but it was focused more on debating and not on constitutional reasoning. The use of the argument organizer homework may have provided that support to Amanda and Tim by helping them focus somewhat on constructing disciplinary arguments for the debate, it did not fully scaffold their participation in the debate activity. This can be seen when Tim brought in ideas he had learned from economics class about banking and personal finance, a valuable skill, but one not aligned with the focus of the lesson. This scenario highlights the importance of disciplinary scaffolding when students take on agentic roles in class. Even though the goal of the debate was to help students better understand the powers shared by the National and State governments, the students ended up participating in extemporaneous, non-disciplinary arguments that sidetracked the debate. By the end of the

activity, the group was no longer engaged in Constitutional thinking about federalism, which was the disciplinary goal of the task and the unit. We do not argue for narrowly confining students to specific activities; instead, to maintain specific disciplinary interest, activities need to guide students to wrestle specifically with the content and disciplinary practices that are aligned with the goal of the lessons.

While Amanda's role (as George Washington) in the debate was different (i.e. questioning the debaters and ultimately deciding which argument was most persuasive), her interest in the disciplinary activity also appeared to have been triggered. Throughout the debate, she actively listened and was not shy about interrupting when the debaters strayed from the debate protocol or used a spurious argument. It was also evident that she brought forth her completed homework as a guide to help her ask pertinent questions. The following excerpt shows how her knowledge about the disciplinary topic sustained her interest to such a degree that she was eager for a re-debate, where she would get to play a non-neutral role:

Amanda: [to teacher] Do I get to debate next time?
Teacher: Yeah, we'll switch up so you don't...
Amanda: We're going to do the same argument?
Teacher: Yeah, you won't be the judge next time.
---moments later---
Amanda: [to Ian] If you had studied better you could have knocked him down because, like, in the end you win. Like right now we have a federal bank. And all the stuff that the federal bank does. And people hate taxes, I can't stand taxes.

In this case, we see how giving students a reason to learn (i.e. engaging them first with the role assignment) helped trigger their situational interest in the historical federalism debate. However, the debate roles, functioning as reasons to learn, did not help maintain their interest in federalism very well.

It seems that the argument organizer helped maintain some of students' interest in constitutional issues; however, it did not support students' re-engagement with the political issue at hand. Even though engagement first may have triggered students' interest in the political issue, in order for their interest to be maintained, the knowledge that students acquire must be relevant and purposeful towards future endeavors. There is a potential for tools (the argument organizer homework) to help students sustain triggered political interest, providing the disciplinary scaffolding needed to accompany agentic student roles, however sustaining that interest and helping students become more personally interested in the issue is challenging. Better scaffolds (i.e. the argument-organizing tool and better framing of the activities by the teacher) may be ways to tackle these challenges.

5 Discussion

While the literature suggests schooling and classroom activities can help bolster students' political efficacy and proclivities toward political participation (e.g., Kahne, Chi, & Middaugh, 2006; Levy, 2011), the four phases of

interest development show that students may become invested in political participation if they develop personal interests in politics. Even though the literature has often used political interest (or interest in politics) as a predictive variable on many civic and political engagement measures (e.g., Bekkers, 2005; Torney-Purta, et al., 2001; Delli Carpini & Keeter, 1996), little is known about how students may develop interest in politics through classroom activities. The case presented here shows what happens to students' interest in a political issue (states' rights and federalism) after their situational political interest had been triggered by engagement first.

Data analysis revealed two major findings. First, engaging students by providing them with reasons to learn seems to trigger students' interest in political issues. Second, even though engagement first has the potential to carry students' interest in a political issue into additional activities, if they are to maintain that triggered interest, subsequent activities need to support students' re-engagement with the topic. These findings can help scholars who wish to investigate how classroom activities may contribute to students' political interest and eventual political participation.

