



**YALE NATIONAL INITIATIVE**  
*to strengthen teaching in public schools®*

# **National Fellow Questionnaire Results, 2005-2021**

March 2022





## 2005-2021 Yale National Initiative Fellow Questionnaire Results

### **Overview**

*Annual data collected by the Yale National Initiative now constitute a rich record of participants' experiences.*

The Yale National Initiative has since 2005 required participating teachers (National Fellows) to complete a questionnaire at the end of their seminar. Prior to 2014, National Fellows completed the questionnaire on paper. Starting in 2014, the National Fellow questionnaire was expanded and administered online using Qualtrics. The emphasis in education on deeper learning, Common Core Standards, and school improvement led to the expansion of teaching and learning strategies examined and the addition of school context questions. A desire to understand how the Teacher Institute fits with other teacher professional development opportunities at Fellows' schools led to the addition of questions about the availability of professional development opportunities at Fellows' Schools and their receipt of other professional development.

For a core set of questions, Fellow questionnaire data are available for more than 15 years (2005-2021). For an additional set of questions added in 2014, data are now available for eight years (2014-2021). References to Fellows throughout the report include the dates to which the findings pertain.

The Yale National Initiative typically brings participating teachers to the Yale University campus for an Organizational Session in May and for a two-week Intensive Session in July. In 2020 and 2021, because of the COVID-19 pandemic, both the Organizational Session and Intensive Session were conducted online. The Fellow questionnaire administered in 2020 remained largely the same, but some questions were altered to refer to teachers' school context prior to the pandemic and a couple new essay questions were added to learn about the Fellows' experiences in the online program. In 2021, several school context questions were omitted due to pandemic-related disruptions in schools. In the summary of findings following this overview, omissions in 2021 and differences in findings in 2020 that may reflect the shift to online seminars are noted.

This document presents tabulations of these longitudinal data to serve as a reference document and foundation for future summary reports on important topics. The unit of analysis is the Fellow-seminar combination; that is, individual National Fellows are represented in the data each time they participated in a seminar. Altogether, the data include 987 Fellow-seminar combinations.

During the 17-year period from 2005 through 2021, 572 different teachers have participated in the Yale National Initiative once or more. All National Fellows completed a questionnaire about their experiences each time they participated. Individual National Fellows participated in 1 to 15 seminars between 2005 and 2021. Two thirds of the 2005-2021 National Fellows (65%) participated once, nearly one fifth (18%) participated twice, and 17% participated more than twice. A few Fellows have participated many times; these Fellows are leaders from existing and developing local Teachers Institutes who also have leadership roles in the Yale National Initiative.

The questionnaire results are presented in two ways: (1) aggregated findings across all years, and (2) findings disaggregated by year. In both cases, for simplicity, the discussion refers to Fellows, but it should be kept in mind that in the aggregated findings, repeating Fellows are represented each time they participated in a seminar. In sensitivity analyses conducted in 2020, we determined that alternate approaches that include each Fellow only once in the aggregated analyses yield very similar findings. Details of these sensitivity analyses are included in the appendix to this report.

National Fellows by the Number of Seminars  
They Have Attended

Number of seminars	Number of Fellows	Percent
1 (%)	372	65.03
2 (%)	102	17.83
3 (%)	51	8.92
4 (%)	23	4.02
5 (%)	13	2.27
6 (%)	3	0.52
7 (%)	2	0.35
8 (%)	1	0.17
10 (%)	1	0.17
11 (%)	2	0.35
14 (%)	1	0.17
15 (%)	1	0.17
Total	572	100.00

***A wide range of teachers have participated in the Yale National Initiative.***

The Yale National Initiative invites teachers from public school districts with a Teachers Institute or an interest in establishing one to participate in national seminars at Yale University. Since 2005, teachers from 13 states and the District of Columbia have participated.

