



Why Career and Technical Education? Exploring Policymakers' Expressed Motivations for Supporting Perkins V

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Key Points

- The most prominent definitions of career and technical education (CTE) center on how CTE can provide job seekers with in-demand skills to meet modern employers' needs.
- Other policy dimensions covered more consistently across members of Congress and CTE leaders include state and local flexibility, the involvement of the business community, accountability, and simplification.
- Given the complexity of CTE policy, that policy actors consistently focus on several specific dimensions of CTE policy (the workforce gaps, local involvement, and oversight) provides useful insight into which policy arguments are more compelling in the current policy environment.

On July 31, 2018, President Donald Trump signed what would become his first major piece of legislation changing federal education policy: the Strengthening Career and Technical Education for the 21st Century Act (also known as the Perkins Act or Perkins V).¹ This act is the latest update of the Carl D. Perkins Career and Technical Education Act, which was last reauthorized in 2006 and provides over \$1.2 billion in federal support for career and technical education (CTE) programs. Indeed, there has been a renewed public interest in CTE over the past several years, including interest from policymakers.

While we could speculate about the reasons for the recent support for CTE, evidence on what people are actually saying helps us (as citizens and participants in policy) understand the issues on the table in this conversation. One place we might look to understand policymakers' perspectives is in their press releases.

This report investigates several key questions concerning the current CTE policy environment.

First, what are common themes in how legislators have discussed the most recent legislative actions on CTE? Second, are there differences in these themes across the House and the Senate? Finally, did Democrats and Republicans include different themes in the press releases on CTE from 2014 through the president's signing of the Perkins Act in 2018? Further, interviews with key staff members for two major CTE organizations involved in the recent reauthorization—Advance CTE and the Association for Career and Technical Education (ACTE)—provide additional insights on the dimensions of CTE policy that were salient for policy actors at the time. Information from these interviews is coupled with the information from the press releases to further clarify the context.

In education policy, and public policy more broadly, policy actors do not often demonstrate broad consensus about the value of specific policies. For example, in the history of charter school policy, there have been differing emphases between parties and other social groups on charters' role.² However, this stark division did not seem to be as strong for CTE policy. Overall, both congressional representatives and leaders from the CTE organizations discussed similar dimensions of CTE policy as relevant to the most recent reauthorization.

First, all sources prominently featured the role of CTE in developing a workforce that matches modern employers' needs. Beyond this emphasis, sources frequently highlighted how the most recent iteration of the Perkins bill shifts authority to state and local constituents (including businesses). Finally, many of the releases also noted the role of impending changes in accountability, transparency, and complexity of CTE policy.

While various parts of CTE policy were covered across press releases, that these specific dimensions were most frequently covered at such high rates, despite the many components of the Perkins Act that could have emerged as themes, helps clarify the motivations people had for supporting the most recent reauthorization. CTE policy, like any policy, can often be broad and complex, but the consistency in language and emphases across sources demonstrate that these perspectives could have motivated support of CTE policy in our current environment.

This report begins with a broad overview of the definition of CTE and the most recent reauthorization of the Perkins Act. Next, evidence from the press releases and interviews is presented to cover the questions posed at the beginning of this report, including analysis of the differences between the House and the Senate, between Republicans and Democrats, and among CTE activists. Finally, conclusions and broad takeaways, including remaining open questions, are reviewed.

From “Vocational Education” to “Career and Technical Education”

The original 1984 Perkins Act did not contain the term “career and technical education”; it used the term “vocational education.” The original bill was

called the Carl D. Perkins Vocational Education Act and was an amendment to a prior 1963 bill, the Vocational Education Act, which itself was an update of the 1917 Smith-Hughes Act. The 1917 act was the first federal program in the United States assisting vocational education, over 100 years ago. At first, vocational education was generally described as public educational programs meant to train people for gainful employment in jobs that generally did not require a college degree but did require some specialized training.

Over time, while one might argue that CTE, in some ways, is similar to older conceptions of vocational education,³ the evolution of the names given to the Perkins bill throughout its reauthorizations offers some insight into changing social and policy definitions of this type of education. The original 1984 bill just used the term “vocational education,” and in 1990, the bill was updated to use the term “vocational and applied technology.” The 1998 reauthorization used “vocational and technical education,” and it was not until 2006 that the bill was titled using “career and technical education.”⁴ The reasons for this change are beyond the scope of this report, but note that this change occurred when some people felt that the term “vocational” was outdated and derogatory.⁵ In addition, CTE often encompasses some fields that may have been more typically associated with associate or bachelor's degrees in the past, such as engineering.⁶

The most recent Perkins Act reauthorization amends previous definitions of a CTE program. In contrast to previous versions, this bill adds more specific descriptors of current or emerging professions and reframes industry-recognized credentials, certificates, and associate degrees all as different types of postsecondary credentials. Already here, there is an apparent evolution between the definition of CTE and the vocational education from which the current bill evolved. Even in the development of the name of the policy itself, there is not one way to understand this policy area, as evidenced by the changing language used to describe it.

The 2018 Perkins Reauthorization and Some Context

What was the journey of the most recent reauthorization through the chambers of Congress? The

most recent Perkins reauthorization (also known as Perkins V) was first introduced in June 2016 to the House of Representatives, which passed the bill.⁷ However, the Senate did not take further action, so the bill did not move forward that year.⁸ In May 2017, it was introduced again to the House. Again, the bill was passed (by voice vote). During both periods in which the bill passed through the House, it enjoyed wide bipartisan support.⁹

It would be over a full year before the bill passed through the Senate. Before that happened, two letters were sent to the Senate Committee on Health, Education, Labor, and Pensions, urging the committee to put the bill on the floor for consideration. The first, signed by 59 senators, was sent on October 11, 2017.¹⁰ The second, signed by 237 members of the House, was sent on November 11, 2017, urging the committee to consider the legislation and, eventually, help it pass.¹¹

Finally, on July 23, 2018, the Senate Committee on Health, Education, Labor, and Pensions discharged the bill by unanimous consent.¹² That same day, it was passed in the Senate by voice vote.¹³ On July 31, 2018, President Trump signed the bill, which became Public Law No. 115-224.¹⁴ A full timeline of events is shown in Table 1.

Outside of Congress, other entities were working on CTE policy reform, including executive efforts from the Department of Education’s “blueprint” for CTE reform,¹⁵ advocacy work from organizations such as Advance CTE and the ACTE,¹⁶ and work from various businesses such as IBM and Northrop

Grumman.¹⁷ Finally, even in Congress, other efforts overlapped in focus with the Perkins reauthorization that likely influenced its process, including the signing of the Workforce Innovation and Opportunity Act in 2014¹⁸ and the 21st Century SHOP CLASS Act introduced in the summer of 2017.¹⁹

Press Releases and Advocacy Organizations

Scholars have historically viewed press releases primarily as a means through which organizations and even individuals provide initial framings for events to news media sources. Long gone are the days when press releases were primarily directed at journalists, as the advent of the internet has allowed press releases to exist in their own right, since their online publication makes them now much more available to a wider audience.²⁰ To the extent that congressional press releases are no longer just tools for the media but are also broad messages to members’ constituents, the press release carries even greater importance as a source of information about what the members themselves are emphasizing. These emphases might be described as their *expressed agendas*.²¹ Of course, the extent to which these professionally curated press releases represent true individual agendas is limited. However, public messaging plays a central role in painting a portrait of what congressional members want people to see as important in CTE policy, and as such the themes that were identified in the press releases provide meaningful insights.