The case in this paper provides insights to how the four phases of interest development can be used to analyze students' developing interests in politics. In this case, we found that engaging students first in the debate roles triggered their interests in finding out more about the bank issue that was being debated. Not only did the role-assignment give students reasons to learn about the political issue, the students seemed excited about taking on their roles and bringing the debate to life. The role assignment created a perfect 'time for telling' students what they needed to know about states' rights and federalism. Unfortunately, the subsequent debate preparation and debate itself (i.e. the telling—or activities through which students learned information) did not seem to help maintain students' triggered interest in the states' rights and federalism. We want to emphasize that general interest may have been developed in this episode. It is possible that even political interest was further developed, but we saw no evidence that the interest being developed was linked to the disciplinary knowledge and practices connected to states' rights and federalism. We focus on this nuance because we want students to be both interested and knowledgeable, not just interested. To reach this objective, we focus on specific content and practices that were the goals of the lessons we analyzed. In this way we're focused on aligning the learning objective, targeted disciplinary content, and developing political interest. Through this study, we hope to further raise the question of how to scaffold political interest within targeted disciplinary context. Content matters in that we're interested in knowledgeable political active individuals and not just active individuals.

The argument organizer assignment seemed to help two students organize and scaffold discipline specific knowledge. We observed them using and re-engaging with the argument organizer as they attempted to move

the debate activity forward, when it deviated from the content of interest. However, even the organizer seemed to distract students from the concept of federalism because it did not specify the kinds of constitutional arguments they needed to use. Furthermore, the student who did not have access to the organizer (Ian) was not able to contribute meaningful knowledge to the activity. Even though Ian engaged deeply with the activity, his lack of meaningful content knowledge about the topic of interest (federalism) moved the activity away from disciplinary content. This resulted in the group maintaining interest in the activity of debate generally, but not sustaining their political interest in the content.

While engagement first did help trigger students' political interest in what seemed to be a pretty bland political issue (i.e. rights of the national government to establish a national bank), we found that the 'telling' following engagement first plays an important role in helping to maintain students' triggered political interests. It seems that in order for triggered political interest to be maintained, the 'telling' after engagement first needs to foster more disciplinary engagement in the students. Specifically, this case shows how triggering students' political interest with engagement first is not enough. Instead, if we hope to maintain students' political interests (and subsequently bolster their personal interests in politics), engagement first need to be followed up with activities that help students organize their disciplinary thinking around that issue and prepare students for future disciplinary practices.

The case shows how engaging students in roles triggered students' situational political interest and provided them with meaningful reasons to learn information about a political issue. At the same time, purposeful assignments and activities may help maintain political interest by scaffolding students' knowledge about the discipline, once it has been triggered. The role-play triggered students' political interest, while the homework assignment sustained some of the students' political interest by helping them prepare for the debate. The organizer had the potential to help Tim research and organize more information and knowledge on the banking issue around Constitutional reasoning. However, it is possible that the instructions for the organizer were not specific enough to Constitutional reasoning around states' rights, it did not help maintain students' political interests, and instead curtailed the debate into a conversation about banking.

This case also shows how an activity may impact students' thinking and interest around politics. The two members of the group who maintained their political interests the most though the class activity used the argument organizer as it was designed. However the third member (Ian), who did not use the tool, showed great interest in the *activity* but his triggered *political* interest was not maintained. Amanda and Tim's usage of the argument organizer helps us see that tools that prepare students for later participation can help maintain interest. However, it also shows that interests in the topic or activity are not uniformly beneficial. The

students were all interested in the debate; however, they needed tools and support to guide their political knowledge and affect, which was unfortunately lacking. Ian did not engage in the debate in a way that demonstrated maintained political interest. Instead, he demonstrated interest in economics by sharing his content knowledge on that topic. This suggests that he was still engaged in the affective dimension of the debate in terms of enjoying it and wanting to participate, but he was not engaged in the knowledge dimension in terms of knowing about and sharing Constitutional reasoning with his peers. At the same time, Amanda and Tim were able to use the organizer as a guide, but only for a short period. It is important to note the argument organizer served as an important tool that maintained some of the interest and knowledge development of the two students who were prepared. In the long run, it is possible that the organizer did not provide enough support for the students to maintain their interest in the political issue in significant ways. While the students thought the debate was fun, they ultimately did not make the crucial connection between the debate and federalism, as was intended by the teacher.