States in Which National Fellows Teach

	Number	Percent
Pennsylvania	173	17.55
California	154	15.62
Virginia	112	11.36
Delaware	100	10.14
Illinois	91	9.23
Connecticut	69	7.00
Oklahoma	66	6.69
North Carolina	60	6.09
Arizona	39	3.96
Texas	32	3.25
New Mexico	28	2.84
Georgia	28	2.84
District of Columbia	20	2.03
Florida	14	1.42
Total	986	100.00

The Yale National Initiative attracts teachers from all grades and core subject areas. The teachers who have participated range from young teachers starting in their careers to older, more experienced teachers still committed to improving their teaching.

During the period from 2005 to 2021, the characteristics of National Fellows have varied from year to year, but few clear trends are apparent. Over the period, however, the proportion of National Fellows teaching high school grades has decreased from around 60% to around 40%.

### ***The Yale National Initiative has addressed limitations in the professional development offered by districts and schools.***

The Yale National Initiative introduces the Teachers Institute approach to teacher professional development to teachers from interested public school districts. It addresses some limitations of the other professional development opportunities available to teachers. By providing intensive seminars on topics recommended by school district Teacher Representatives and Steering Committee members, the National Initiative gives teachers a rare opportunity to select the content of their professional development and deepen their content knowledge in a relevant area, something they perceived to be lacking in the professional development opportunities offered by their school. More than half of 2014-2020 National Fellows reported having a small role or no role at all in determining the content of their in-service professional development. Slightly more than half of 2014-2021 Fellows disagreed that their school provides professional development that deepens content knowledge. Fewer than half had participated in the past year in other content-focused professional development that extended to more than two sessions, and only a small proportion had participated in content-focused professional development that took place in eight or more sessions.

By requiring teachers who apply to get verification from their principal that they will be assigned a curriculum area or course in which to teach the unit in the coming year, the Initiative enabled teachers who felt they generally had little control over the content, topics, and skills they teach to take the knowledge they gained back to their classrooms. Nearly one third of 2014-2020 National Fellows reported having little or no control in selecting content, topics, and skills to be taught, and more than one third reported having little or no control in selecting textbooks and other instructional materials.

The Initiative seminars have consistently attracted teachers seeking both to satisfy their own need to learn and to improve their teaching and engage their students. Most 2005-2021 National Fellows were motivated to participate in the Yale National Initiative by the opportunity to develop materials to motivate their students and develop curriculum that fits their needs, the opportunity for intellectual stimulation, the opportunity to increase their mastery of the subject they teach, and the opportunity to work with university faculty.

According to the teachers who completed the Initiative seminars—National Fellows—the program has been highly successful in meeting their professional development needs. More than 90% of the 2005-2021 National Fellows reported that the program overall was useful to a great extent, and most of the remaining National Fellows said it was useful to a moderate extent.

### ***Teacher leaders help ensure that the Initiative meets teachers' needs.***

Leadership by participating teachers is a hallmark of the Teachers Institute approach. The teacher leaders in the Yale National Initiative—school district Teacher Representatives and Seminar Coordinators—have well-defined, important roles in shaping and supporting the seminars. Consistently high ratings from National Fellows show that the teacher leaders filled their roles well during the study period.

Some National Fellows served as school district Teacher Representatives responsible for staying in touch with prospective National Fellows, encouraging and assisting them in applying, and promoting use of curriculum units written by National Fellows. Approximately three quarters of National Fellows reported that their Teacher Representative was very helpful in these ways.

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*Professionally and personally, there is nothing more stimulating than researching a subject/piece of literature about which I am passionate. It is not something that I, as a secondary school teacher, am often able to do. Most professional development is top-down, not something over which we have almost complete choice and control. And to have what I'm studying and learning about and researching be so on-point to what I am teaching in the classroom is invaluable. 2014 National Fellow*

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Some experienced National Fellows served as Seminar Coordinators, helping other National Fellows in their seminar and assisting the seminar leader with logistics. A consistently high proportion of 2005-2021 National Fellows agreed that their Seminar Coordinator provided leadership without diminishing the collegial relationships within the seminar. At least three quarters of National Fellows reported that their Seminar Coordinator was very helpful in providing information about deadlines and monitoring the process of the seminar through observations and conversations with seminar participants.