The search process resulted in 366 press releases, 240 from House members (from 94 different people) and 126 from Senate members (from 42 different people). For the House releases, looking at the timeline of their publication as shown in Figure 1, there were larger spikes in publication during the first consideration of the bill in the summer of

Table 1. Timeline of 2018 Perkins Act Reauthorization

HR 5587 introduced in House	June 28, 2016
HR 5587 approved 405–5 in House	September 13, 2016
HR 2353 introduced in House	May 4, 2017
HR 2353 approved by voice vote in House	June 22, 2017
Senate members sign letter for Senate committee	October 11, 2017
House members sign letter for Senate committee	November 11, 2017
Amendment SA 3408 introduced in Senate	July 23, 2018
Amendment SA 3408 approved by unanimous consent in Senate	July 23, 2018
CTE bill signed by president	July 31, 2018

Source: Author’s summary.

2016, the second consideration in the summer of 2017, and the bill's final signing in the summer of 2018. Senate releases, as shown in Figure 2, were not as common until the bill reached the Senate floor and was signed by the president in the summer of 2018.

The House and Senate releases (treated separately), because of the volume, were analyzed using a more quantitatively oriented approach to content analysis that involved, with samples of the releases, developing vocabularies that reliably identified documents as containing certain types of framing for the Perkins bill and using those vocabularies to tag all the releases and report summary information.²²

Crucial actors in the progress of CTE policy, especially in the most recent iteration, have included Advance CTE and ACTE, as noted above. Advance CTE and ACTE are both CTE advocacy organizations. Advance CTE is a membership organization consisting of state leaders interested in CTE policy, whereas ACTE tends to represent CTE professionals and organizations. The two organizations' involvement in the most recent reauthorization included a partnership between the two organizations to engage stakeholders (such as national education organizations, school administrators, and others) in identifying policy priorities for the Perkins Act. Particularly because both organizations were involved in the most recent reauthorization, interviews with leaders of both organizations provided contextual information and additional perspectives. Advance CTE interviewees included Executive Director Kimberly Green, Deputy Executive Director Kate Kreamer, and Communications Manager Katie Fitzgerald. Alisha Hyslop, director of public policy, discussed her perspective from ACTE.

Overall Themes: What Are They Saying About CTE?

Overall, several common themes (explained in more detail in the following sections) emerged from the data. The most prominent themes, which are less concretely about the definition of the bill itself and more about problems that the bill can address, were related to the skills gap and 21st-century skills (those skills generally related to modern technology). The rest, however, are much more related to the

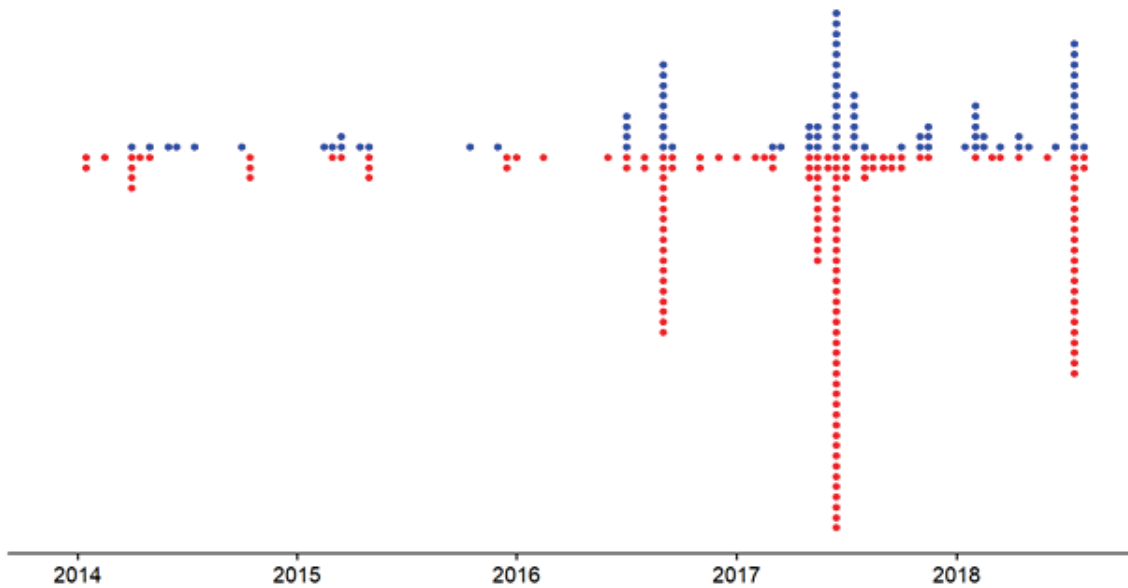
different components of the bill that people tended to highlight, which also, as noted above, is part of understanding the meaning that the bill holds for different legislators.

Broadly, the themes that appeared in the press releases cover three large concepts: (1) skills and competencies (the skills gap and 21st-century skills), (2) control and input (opportunities for business partnerships, local input into decision-making, and flexibility to make decisions not dictated by the federal government), and (3) implementation (accountability of CTE programs for outcomes, transparency of the process for implementing CTE, and simplification of said processes). The different concepts are explained in more detail below, including additional insights gained from the interviews with CTE organizations.

Skills and Competencies: The Skills Gap and the 21st-Century Economy. A common theme that emerged from the data, which was found fairly consistently across press releases and legislators, was that support for CTE is important in light of the expected workforce needs of the 21st-century economy. Indeed, the White House itself used this language in its own press release about the final signing when it said, "The White House, led by Ivanka Trump, was strongly engaged every step of the way to ensure passage of this critical legislation to provide students and workers the training necessary to succeed in a 21st century economy."²³ In discussions of the 21st-century economy, other related terminology included references to "in demand," "high demand," and "modern economy" and comments about "today's workforce" and, in some cases, the "future workforce." This focus on the modern economy highlights the uniqueness of the economy's current needs and how students, to participate in that economy, need to learn skills that match.