Eventually, the debate discussion became sidetracked from the disciplinary focus as the two students tried to correct Ian's misunderstandings about banks in general. While the argument organizer worked partially as designed, the debate activity required all students to have more instructional support in order to maintain their political interests and function within the discipline. In short, the 'telling' that occurs after engagement first may be more important to the maintaining of triggered interest than the initial engagement. Engagement first primes the students for learning by triggering their political interest, but the 'telling' can help maintain their political interest if it provides students with the disciplinary knowledge and skills that they need to be successful in the activity. In our case, the activity did not maintain as much political interest or knowledge accuracy as we hoped.

5.1 Implications and conclusion

In the past decade, many studies have sought to understand the low level of youth civic and political engagement that we see in our polity (e.g., Macedo et al., 2005; Zukin, Keeter, Andolina, Jenkins, & Delli Carpini, 2006). While there are some promising curricular activities that may help support youth civic participation (see CIRCLE, 2013; Kahne & Middaugh, 2008), how these classroom activities contribute to youth civic participation is less transparent. The four phases of interest development offers researchers a way to examine how classroom activities may trigger and maintain students' political interest, and how situational political interest may help lead to students' commitment to political participation in the future (Lo, 2015). Specifically, this study elucidated some ways that a classroom activity can help support students' knowledge and interests in politics after interest has been triggered, which may lead to eventual political engagement. Since

we are reporting on findings from a larger research project in this paper, our analysis has implications for both the redesign of the curriculum in the DBIR study and a broader understanding of maintaining triggered political interest in civic education.

First, there are implications for DBIR. Recognizing that outside knowledge and unfettered enthusiasm can become distractions if they do not contain a purpose (that is meaningful to students' disciplinary goals) beyond knowledge acquisition, redesign work on the curriculum has included the development of more robust tools aimed at supporting the maintaining of students' political interests through meaningful knowledge development. At the same time, the researchers have worked with teachers to rethink the roles and tasks involved with the Founders' Intent unit so as to ensure all the engagement first moments are followed up with meaningful 'telling' activities that help maintain triggered political interest. One change to the curriculum is the recreation of the Jefferson-Hamilton debate into a deliberative model that requires more intentional and scaffolded political knowledge collection and tool use. Other changes to the curriculum are forthcoming based on the analyses of other data sets.

Second, our analysis shows that while engagement first can help trigger students' interest in political issues, if this triggered political interest is to be maintained, follow up activities that require students to be disciplinarily engaged in the content may be more useful. The analysis shows that when triggered political interest is not supported by purposeful and functional activities geared towards the discipline, the initial triggered interest may not be maintained. If researchers and educators hope to understand how students develop political interest and engagement through classroom activities, it may be worthwhile to investigate the triggering and maintaining of their interests in political issues longitudinally. At the same time, researchers that hope to examine and develop ways to maintain students' triggered interest in political issues would need to consider what activities are used to maintain interest development and how these activities are used in the classroom. The current study shows the complexity of this task but also suggests that it is possible.

5.2 Limitations and Areas for Future Research

This case study is limited in its generalizability, because it is only one case study embedded in one classroom. At the same time, we sought to examine "engagement first" in a bounded context in order to better understand the nuances of how interest might progress from being triggered to being maintained. This means that the study may not be generalizable to other contexts, necessarily; however, we hope the findings promote the design of curriculum and learning environments that aim to trigger and maintain political interest.

Since a progression between the four phases of interest development are not guaranteed (Hidi & Renninger, 2006), the current findings are unable to determine whether or not students actually develop personal interest in



political issues based on their participation in the classroom practices. However, since maintained situational interest may lead to developing personal interest, a longitudinal case study may further elucidate the connection between classroom practices and students' personal interests in politics.

Furthermore, one interpretation of the case data would be that the students were not all prepared, nor did they follow the debate format provided by the teacher. The assumption of this interpretation is that had the students been prepared and followed direction that their interested would have more likely been maintained. While this may be true, our goal for this analysis was to recognize the complex realities of a classroom and to uncover the complicating factors that may disrupt maintaining situational interest.