Observing and fulfilling these roles in the National Initiative prepares participants to step into leadership roles locally.

### ***Collegiality and support have consistently enriched teachers' experiences in Yale National Initiative seminars.***

The Yale University faculty who served as seminar leaders played a key role in sustaining the National Initiative over time. They consistently received high ratings from National Fellows. Nearly all National Fellows in the years from 2005 to 2021 reported that their seminar leader was useful to a moderate or great extent. In fact, more than 90% of National Fellows reported that their seminar leader was useful to a great extent. Among 2014-2021 National Fellows, only a small number felt they did not receive enough guidance from their seminar leader, didn't have enough opportunities to meet with their seminar leader, or didn't receive helpful feedback on their curriculum unit drafts.

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*Additionally, I truly appreciate the time in which I have to spend with other educators who are very positive about their practice, students, and the education field. Each of them becomes part of my network that will benefit me personally and professionally.*

2016 National Fellow

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In leading Initiative seminars, seminar leaders have generally succeeded in balancing the complementary and inseparable but sometimes competing demands for studying the seminar topic with developing applications of that knowledge for the classroom. More than three quarters of the 2005-2021 Fellows of the Yale National Initiative agreed that in their seminar there was a good balance between general study of the seminar topic and discussion of work in progress on their units.

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*My participation as a National Fellow has prepared me to expand my leadership practices in my local Teachers Institute... This was my first year as a seminar coordinator in my local institute, and I have learned a great deal from observing my own coordinator at the National Institute. I feel as though I am now prepared to have a more active role in the overall mechanics of my local institute, as well as a more concrete understanding of the roles each individual plays in its success.*

2018 National Fellow

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Collegiality among National Fellows is also central to participants' experiences in the Yale National Initiative. Nearly 90% of 2005-2021 National Fellows reported that these interactions were useful to a great extent, and nearly all the other National Fellows reported they were useful to a moderate extent. Some National Fellows

noted that they expect the relationships with other teachers formed in the seminars to continue after the seminar ends.

Seminar leaders distribute an annotated bibliography and proposed syllabus of readings in the seminar subject at the first organizational meeting of their seminar. Nearly three quarters of 2005-2021 National Fellows reported that the bibliography for their seminar was useful to a moderate or great extent. It appears that National Fellows in the early years were especially likely to find the bibliographies useful, while more recent National Fellows have been less likely to find them useful. Nearly three quarters of National Fellows, however, agreed that the bibliographies were sufficiently annotated.

The Yale National Initiative operates on a schedule that seems to work well for most National Fellows. The Initiative seminars have always begun meeting during an Organizational Session in May, with regular seminar meetings held

daily during a two-week Intensive Session in early July.<sup>1</sup> The first draft of the curriculum unit is due toward the end of the Intensive Session, the second draft is due in late July, and the final unit is due by mid-August. Only 11% of 2005-2021 National Fellows thought that these unit deadlines came at the wrong time in the school year, and most National Fellows reported that the overall program schedule was useful to at least a moderate extent.

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*The strength of the program is the effectiveness of the process of curriculum development, the collaboration and support among the participants and seminar leaders, and to see the values in the teachers ...I have learned a lot each time that I have participated. Believe me when I say that I have gained and become a better teacher each time I leave from the program...I actually bring it back and use it and it benefits me and my students!* 2018 National Fellow

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While the stipend provided by the Yale National Initiative was not the primary factor motivating teachers to participate, four fifths of National Fellows reported that it was useful to a moderate or great extent.

### **Curriculum units written in Initiative seminars ensure that teachers' learning reaches their students.**

Writing a curriculum unit helps National Fellows work out how they will teach and engage their students in learning about some aspect of the seminar topic. The Yale National Initiative provides written Guidelines specifying the required contents and format of curriculum units. Most 2005-2021 National Fellows reported that the Guidelines were useful to a moderate or great extent.