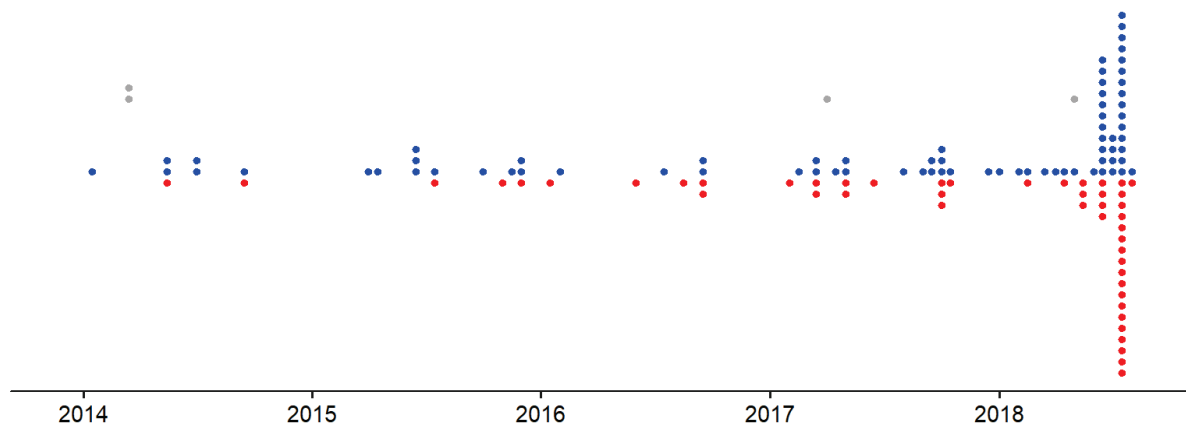
For example, Sen. Maria Cantwell (D-WA) introduced into the reauthorization a provision to increase support for computer science curricula, and in discussing it, she noted in the press release that "the grant money expanded by Cantwell's provision will be available to advance the computer science and coding skills that are critical to the jobs of the future, as well as the national security and

Figure 1. Gathered House Press Releases Timeline



Note: Each dot represents one release, and the releases are grouped into their half months of publication (before or after the 15th of each month). Blue dots represent releases from Democratic representatives. Red dots represent releases from Republican representatives. Source: Author’s summary.

Figure 2. Gathered Senate Press Releases Timeline



Note: Each dot represents one release, and the releases are grouped into their half months of publication (before or after the 15th of each month). Blue dots represent releases from Democratic representatives. Red dots represent releases from Republican representatives. Gray dots represent releases from independent representatives. Source: Author’s summary.

economic competitiveness of the United States.”²⁴ Similarly, Sen. Orrin Hatch (R-UT) said that “the time has come to bring Career and Technical Education into the 21st century. My bills will help give students the resources and skills they need to excel in Utah’s high-tech, high-skilled professions.”²⁵

Across press releases, common language implied that our current labor market needs particular types of skills—skills that may not have been as relevant in previous periods. The consistent references to computer-based technologies and high-tech skills speak to a widespread perception that today, available jobs require these types of specialized expertise.

This theme of 21st-century skills appeared frequently alongside the skills gap, with 86 percent containing mention of either “21st-century skills,” “skills gap,” or both. These justifications centered around the idea that there are two dimensions of the economy—the skills employers need and the skills potential employees already have—that are misaligned.

The press releases largely framed the focus on the skills gap in two important ways (if not both): (1) the employability of students trying to get a job and (2) the lack of qualified candidates to fill the jobs that employers have open.

The first point uses language that places the potential employees at the center, focusing on putting people to work and making sure they can have a fulfilling career in the modern economy mentioned above. These statements often center around ensuring that aspiring workers have the tools they need to find jobs. Often, representatives specifically reference the need for this kind of job training in their own local constituencies, with CTE being tied to a hope of getting people back to work by supplying them with skills that match employers’ needs.

On the other hand, relatedly, there seemed to also be the contention that while jobs may be available, employers are unable to find qualified candidates to fill those jobs. The combination of this perspective and the previous one encompasses what is often referred to as the “skills gap.” For example, Sen. Tim Kaine (D-VA) said, “Wherever I travel through Virginia I hear the same thing from business owners, manufacturers, and plant managers: there are good paying jobs out there, we just need to train our students with the skills to fill them.”²⁶ Similarly, Sen. Dean Heller (R-NV) cited a letter from senators noting that “employers are reporting a shortage of skilled workers to fill in-demand positions.”²⁷ Overall, 40 percent of Senate representatives and 36 percent of House representatives in the sample used the actual term “skills gap.” As is shown in more detail later in this report, there were no notable differences across parties in the emphasis on skills gaps.

In these examples and others, representatives noted that there are positions that need to be filled but there are simply not the workers with the right skills to fill those positions. In particular, the referenced skills were often those stated above: high-tech,

21st-century skills. In addition, several explicitly cited conversations with local employers as the source of information for these arguments.

The interviews with CTE organization leaders confirmed this focus. Hyslop (ACTE) noted that while previous Perkins reauthorizations had different foci, this most recent reauthorization was much more about jobs, workforce development, and the skills gap. According to Hyslop, possible factors may have included the economic recession and the return of dislocated workers to school, state attention to workforce development, and shifting skills needed in the economy. As an example, she pointed to the fact that “the skill set required for [technology jobs] is completely different than it might have been for our parents’ generation that worked in manufacturing.”²⁸

Kreamer (Advance CTE) also noted that state actions and emphases on workforce development by both the Barack Obama and Trump administrations may have played a role in the steadily increasing interest in CTE. Independently, leaders from ACTE and Advance CTE reiterated the sentiments expressed in the press releases regarding the changing economy and the need for new workers to acquire new skills to be competitive.

Finally, according to ACTE and Advance CTE leaders, a major selling point that distinguishes CTE from traditional delivery of education is relevancy. At the secondary level, CTE is seen as value added on top of traditional academic programming. This value is primarily of two forms.

First, CTE, according to interviewees, helps students learn how the academic skills they are learning are applied to problems and scenarios in the work world. In this way, CTE provides a venue for aligning the supply and demand of the workforce, with an eye toward putting the learners first. Second, and similarly, CTE at the K–12 level is seen primarily as an opportunity for career exploration. While not every CTE pathway can be available necessarily for every student in every school, according to Hyslop, the broad career development activities can still benefit all students. Green echoed this notion, saying that especially with CTE in lower grades, career exploration is an important component. Across interviews, participants noted the benefit that CTE provides in aligning curricula to careers.

These first findings, which center around the workforce-related benefits of CTE, are likely unsurprising given the name of the policy itself. Still, there are many ways to discuss employment outcomes in education policy, and policy actors' consistent choices reveal the specific understandings of the world in which people are operating. Across press releases and interviews, policy actors consistently highlighted a mismatch between current educational offerings and employers' needs. Specifically, they often pointed to the lack of high-tech and 21st-century skills among people searching for jobs, which contributes to both staffing shortages for employers and unemployment for job seekers. However, other consistent themes unrelated to workforce benefits also emerged, as detailed below.

Control and Input: Federal Oversight, State Flexibility, and Local Voices. The latest Perkins reauthorization that both congressional chambers approved and presented to the president was over 20,000 words, or 60 pages. The text of the bill itself covered various provisions, including restrictions on using Common Core as part of grant funding conditions, requirements for state efforts to fund CTE programs, and allowable use of funds for secondary school students in nonprofit private schools.²⁹ However, these items were not prominently featured in the press releases. Succinctly defining what exactly this bill does involves choices that may shed light on what different people think are more or less crucial parts of the legislation.