Even though this paper reports on whether interest was maintained by classroom activities after engagement first, another way to investigate how students are engaged in the curriculum is through Engle and Conant's (2002) concept of Productive Disciplinary Engagement (PDE). Engle and Conant define PDE as making intellectual progress or getting somewhere (productive), a connection between what the students are doing and the practices and discourse in the discipline (disciplinary), and making substantial coordinated contributions that include emotional displays and spontaneous re-engagement over time (engagement) (Engle & Conant, 2002, p. 402). Since the literature on interest development suggests that interest is subject-specific, it is possible to use the PDE framework to think about 'engagement first' as discipline-specific engagement rather than just general engagement. Additionally, PDE may better highlight the ways in which students' interest and engagement is an interaction between individual students and the contexts in which they participate, expanding the roles that teachers, activities, and specific disciplinary content and practices play in the development of individual interest. Discussions about this framework are outside of the scope of the current study, but a PDE framework can be used by researchers to study how students engage with politics-specific classroom activities.

Since some studies suggest interests are important parts of an individual's identity (Hidi & Ainley, 2002), it is possible students' developing interest in political issues can influence their identities as citizens. This theory of interest-identity development is outside the scope of this current study, but it could further explain how classroom practices may influence students' civic engagement. Further study of best practices in civic education that use the four-phase model of interest development could help test or unpack the relationship between interest, identity, and civic engagement.

References

- Bekkers, R. (2005). Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*, 26(3), 439–454.
- Bransford, J., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school*. Washington/DC: National Academies Press.
- Campbell, D. E. (2005). *Voice in the classroom: How open classroom environment facilitates adolescents' civic development* (CIRCLE Working Paper 28). Washington, D.C.: Center for Information and Research on Civic Learning and Engagement.
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *The ANNALS of the American Academy of Political and Social Science*, 591(1), 98–124.
- CIRCLE. (2013). *All together now: Collaboration and innovation for youth engagement*. Washington, DC: Center for Information and Research on Civic Learning and Engagement.
- Converse, P. E. (1972). Change in the American electorate. In A. Campbell & P. E. Converse (Eds.), *The Human Meaning of Social Change* (pp. 263–338). New York/NY: Russell Sage Foundation.
- Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd edition). Los Angeles/CA: SAGE Publications, Inc.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: choosing among five approaches*. Thousand Oaks/CA: Sage Publications.
- Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1996). *Talented teenagers: The roots of success and failure* (First Edition). Cambridge England; New York/N.Y: Cambridge University Press.
- Darling-Hammond, L., Barron, B., Pearson, P. D., Schoenfeld, A. H., Stage, E. K., Zimmerman, T. D., ... Tilson, J. L. (2008). *Powerful learning: What we know about teaching for understanding* (1 edition). San Francisco/CA: Jossey-Bass.
- Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. New Haven: Yale University Press.
- Dewey, J., & Jackson, P. W. (1991). *The school and society and the child and the curriculum* (1 edition). Chicago/IL: University Of Chicago Press.
- Efklides, A. (2006). Metacognition and affect: What can metacognitive experiences tell us about the learning process? *Educational Research Review*, 1(1), 3–14.