The Initiative requires that National Fellows have assurance from their principal that they can teach the curriculum unit they write, and the unit must address academic standards. During the application process, principals must assure the Initiative that the proposed curriculum unit is aligned with the teacher's assignments and that the

teacher will be assigned a course or curriculum in which to teach the curriculum unit in the following school year. Recent National Fellows have most often written a unit to supplement their existing curriculum. It has not been uncommon, however, for National Fellows to write a unit to fill a gap in their

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*Personally, I will be more invested in the teaching of the unit since I created it. I will be more knowledgeable about the subject matter than if someone handed me a unit from a textbook and told me to teach it. I will also be more enthusiastic when teaching it because it is mine. I consider the unit to be a work in progress, so I know that I will adjust, tweak, change parts of the unit as needed to address the needs of my students.* 2018 National Fellow

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curriculum. The 2014-2021 National Fellows were most likely to choose a topic based on its importance for their students, but some reported that the primary source of the idea for their unit arose from their students' or their own interest in the topic or their desire to do further work on a topic.

Most curriculum units written by recent National Fellows, who were asked about a more extensive range of teaching and learning strategies, incorporate strategies that promote deeper learning.<sup>2</sup> The teaching and learning strategies most often used to a great extent in 2014-2021 National Fellows' units were asking students to generate and refine ideas, apply facts and processes to real-world situations, work collaboratively in small groups, and make something. National Fellows were more likely to report using several of these deeper learning strategies in their Initiative curriculum unit than they were to report using them in their teaching more generally.

<sup>1</sup> In 2020 and 2021, the program was conducted online due to the COVID-19 pandemic.

<sup>2</sup> William and Flora Hewlett Foundation (2013). Deeper Learning Competencies. Accessed at [https://www.hewlett.org/sp-content/uploads/2016/08/Deeper\\_Learning\\_Defomed\\_April\\_2013.pdf](https://www.hewlett.org/sp-content/uploads/2016/08/Deeper_Learning_Defomed_April_2013.pdf) on November 3, 2017.

National Fellows taught diverse students and usually wrote curriculum units designed for all of them. The classes of most 2014-2021 National Fellows included special education students. More than three quarters of National Fellows taught classes that included ESL students, and nearly two thirds also taught classes that included gifted

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*The unit I created fills a gap in our curriculum and will enable students to learn about energy resources in-depth. I am eager to begin teaching it. Starting a school year excited by bringing in new ideas and lessons has increased my motivation and ability to continue to be a strong teacher...I have taught every YNI and YNHTI curriculum unit that I have designed. Administrators have observed some of these lessons and rated them as exemplary (the highest rating and not easily earned). My students have all responded well to my units and demonstrated a high level of learning. In fact, my YNI and YNHTI units are some of the best curriculum units I teach all year.* 2019 National Fellow

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students. Half of the 2005-2021 National Fellows developed curriculum units for all students, ranging from the least to the most advanced students.

The curriculum units ensure that National Fellows' learning reaches their students. Nearly all 2005-2021 National Fellows expected to teach their curriculum unit during the following school year. 2014 - 2021 National Fellows in self-

contained classrooms planned to teach their curriculum unit to virtually all of the students in their classes (26 students, on average). National Fellows in departmentalized classrooms planned to teach their curriculum unit to 85% of their students (76 students, on average). In total, 2005-2021 National Fellows planned to teach their units to 66,323 students in the year following their seminar. Over time, repeated use of units by the teachers who developed them extends their benefits to more students, and dissemination of the Initiative curriculum units to other teachers within participating school districts and through the website further increases the number of students who benefit. Moreover, students may experience multiple units as they move through school.<sup>3</sup>

When they teach the curriculum unit that they wrote in their Yale National Initiative seminar, many National Fellows anticipate high student engagement and deeper student learning. In narrative comments, National Fellows cite their own excitement about teaching the unit, their deeper knowledge of the unit's content, ideas for teaching the unit that they gained in interactions with other National Fellows and their seminar leader, and their confidence in teaching their unit as reasons to expect high student engagement.