Some of these choices included explanations about the extent to which the reauthorized Perkins bill would shift control over different parts of CTE. Across all releases, 29 percent presented language on federal limits and increased state flexibility, as well as input from local community and parent stakeholders or both. Fourteen percent presented both themes. Sen. Mazie Hirono (D-HI) noted that “the bill promotes more collaboration between educators, representatives of labor and business, community stakeholders, and others to ensure that education programs are more relevant for local workforce needs and that students are better prepared for the CTE careers available to them where they live.”³⁰ An emphasis on the involvement of local communities (parents included) was a commonly covered aspect of the bill.

Not only was broad local collaboration important to many legislators, but so too was the explicit empowerment of states and, relatedly, limits on federal involvement. Across the political spectrum, representatives emphasized the local and state control afforded by the bill and, relatedly, the limitations of the federal government's involvement in local plans. In both the House and Senate, and across Democrats and Republicans, a significant number of people cited this dimension of the bill (though Republican legislators were almost twice as likely to do so).

CTE organization leaders also prominently noted state and local control versus federal control. Interviewees from both ACTE and Advance CTE said that even before the federal reauthorization discussion, there had been a proliferation of CTE programming at the state level, much of which may have even spurred the federal efforts. Hyslop said, to this end, “It's really state policy that's driving a lot of the things that are happening in CTE.”³¹ In addition, Green emphasized that outreach by Advance CTE to its membership revealed that many people felt positively about the work happening in states, and, as such, the work at the federal level was about improving federal policy to help support the work that was already underway. Also, while accountability issues were at the center of much of the more complex discussions during this reauthorization, the central question had to do with the appropriate role of the federal government in that accountability.

In addition, 30 percent of releases mentioned increased opportunities for involving businesses in CTE work. For example, Rep. Ryan Costello (R-PA) mentioned in a press release that the bill would “encourage local businesses to be involved with the development of CTE plans so students emerge with first-hand experience of the skills employers need.”³² While they often broadly defined “local stakeholders,” involving employers, businesses, and industry in developing local CTE programs was specifically mentioned in many press releases.

This point was more prevalent among House members than among senators. This result aligns with conventional wisdom (not without critique³³) that House members have closer ties to local constituents because of their more geographically narrow responsibilities, which might produce more references to local actors among House members. At least according

to Kreamer, involving employers in education is necessary, as she explained that “the education system cannot be the sole responsibility of a K–12 teacher in that system if we really want to be meeting all these needs and providing full opportunities.”³⁴

While it is unclear from this type of method how much this shift to more locally based control specifically motivated congressional members in their actions and votes, that these aspects of the legislation were so emphasized suggests that this is an important part of the 2018 Perkins reauthorization. Representatives often framed their support for the reauthorization to empower local communities, including local businesses, to implement CTE in a way that is more relevant to their needs. Several members even explicitly mentioned the *decrease* in federal involvement as a key descriptive feature of this reauthorization.

As such, the shift of power from the federal to the local level was an important part of the Perkins reauthorization. While most policy proposals involve some sort of negotiation related to the distribution of power, that this dimension was relatively prominent in Perkins discussions, even above many specifics of the policy itself, is telling. In particular, this emphasis suggests that while understanding policies is important, so too is understanding who is involved and in what capacity.

Implementation: Standards and Process. Finally, although the bill covered many different aspects of the continued implementation of CTE, two commonly covered aspects were accountability and simplification of existing processes.

House and Senate members often discussed the terms “accountability” and “transparency” together in press releases, as in this quote from a press release from Rep. Virginia Foxx (R-NC): “Additionally H.R. 5587 increases transparency and accountability by ensuring secondary and postsecondary programs deliver results and providing parents, students and stakeholders a voice in setting performance goals and evaluating the effectiveness of local programs.”³⁵ Almost 16 percent of all releases included language related to these concepts.

In addition, to some, previous implementations of CTE were too complex or burdensome, prompting some, such as Sen. Johnny Isakson (R-GA), to note

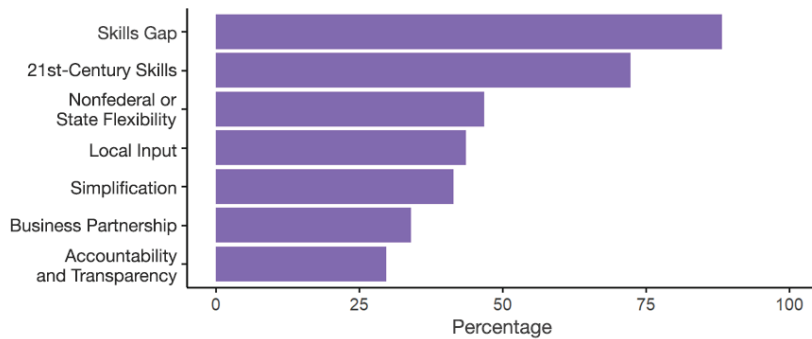
that the current reauthorization of the Perkins Act would work to “reduce burdensome regulations on states and local school systems.”³⁶ The simplification of the implementation involves both accountability mechanisms and the processes for states to apply for funds. Rep. Alma Adams (D-NC) mentioned both, saying the legislation would “streamline performance measures to ensure that career and technical education programs deliver results for students and taxpayers” and “reduce administrative burdens and simplify the process for states to apply for federal resources.”³⁷

Simplifying the process was, to some representatives, a central enough dimension of the legislation to mention in press releases. The interviews with Advance CTE and ACTE leaders covered the same focus. In fact, streamlining and simplification was a major motivator for the most recent reauthorization effort from ACTE’s standpoint, according to Hyslop. ACTE was looking at a way to “prioritize and focus investment,” and Hyslop echoed some of the sentiment from the press releases when describing the complexity of the Perkins legislation.³⁸ Interestingly, one might consider the themes of accountability and transparency to be close cousins to the issues of control and oversight, again notable given their prevalence over specific dimensions of policy.

Differences Across the Senate, House, and CTE Organizations

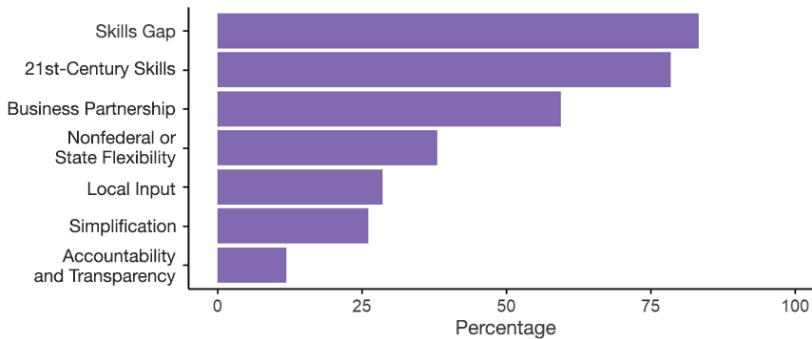
Figures 3 and 4 show the frequency of these themes for House and Senate representatives, respectively.³⁹ In both bodies of Congress, the most primary emphases were skills and competencies and the ability to align job seekers’ skills with employers’ needs. Similarly, activists discussed the role of CTE in aligning academic curricula with the workforce’s needs, but they articulated more specific mechanisms through which this alignment happens. To those in the CTE organizations, the primary way in which secondary students gained more relevant skills was through the intentional, consistent application of academic skills to real-world work problems. In addition, on the lower end of the figure, press releases from both bodies did mention accountability and transparency as descriptors for the Perkins reauthorization, but much less so than other aspects of the bill.