- Engle, R. A., & Conant, F. R. (2002). Guiding principles for fostering productive disciplinary engagement: Explaining an emergent argument in a community of learners classroom. *Cognition and Instruction, 20*(4), 399–483.
- Feldman, L., Pasek, J., Romer, D., & Jamieson, K. H. (2007). Identifying best practices in civic education: Lessons from the student voices program. *American Journal of Education, 114*(1), 75–100.
- Fishman, B. J., Penuel, W. R., Allen, A.-R., Cheng, B. H., & Sabelli, N. (2013). Design-based implementation research: An emerging model for transforming the relationship of research and practice. In B. J. Fishman & W. R. Penuel (Eds.), *National Society for the Study of Education: Vol 112. Design Based Implementation Research* (pp. 136–156). New York/NY: Teachers College Press.
- Harackiewicz, J. M., Barron, K. E., Tauer, J. M., Carter, S. M., & Elliot, A. J. (2000). Short-term and long-term consequences of achievement goals: Predicting interest and performance over time. *Journal of Educational Psychology, 92*(2), 316–330.
- Hidi, S., & Ainley, M. (2002). Interest and adolescence. In F. Pajares & T. C. Urdan (Eds.), *Academic motivation of adolescents* (pp. 247–275). Greenwich/CO: Information Age Pub.
- Hidi, S., & Baird, W. (1986). Interestingness—a neglected variable in discourse processing. *Cognitive Science, 10*(2), 179–194.
- Hidi, S., Renninger, A., & Krapp, A. (2004). Interest, a motivational variable that combines affective and cognitive functioning. In D. Dai & R. Sternberg (Eds.), *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development* (pp. 89–115). Mahwah/NJ: Lawrence Erlbaum Associates Publishers.
- Hidi, S., & Renninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist, 41*(2), 111–127.
- Hidi, S., Weiss, J., Berndorff, D., & Nolan, J. (1998). The role of gender, instruction and a cooperative learning technique in science education across formal and informal settings. In L. Hoffmann, A. Krapp, K. A. Renninger, & J. Baumert (Eds.), *Interest and learning: Proceedings of the Seeon conference on interest and gender* (pp. 215–227). Kiel, Germany: IPN.
- Kahne, J., Chi, B., & Middaugh, E. (2006). Building social capital for civic and political engagement: The potential of high-school civics courses. *Canadian Journal of Education / Revue Canadienne de L'éducation, 29*(2), 387–409.
- Kahne, J. E., & Sporte, S. E. (2008). Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation. *American Educational Research Journal, 45*(3), 738–766.
- Kahne, J., & Middaugh, E. (2008). High quality civic education: What is it and who gets it? *Social Education, 72*(1), 34–39.
- Kahne, J., Crow, D., & Lee, N.-J. (2013). Different pedagogy, different politics: High school learning opportunities and youth political engagement. *Political Psychology, 34*(3), 419–441.
- Kahne, J. & Westheimer, J. (2003). Teaching democracy: What schools need to do. *Phi Delta Kappan, 85*(1), 34–40, 57–67.
- Kahne, J., & Westheimer, J. (2006). The limits of political efficacy: Educating citizens for a democratic society. *PS: Political Science & Politics, 39*(02), 289–296.
- Krapp, A., (2000). Interest and human development during adolescence: An educational-psychological approach. In J. Heckhausen (Ed.), *Motivational Psychology of Human Development: Developing Motivation and Motivating Development* (pp. 109–128). London: Elsevier.
- Krapp, A., (2007). An educational–psychological conceptualisation of interest. *International Journal for Educational and Vocational Guidance, 7*(1), 5–21.
- Krapp, A., Hidi, S., & Renninger, K. A. (Eds.). (1992). *The role of interest in learning and development* (Vol. xiv). Hillsdale/NJ, England: Lawrence Erlbaum Associates, Inc.
- Langton, K. P., & Jennings, M. K. (1968). Political socialization and the high school civics curriculum in the United States. *The American Political Science Review, 62*(3), 852–867.
- Levinson, M. (2011). Democracy, accountability, and education. *Theory and Research in Education, 9*(2), 125–144.
- Levy, B. L. M. (2011). Fostering cautious political efficacy through civic advocacy projects: A mixed methods case study of an innovative high school class. *Theory & Research in Social Education, 39*(2), 238–277.
- Lipstein, R. L., & Renninger, K. A. (2006). “Putting things into words” : The development of 12–15-year-old students' interest for writing. In S. Hidi & P. Boscolo (Eds.), *Writing and Motivation, Volume 19* (pp. 113–140). Bingley, UK: Emerald Group Publishing Limited.
- Lo, J. C. (2015). Developing participation through simulations: A multi-level analysis of situational interest on students' commitment to vote. *The Journal of Social Studies Research, 39*(4), 243–254. doi.org/10.1016/j.jssr.2015.06.008
- Macedo, S., et al. (1996). Community, diversity, and civic education: Toward a liberal political science of group life. *Social Philosophy and Policy, 13*(01), 240–268.
- Mitchell, M. (1993). Situational interest: Its multifaceted structure in the secondary school mathematics classroom. *Journal of Educational Psychology, 85*(3), 424–436.