Nearly all National Fellows who had participated in a previous National seminar reported that they had implemented the curriculum unit they developed in their most recent seminar. More than half had implemented their unit as planned, and more than half had implemented it with adaptations or additions. Moreover, many reported that they had used the teaching strategies or content objectives in their unit when teaching their existing curriculum. Most of these Fellows reported that the goals of their unit had been met, and nearly all planned to teach their previous unit again.

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*I believe I will be able to more effectively engage my students. It also provided me with the opportunity to provide my students with opportunities for more thought-provoking discussion and higher level thinking skills that they need...This unit will get them to think in new ways to better understand what they are learning. I believe that this will prepare them for what they will experience in high school and will enable them to become independent learners.* 2014 National Fellow

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### ***National Fellows almost universally agreed that they benefitted in a variety of ways from their seminar participation.***

Almost all of the 2005-2021 Fellows of the Yale National Initiative agreed that the seminar helped them grow professionally and intellectually (most agreed strongly) and that they gained knowledge of their subject and confidence in their ability to teach it (two thirds agreed strongly). More than two thirds agreed strongly that they

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<sup>3</sup> Arnold, Taylor B. (2015). Modeling the number of students reached by the Teachers Institute. (New Haven, CT: Yale National Initiative.)



have higher expectations of their students' ability to learn about the seminar subject, and more than one third agreed strongly that they learned new teaching strategies from other participants in their seminar. National Fellows' higher expectations of students may be important, because higher teacher expectations have been associated with higher student achievement.<sup>4</sup>

Most 2014-2021 National Fellows agreed that the seminar provided useful knowledge or information, gave them opportunities to work on their teaching, led them to seek information from others, and led them to think about teaching in a new way. More than three quarters indicated that their seminar made them pay closer attention to their teaching and provided useful feedback about teaching.

### *The benefits of participating in the Yale National Initiative will continue to influence student learning over time.*

Most 2014-2021 National Fellows reported that they expect to remain in teaching in their district for at least five years. On average, National Fellows plan to remain in teaching for twelve years. In narrative comments, some National Fellows noted the renewed excitement they felt for teaching after participating in their seminar, and a few described the importance of their seminar experience to decisions to remain in teaching.

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*The seminar experience was incredibly valuable to me both professionally and personally. I had the chance to deepen my content knowledge and consider teaching a topic I had not thought about teaching before. I also felt incredibly respected and felt that I had valuable things to contribute to the learning process that happened in the seminars. I believe the National Initiative reminded me that teachers are not only experts in pedagogy, but can be and are experts in the content that they teach.*

2014 National Fellow

*I am considered to be an innovative, forward thinking educator in my district. Put simply, I give that credit to my past participation in the National Initiative. Learning core content at such a deep level allowed me to teach differently, deliver professional development, and really define a whole new paradigm for what our students were capable of doing with regards to the STEM disciplines in our school...*

2014 National Fellow

*The seminar helped me to reconnect with my purpose and reason for teaching. It helped to reignite my passion for education and remember the impact that I can have in the classroom. It helped deepen my knowledge about my content, and the importance of reading scholarly journals about my field and content.*

2016 National Fellow

*Participating in the seminar has changed my way of thinking about my profession. I learned a lot about the content knowledge and realized there were other ways of approaching learning standards. I guess my attitude towards my profession has been like "still water" since every year has been "JUST FINE." Participating in the seminar has made me realize I need to be a learner, too. Personally, this experience has allowed me to look at myself and the past 14 years of my career and the future years of who I want to be as a teacher.*

2016 National Fellow

*As previously mentioned, my participation in the Yale National Initiative has always had a positive effect on my students as my preparation and understanding of those units are significantly deeper and more purposeful than other units I may teach. They sense my passion. Furthermore, as a result of the discussions with colleagues from across the nation who are engaged, passionate, professionals, I'm always reinvigorated to reenter the classroom*

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<sup>4</sup> Friedrich, A., Flunger, B., Nagengast, B., & Jonkmann, K. (2015). Pygmalion effects in the classroom: Teacher expectancy effects on students' math achievement. *Contemporary Education Psychology*, vol. 41, pp. 1-12.