Figure 3. Common Themes Found Across House Representatives' Press Releases



Note: Results are reported at the representative level.
Source: Author's calculation.

Figure 4. Common Themes Found Across Senate Representatives' Press Releases



Note: Results are reported at the representative level.
Source: Author's calculation.

There were, however, also differences across the House and Senate. While both spoke extensively about the workforce-related dimensions of CTE, senators were more likely to directly mention 21st-century skills and related, modern skills. In addition, while both bodies, overall, discussed local flexibility and power, House members spoke more about nonfederal, state, and local control, while most Senate members focused on the potential for business partnerships. House members were also more likely to mention the themes related to implementation, both in terms of accountability and simplifying CTE policy.

As shown in Figures 1 and 2, House and Senate members were primarily active in CTE policy at different times; most House activity occurred during the summer of 2017, while most Senate activity

occurred during the summer of 2018. Policy emphases can change quickly, even over a year. However, that there was consistent messaging around CTE's workforce benefits, but an increasing emphasis on local flexibility, might speak to what some of the more core elements of CTE are and which parts are less consistently interpreted.

Differences Across Democrats and Republicans

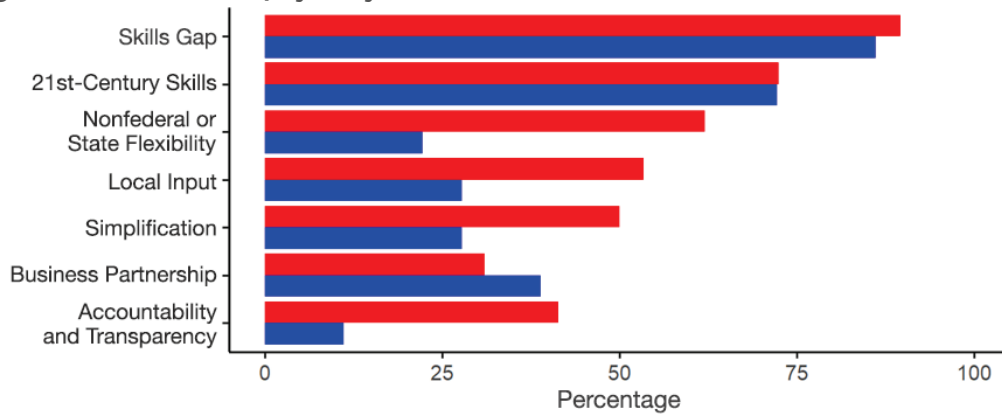
While at least in its most recent iteration legislative action on the Perkins Act has been relatively bipartisan, the partisan nature of today's political environment might raise a natural question: Do Democrats and Republicans view this latest Perkins reauthorization differently? If so, how?

For both the House and the Senate, respectively, the prevalence among members' press releases, by party, are shown in Figures 5 and 6.

In the House, the two most prevalent themes (21st-century skills and the skills gap) seemed to be relatively equal in frequency across Democrats and Republicans. We see differences in the implementation, with Democrats mentioning the importance of business partnerships more often and Republicans mentioning simplification, local input, nonfederal control or state flexibility, and accountability and transparency more often. Similar patterns for these themes were found in the Senate. In addition, Senate Democrats were much more likely to highlight the changing economy and the need for students to have 21st-century skills.

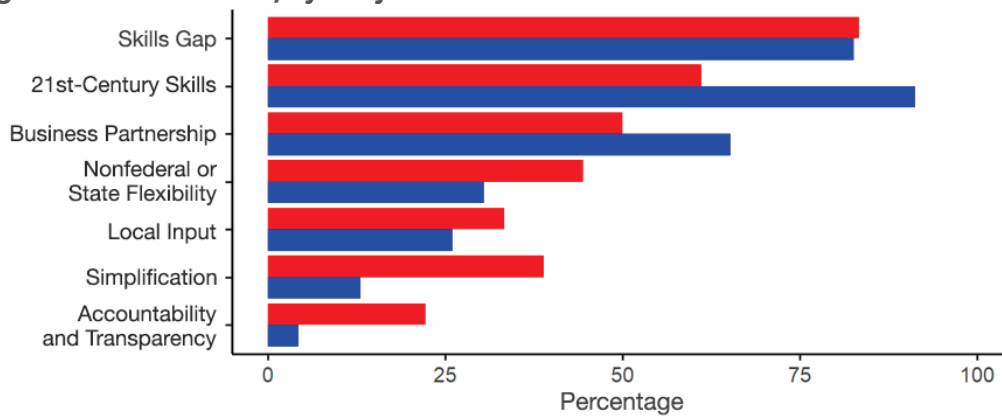
While the reauthorization still enjoyed bipartisan support, the results here, combined with the hurdles the Senate bill faced in getting committee members

Figure 5. House Themes, by Party



Note: Results are reported at the representative level. Red bars refer to Republican representatives, and blue bars refer to Democratic representatives.
Source: Author's calculation.

Figure 6. Senate Themes, by Party



Note: Results are reported at the representative level. Red bars refer to Republican representatives, and blue bars refer to Democratic representatives. One independent representative is not shown.
Source: Author's calculation.

to agree to the amount of involvement of the federal education, suggest that there are differences with implementation. Republicans and Democrats seemed to emphasize the same problems with relatively equal frequency but differed in emphasis on important aspects of the implementation regarding local control and process. Comparing the extent to which representatives mentioned themes related to greater local flexibility, Republicans were twice as likely to note this dimension (67 percent of Republicans versus 31 percent of Democrats in the House and 50 percent of Republicans versus 39 percent of Democrats in the Senate).

Implications for the Future of CTE Policy and Politics

For the future of CTE itself, the results here begin a discussion about the work that will be happening in states and local communities to design, boost, and roll out implementation of CTE. Just as deliberation, democratic process, and differing perspectives were a part of the yearslong process that produced the federal law, states and local governance bodies (and other stakeholders) may need to prepare themselves for understanding and managing those perspectives. In particular, the evidence here reveals the following.

1. The most prominent definitions of CTE seem to center on how CTE can provide job seekers with in-demand skills to meet modern employers' needs.
2. While the Perkins Act covers multiple ideas, the other policy dimensions covered more consistently across members and CTE leaders include state and local flexibility, the business community's involvement, accountability, and simplification.
3. House and Senate members cover these different themes in broadly equal amounts, though Senate members focus more on business partnerships and House members focus more on accountability and simplicity.
4. Overall, Democrats and Republicans also cover similar dimensions of the policy, though Democrats are more likely to focus on business partnerships and, in the Senate, 21st-century skills, while Republicans focus more on state and local flexibility, accountability, and simplification.