- Niemi, R. G., & Junn, J. (1998). *Civic education what makes students learn*. New Haven: Yale University Press.
- Nie, N. H., Junn, J., & Stehlik-Barry, K. (1996). *Education and democratic citizenship in America*. Chicago/IL: University Of Chicago Press.
- Nolen, S. B. (2007). Young children's motivation to read and write: Development in social contexts. *Cognition and Instruction, 25*(2-3), 219-270.
- Parker, W. C. (2001). Toward enlightened political engagement. In W. B. Stanley (Ed.), *Critical issues in social studies research for the 21st century* (pp. 97-118). Greenwich/CO: Information Age Pub.
- Parker, W. C., Lo, J., Yeo, A. J., Valencia, S. W., Nguyen, D., Abbott, R. D., ... Vye, N. J. (2013). Beyond breadth-speed-test toward deeper knowing and engagement in an Advanced Placement course. *American Educational Research Journal, 50*(6), 1424-1459. doi.org/10.3102/0002831213504237
- Parker, W., Mosborg, S., Bransford, J., Vye, N., Wilkerson, J., & Abbott, R. (2011). Rethinking advanced high school coursework: Tackling the depth/breadth tension in the AP "US Government and Politics" course. *Journal of Curriculum Studies, 43*(4), 533-559.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist, 37*(2), 91-105.
- Penuel, W. R., Fishman, B. J., Cheng, B. H., & Sabelli, N. (2011). Organizing research and development at the intersection of learning, implementation, and design. *Educational Researcher, 40*(7), 331-337.
- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667-686.
- Pressick-Kilborn, K., & Walker, R. (2002). The social construction of interest in a learning community. In D. M. McInerney & S. V. Etten (Eds.), *Research on Sociocultural Influences on Motivation and Learning* (Vol. 2, pp. 153-182). Greenwich, Conn.: IAP.
- Renninger, K. A. (1990). Children's play interests, representation, and activity. In R. Fivush & J. A. Hudson (Eds.), *Knowing and remembering in young children* (pp. 127-165). New York/NY: Cambridge University Press.
- Renninger, K. A. (2000). Individual interest and its implications for understanding intrinsic motivation. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 373-404). San Diego/CA: Academic Press.
- Renninger, K. A., Ewen, L., & Lasher, A. K. (2002). Individual interest as context in expository text and mathematical word problems. *Learning and Instruction, 12*(4), 467-490.
- Renninger, K. A., & Hidi, S. (2002). Student interest and achievement: Developmental issues raised by a case study. In A. Wigfield & J. S. Eccles (Eds.), *Development of Achievement Motivation* (pp. 173-195). San Diego: Academic Press. Retrieved from www.sciencedirect.com/science/article/pii/B9780127500539500097
- Renninger, K. A., & Shumar, W. (2002). Community building with and for teachers: The Math Forum as a resource for teacher professional development. In K. A. Renninger & W. Shumar (Eds.), *Building virtual communities: Learning and change in cyberspace* (pp. 60-95). New York/NY: Cambridge University Press.
- Sansone, C., Weir, C., Harpster, L., & Morgan, C. (1992). Once a boring task always a boring task? Interest as a self-regulatory mechanism. *Journal of Personality and Social Psychology, 63*(3), 379-390.
- Schwartz, D. L., & Bransford, J. D. (1998). A time for telling. *Cognition and Instruction, 16*(4), 475-522.
- Sherrod, L. R., Torney-Purta, J., & Flanagan, C. A. (Eds.). (2010). *Handbook of research on civic engagement in youth* (1st ed.). New York/NY: Wiley.
- Silvia, J. (2001). Interest and interests: The psychology of constructive capriciousness. *Review of General Psychology, 270-290*.
- Torney-Purta, J., Amadeo, J., & Richardson, W. K. (2007). Civic service among youth in Chile, Denmark, England, and the United States: A psychological perspective. In M. Sherraden & A. McBride (Eds.), *Civic service worldwide: Impacts and inquiries*. Armonk/NY: M. E. Sharpe
- Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen*. IEA Secretariat: Amsterdam, The Netherlands.
- Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. *American Educational Research Journal, 41*(2), 237-269.
- Zukin, C., Keeter, S., Andolina, M., Jenkins, K., & Delli Carpini, M. X. (2006). *A new engagement?: Political participation, civic life, and the changing American citizen*. Oxford; New York/NY: Oxford University Press.