*with enthusiasm and positivity. As a department chair and instructional leader on my campus who is frequently used as a model classroom, I know my teaching practice inspires and is used as a model by colleagues, which is immensely gratifying.*

2018 National Fellow

*After four years of participation, it is clear that my units are more successful with students as I have an accumulated a depth of knowledge and integrated teaching techniques from teachers across the nation to enhance my practice. I have been a highly effective teacher for the past two years as a result of my participation in the program. The schools that I have taught have recognized this and continue to delegate additional leadership responsibilities towards me.*

2019 National Fellow

*My participation always increases my sense of professionalism and dedication to my role as classroom educator. Participating in the intensive provides a great deal of pride in my scholastic and intellectual abilities and encourages me to continue challenging myself and expanding my knowledge. I receive none of these encouragements from my practice during the school year.*

2018 National Fellow

*This was an absolutely wonderful experience for me. I feel so respected and valued and those feelings truly give me an anti-burnout shot as I head into another school year with its inevitable challenges.*

2018 National Fellow

*Overall the online program went very well. It is hard to recreate a program in a whole new way, but it was done successfully! The seminars went well and I think the units that came out of at least my seminar were hugely successful. Going virtual was a wonderful decision, as everyone benefitted and grew from the program in many of the ways that we typically do. YNI is the best and it showed amidst a global pandemic!!*

2020 National Fellow

*This was the best professional development opportunity I have experienced. The most valuable aspect was being respected as a teacher and being given the time to deeply learn content from an expert. I find that most other professional development sessions focus on classroom management or data analysis and are not usually helpful. Being able to read and learn about science was wonderful because I could ask questions of my seminar leader to learn and understand what I will be teaching my students. It was also nice to be able to learn from my colleagues and ask them for ideas for teaching strategies; I received some very helpful ideas from them.*

2021 National Fellow

*Overall, I feel that my experience in the National Initiative this year was extremely rewarding!! It did not disappoint! The organization of the program as well as the communication was prevalent throughout. Pulling off such a program in this manner is a daunting task, but it was done well...I never knew I could have so much fun at a "virtual reception!!" Each seminar leader was just as helpful and available as they would have been in New Haven...The most challenging aspect of having the sessions online are the screen time spent during the day..."Zoom-fatigue" happens today and is a real concern, but I felt that the rewards from participating in this institute were far greater.*

2020 National Fellow

*I think that this program was amazing. I loved it! I also believe that the fact that everything was able to move online in such a short period of time and that it was able to hold on to a lot of its most valuable assets in a new medium really speaks to the strength of the program overall. Being able to work with Yale professors and to gain new knowledge is an incredible opportunity. Having experienced teachers support us in the seminar and in our hometowns is also a great strength of the program. Also, access to support from Yale is very helpful and has an extremely fast response time!*