CTE, as a policy, is composed of many moving parts, ranging from the specific programs that are eligible to how we define the scope of CTE. Given its complexity, it is both interesting and informative for future work that the consistent themes were those highlighted above, focusing on workforce gaps and changes in control and oversight. While this result may be expected given that the Perkins reauthorization was a federal bill, there was little consistent evidence on how exactly CTE is supposed to look.

In addition, given the prevalence of the focus on economic needs, local actors may need to take real time to focus and clarify the extent of the problem that CTE is meant to address. The results also provide some guidance to researchers about the areas that may be of most concern. Perhaps more direct evidence on the skills offered in CTE programs and their alignment to local employment needs would influence policy decisions, as could more work on the political dynamics of how CTE policy is implemented at the local level.

Understanding where the messaging comes from is still needed for drawing broader conclusions. That there is evidence of relative consistency is interesting given a lack of such consistency in other big policy arenas, but multiple possible sources might lead us to different implications. That there is shared meaning across policy actors is important, and that shared meaning could be a result of collaborative meaning-making among those involved. However, the consistency in messaging could reflect consistent sources of information in a policy arena in which there are not enough alternative sources for people to be forming a wider variety of perspectives.

In other words, the similarities could be due to similar ideologies, or they could be similarities in message sources that are not filtered through an ideological system strong enough to polarize that message. As such, beyond the implications of the findings for CTE policy itself, the questions they raise for how policy deliberation looks in perhaps a less polarized policy arena (at least compared to many that are the subject of popular press) present an alternative perspective on what is possible in our democracy.

As noted by Sen. Mike Enzi (R-WY), "Ask any businessperson what their biggest challenge is, and they're likely to tell you that it's finding workers with the right skills and knowledge to fill their open jobs."⁴⁰ For the world of education policy more broadly, the heavy emphasis on skill acquisition and the skill acquisition that might improve those matches in a changing economy raises important questions.

If people hold that (1) there is a mismatch between the skills students are learning in schools and the skills employers are actually asking for and (2) this mismatch is a function of a new economy, what, then, might we wonder about these individuals' perspectives on schools as a whole? How does this viewpoint translate into other perspectives on education reform, including standards, testing, and evaluation?

Answers to these questions and more are key to understand if practitioners, policymakers, researchers, or even everyday citizens want to engage with and change the policy debate in a way that meets people where they are, first.

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About the Author

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Appendix A. Methodology

The methodology for data collection and analysis are explained in this appendix, including both the content analysis of press releases and the interviews with advocacy organizations.

Gathering Press Releases

We found press releases by doing Google searches of members' congressional websites on August 2–10, 2018, for two key terms: “CTE” and “Perkins.” Results returned by Google were then screened for relevancy. Irrelevant results—for example, a congressperson's guide to college-bound constituents on how to apply for Perkins loans—were ignored, while relevant results were compiled in a document and coded in a spreadsheet identifying a congressperson's office as having issued a CTE-related press release on a spreadsheet. Some members' offices issued too many press releases for us to sift through. In these few instances, a sample was chosen that included both press releases with the repeated talking points and releases with other unique talking points to fully capture what the member said.

After removing releases with unknown dates⁴¹ that were published before 2014,⁴² this process resulted in 366 press releases, 240 from House members (from 94 different people) and 126 from Senate members (from 42 different people).

Analyzing Press Releases

To analyze this bulk of data, this study employed a quantitative, dictionary-based approach to content analysis.⁴³ For each chamber of Congress, a random sample of 30 releases was chosen. These 60 total releases were manually coded using traditional approaches to qualitative content analysis, iteratively reading and rereading the releases to identify themes.

While this manual coding occurred, all original press releases were cleaned using typical text preprocessing methods used in natural language processing. This preprocessing involved changing all text to lowercase, taking out all white space, removing punctuation, removing stop words (i.e., common words such as “the” and “an”), and stemming the text such that words sharing roots would all appear the same (e.g., “streamlining,” “streamlined,” and “streamline” would all appear as “streamlin”).

With each theme that emerged from the manual coding, a dictionary was developed and refined using the preprocessed text, based primarily on the presence of certain key terms of the proximity of certain key terms to one another. The computer then used the dictionary to tag the full corpus of press releases. These tags were then compared to the manual codes, and the dictionary was iteratively adjusted to maximize the alignment between the manual coding and the computer tagging. The dictionary terms for each code are shown in Table A1.

Final tagging using the dictionary also adjusted the original corpus by removing some terms that are not informative and produce false matches (e.g., removing “21st century act,” which was part of the name of the bill, because “21st century” was a dictionary term) and combining terms that were important in the coding but would have been removed by the preprocessing steps (e.g., changing “in-demand” to “indemand” because the preprocessing would have removed “in”).

This computer-aided approach risks missing more nuanced information that would be better captured by complete manual coding by multiple human coders. First, however, this approach begins and ends with human coding, and the rules that the computer uses do not exist without human refinement, leading to greater precision by the computer.⁴⁴ Second, there may be thematic lessons in the releases that are not as easily captured by this method as implemented, including more nuanced linguistic turns, meanings derived from sentence construction rather than just word content, and complex connections between different themes. This analysis can be combined with future work accounting for these items (e.g., using traditional qualitative methods or probabilistic topic modeling) to get a deeper picture, but for now, the method described here provides an initial look at what is at least conveyed through the choices the release writers made in their language based on terminology.

Table A1. Dictionary Terms for Computer-Aided Coding

Code	Terms
21st-Century Skills	"21st century" "indemand" "highdemand" "modern econom" "next generat job" "today" within four words of "econom" "workforc" within four words of "trend" "workforc" within four words of "chang" "job" within four words of "futur" "job" within four words of "tomorrow" "econom" within four words of "tomorrow"
Accountability and Transparency	"accccount" "transpar" "perform measur" "perform" within three words of "goal"
Business Partnership	"busi" within 12 words of "partner" "compani" within 12 words of "partner" "busi" within 12 words of "collabor" "busi" within 12 words of "togeth" "busi" within 12 words of "workwith" "privat" within 12 words of "togeth" "collabor" within 12 words of "industri"
Local Input	"local stakehold" "empow" within five words of "communiti" "input" within five words of "communiti" "voice" within five words of "communiti" "partner" within five words of "communiti" "collabor" within five words of "communiti" "empow" within five words of "parent" "input" within five words of "parent" "voice" within five words of "parent" "partner" within five words of "parent" "collabor" within five words of "parent" "flexibl" within five words of "local" "design" within five words of "local"
Nonfederal or State Flexibility	"allow state" "state" within five words of "flexibl" "state" within five words of "empow" "feder" within five words of "limit" "limit" within five words of "depart"
Simplification	"streamlin" "simplifi" "burden" "reduc" within five words of "administr"
Skills Gap	"skill gap" "align" within 10 words of "need" "align" within 10 words of "job" "train" within 10 words of "workforc" "need" within 10 words of "workforc" "skill" within 10 words of "need" "skill" within 10 words of "career" "fill" within 10 words of "job"

Source: Author.