2020 National Fellow

### 2005-2021 Yale National Initiative Longitudinal Fellow Questionnaire Results

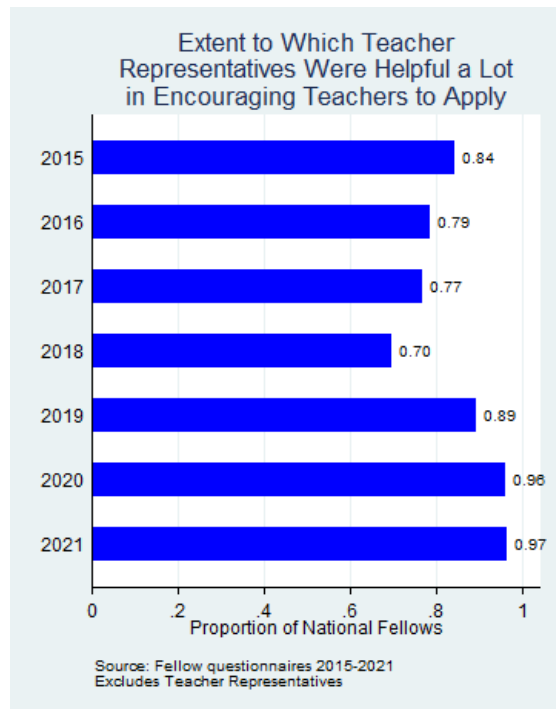
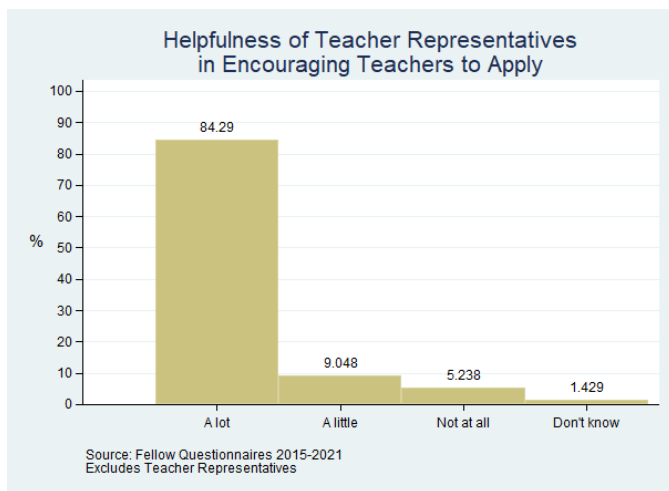
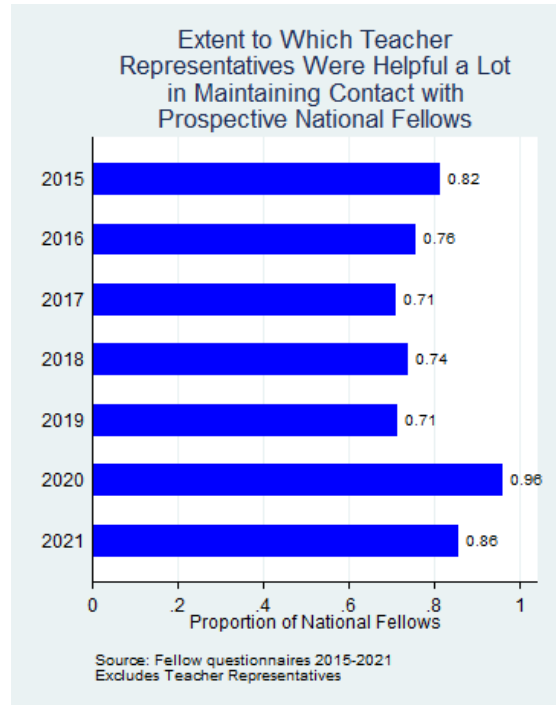
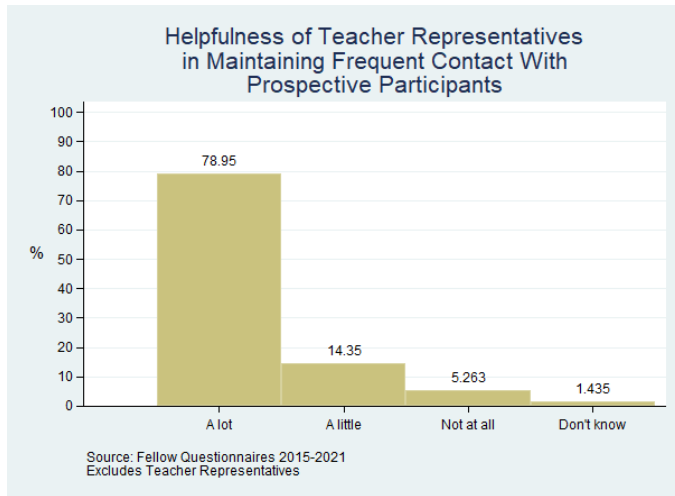
#### *Teacher Representative's Helpfulness to National Fellows (2014-2021)*