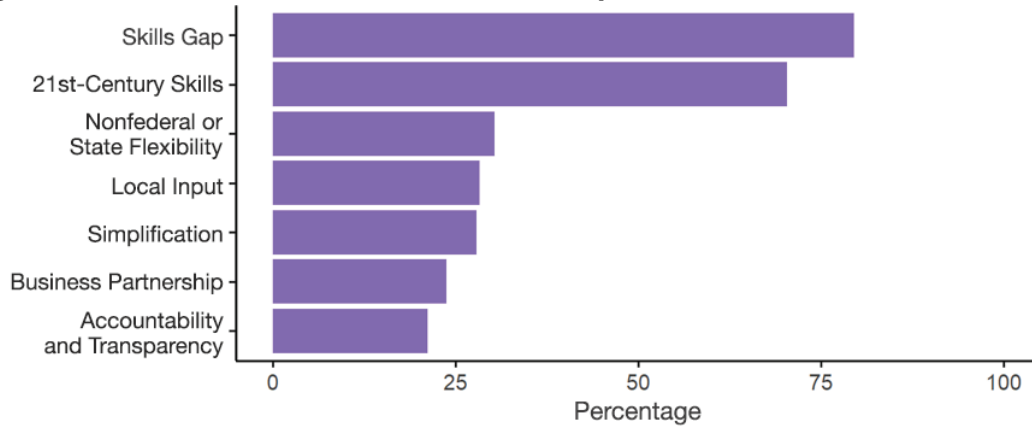
Interviews with Advance CTE and ACTE Staff

Advance CTE and ACTE are both CTE advocacy organizations. Advance CTE is a membership organization consisting of state leaders interested in CTE policy, whereas ACTE tends to represent CTE professionals and organizations. Both were involved and worked together in the recent Perkins reauthorization.

To gain perspectives directly from people involved with the process, interviews were also conducted with key staff members from Advance CTE and ACTE. Advance CTE interviewees included Executive Director Kimberly Green, Deputy Executive Director Kate Kreamer, and Communications Manager Katie Fitzgerald. Alisha Hyslop, director of public policy, discussed her perspective from ACTE. Interviews were about an hour long and were conducted over the phone. Throughout the interview process, the validity of responses was verified through confirming statements with participants. The interviews were then transcribed and analyzed through an iterative reading and rereading of text and memos from interviews to identify themes.

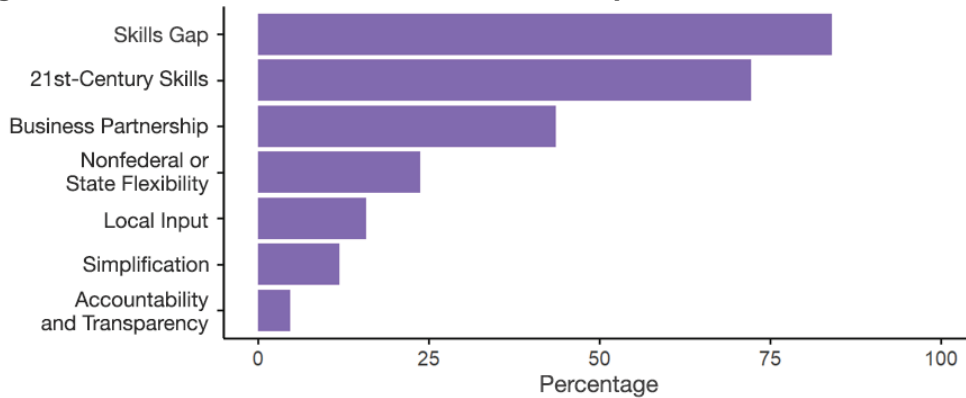
Appendix B

Figure B1. Common Themes Found Across House Representatives' Individual Press Releases



Note: Results are reported at the press release level.
Source: Author's calculation.

Figure B2. Common Themes Found Across Senate Representatives' Individual Press Releases



Note: Results are reported at the press release level.
Source: Author's calculation.

Notes

1. Andrew Ujifusa, “Donald Trump Signs First Major Education Policy Bill of His Presidency,” *Education Week*, July 31, 2018, <https://www.edweek.org/ew/articles/2018/07/31/donald-trump-signs-career-technical-education-bill.html>; and Catherine Gewertz, “What Is Career and Technical Education, Anyway?,” *Education Week*, July 31, 2018, <https://www.edweek.org/ew/issues/career-technical-education/index.html>.
2. Katrina Bulkley, “Understanding the Charter School Concept in Legislation: The Cases of Arizona, Michigan and Georgia,” *International Journal of Qualitative Studies in Education* 18, no. 4 (2005): 527–54, <https://doi.org/10.1080/09518390500137683>; Gary Miron, “The Shifting Notion of ‘Publicness’ in Public Education,” in *Handbook of Education Politics and Policy*, ed. Bruce S. Cooper, Lance D. Fusarelli, and James G. Cibulka (New York: Routledge, 2008); and Joel Spring, *Political Agendas for Education: From the Religious Right to the Green Party* (Mahwah, NJ: Lawrence Erlbaum Associates, 2002).
3. Gewertz, “What Is Career and Technical Education, Anyway?”
4. Janice Nahra Friedel, “Where Has Vocational Education Gone? The Impact of Federal Legislation on the Expectations, Design, and Function of Vocational Education as Reflected in the Reauthorization of the Carl D. Perkins Career and Technical Education Act of 2006,” *American Educational History Journal* 38, no. 1–2 (2011): 37–53.
5. Sean Cavanagh, “Congress Renews Perkins ‘Career Education’ Law,” *Education Week*, July 31, 2006, https://www.edweek.org/ew/articles/2006/07/31/44perkins_web.h25.html.
6. Gewertz, “What Is Career and Technical Education, Anyway?”
7. GovTrack, “H.R. 5587: Strengthening Career and Technical Education for the 21st Century Act,” <https://www.govtrack.us/congress/votes/114-2016/h503>.
8. Jillian Luchner, “Career and Technical Education (CTE) Bill Passes into Law with New Opportunities for Out-of-School Time,” Afterschool Alliance, August 2, 2018, https://www.afterschoolalliance.org/afterschoolsnack/Career-and-Technical-Education-CTE-Bill-Passes-into-Law-with_08-02-2018.cfm.
9. Strengthening Career and Technical Education for the 21st Century Act, H. Rept. 115-164, 115th Cong., 1st sess., June 7, 2017, <https://www.congress.gov/congressional-report/115th-congress/house-report/164>; and Alyson Klein, “Senate Education Committee Set to Consider Career, Technical Education Bill,” *Education Week*, June 13, 2018, http://blogs.edweek.org/edweek/campaign-k-12/2018/06/senate_education_career_technical_ivanka.html.
10. Senate representatives, letter to Chairman Lamar Alexander and Ranking Member Patty Murray, October 11, 2017, <https://www.mccaskill.senate.gov/imo/media/doc/2017-10-11-%20CTE-Perkins%20to%20AlexanderMurray.pdf>.
11. House representatives, letter to Chairman Lamar Alexander and Ranking Member Patty Murray, November 11, 2017, <https://krishnamoorthi.house.gov/sites/krishnamoorthi.house.gov/files/CTE%20Letter%20to%20Senate%20HELP.pdf>.
12. Klein, “Senate Education Committee Set to Consider Career, Technical Education Bill.”
13. Strengthening Career and Technical Education for the 21st Century Act.
14. Strengthening Career and Technical Education for the 21st Century Act.
15. US Department of Education, “Investing in America’s Future: A Blueprint for Transforming Career and Technical Education,” Office of Vocational and Adult Education, April 2012, <http://hdl.voced.edu.au/10707/264915>.
16. Association for Career and Technical Education and Advance CTE, “ACTE and Advance CTE Statement on Perkins Markup,” press release, June 25, 2018, <https://www.acteonline.org/press-releases/acte-and-advance-cte-statement-on-perkins-markup/>.
17. Ginni Rometty and Wes Bush, “Congress Must Address the ‘Skills Gap’ and Update Our Education System by Passing the Perkins Act,” CNBC, June 22, 2018, <https://www.cnbc.com/2018/06/22/congress-must-address-the-skills-gap-and-update-our-education-system-by-passing-the-perkins-act.html>.
18. Andrew Kreighbaum, “Another Higher Ed Bill Stalled in Congress,” *Inside Higher Ed*, April 20, 2018, <https://www.insidehighered.com/news/2018/04/20/career-training-legislation-seems-stalled-congress>.
19. Shop Class Act, H.R. 2308, 115th Cong., 1st sess., <https://www.congress.gov/bill/115th-congress/house-bill/2308>.
20. Inger Lassen, “Is the Press Release a Genre? A Study of Form and Content,” *Discourse Studies* 8, no. 4 (August 2006): 503–30, <https://doi.org/10.1177/1461445606061875>.
21. Justin Grimmer, “A Bayesian Hierarchical Topic Model for Political Texts: Measuring Expressed Agendas in Senate Press Releases,” *Political Analysis* 18, no. 1 (Winter 2010): 1–35, <https://doi.org/10.1093/pan/mpp034>.
22. A more detailed explanation of data collection and analysis for both the press releases and interviews with advocacy organizations is in Appendix A.
23. White House, “Statement from the President on the Passage of Legislation to Reauthorize the Carl D. Perkins Career and Technical Education Act,” press release, July 25, 2018, <https://www.whitehouse.gov/briefings-statements/statement-president-passage-legislation-reauthorize-carl-d-perkins-career-technical-education-act/>.

24. Maria Cantwell, “Cantwell Legislation to Increase High School Computer Coding Programs Signed into Law,” press release, July 31, 2018, <https://www.cantwell.senate.gov/news/press-releases/cantwell-legislation-to-increase-high-school-computer-coding-programs-signed-into-law>.
25. Orrin Hatch, “Perkins Career and Technical Education Bill with Hatch Priorities Signed into Law,” press release, July 31, 2018, <https://www.hatch.senate.gov/public/index.cfm/2018/7/perkins-career-and-technical-education-bill-with-hatch-priorities-signed-into-law>.
26. Dean Kaine, “Kaine & Capito Introduce Bill to Deal with Workforce Shortages Through Middle School Pilot Program,” press release, September 14, 2017, <https://www.kaine.senate.gov/press-releases/kaine-and-capito-introduce-bill-to-deal-with-workforce-shortages-through-middle-school-pilot-program>.
27. Dean Heller, “Heller, 58 Senators Urge Congressional Action to Renew Career and Technical Education Programs,” press release, October 13, 2017, <https://www.heller.senate.gov/public/index.cfm/pressreleases?ID=6F983972-9D64-4554-9F8F-2BCoE3968EFC>.
28. Alisha Hyslop (director of public policy, Association for Career and Technical Education), in discussion with the author.
29. Strengthening Career and Technical Education for the 21st Century Act, H.R. 2353, 115th Cong., 1st sess., <https://www.congress.gov/bill/115th-congress/house-bill/2353>.
30. Mazie Hirono, “Strong Federal Funding for Hawaii Programs to Continue Under Update of Federal Career & Technical Education Programs,” press release, August 6, 2018, <https://www.hirono.senate.gov/news/press-releases/strong-federal-funding-for-hawaii-programs-to-continue-under-update-of-federal-career-and-technical-education-programs>.
31. Hyslop, in discussion with the author.
32. Ryan Costello, “Costello Applauds Passage of Legislation to Help Students Gain Skills They Need to Succeed,” press release, September 16, 2016, <https://costello.house.gov/media-center/press-releases/costello-applauds-passage-legislation-help-students-gain-skills-they>.
33. Bruce I. Oppenheimer, “The Representational Experience: The Effect of State Population on Senator–Constituency Linkages,” *American Journal of Political Science* 40, no. 4 (November 1996): 1280–99, <https://doi.org/10.2307/2111751>.
34. Kate Kreamer (deputy executive director, Advance CTE), in discussion with the author.
35. Virginia Foxx, “Foxx Praises Passage of Legislation to Strengthen Career and Technical Education,” press release, September 13, 2016, <https://foxx.house.gov/news/documentsingle.aspx?DocumentID=398936>.
36. Johnny Isakson, “Isakson Applauds Committee Passage of Legislation to Improve Technical Education, Streamline Job Training,” press release, June 26, 2018, <https://www.isakson.senate.gov/public/index.cfm/2018/6/isakson-applauds-committee-passage-of-legislation-to-improve-technical-education-streamline-job-training>.
37. Alma Adams, “Adams Supports Career and Technical Education Legislation, Requests Report to Study STEM Curriculum in Community Colleges,” press release, May 17, 2017, <https://adams.house.gov/media-center/press-releases/adams-supports-career-and-technical-education-legislation-requests>.
38. Hyslop, in discussion with the author.
39. Patterns were similar when reported at the individual press release level, as shown in Appendix A.
40. Mike Enzi, “Statement with Senator Casey About Perkins Career and Technical Education on the Senate Floor,” press release, July 26, 2018, <https://www.enzi.senate.gov/public/index.cfm/2018/7/statement-with-senator-casey-about-perkins-career-and-technical-education-on-the-senate-floor>.
41. Six releases from four different Republican House members were excluded for this reason.
42. Initial analysis revealed that press release activity started to accelerate around the beginning of 2014.
43. Matthes Jörg and Matthias Kohring, “The Content Analysis of Media Frames: Toward Improving Reliability and Validity,” *Journal of Communication* 58, no. 2 (June 2008): 258–79, <https://doi.org/10.1111/j.1460-2466.2008.00384.x>.
44. Shah V. Dhavan et al., “News Framing and Cueing of Issue Regimes: Explaining Clinton’s Public Approval in Spite of Scandal,” *Public Opinion Quarterly* 66, no. 3 (Autumn 2002): 339–70, <https://www.jstor.org/stable/3078767>.

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