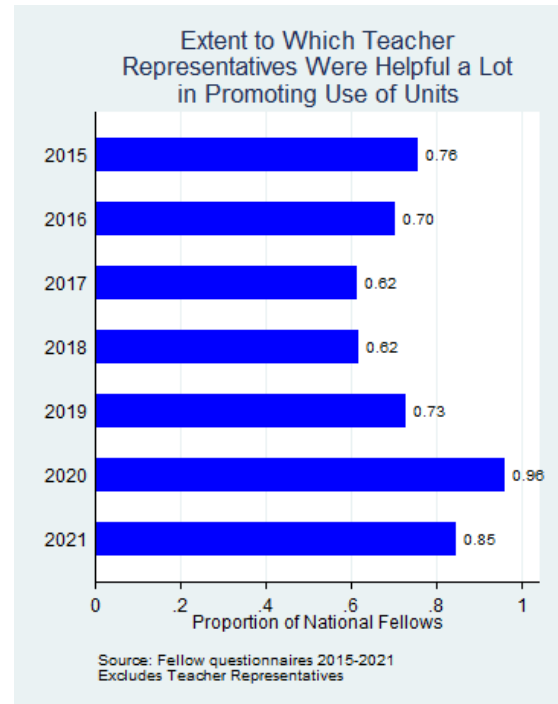
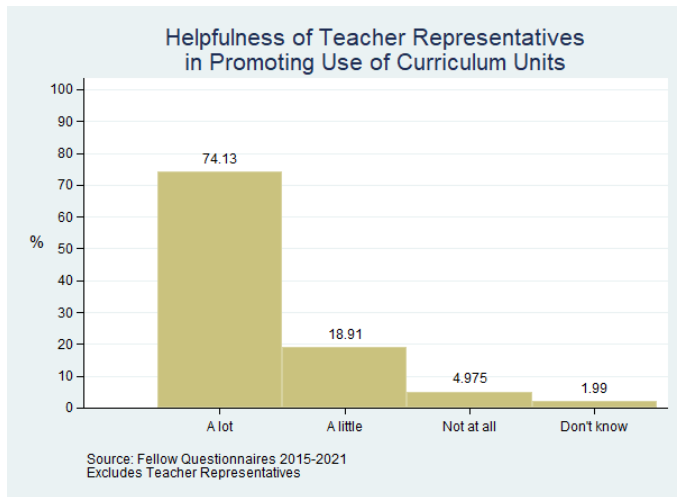
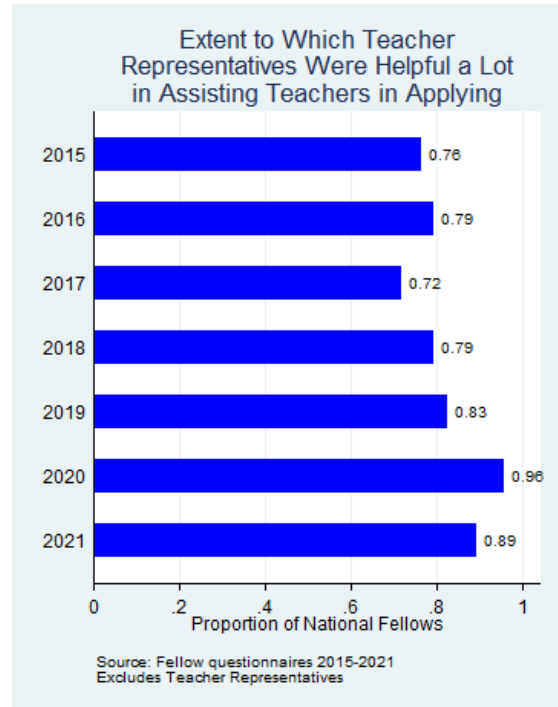
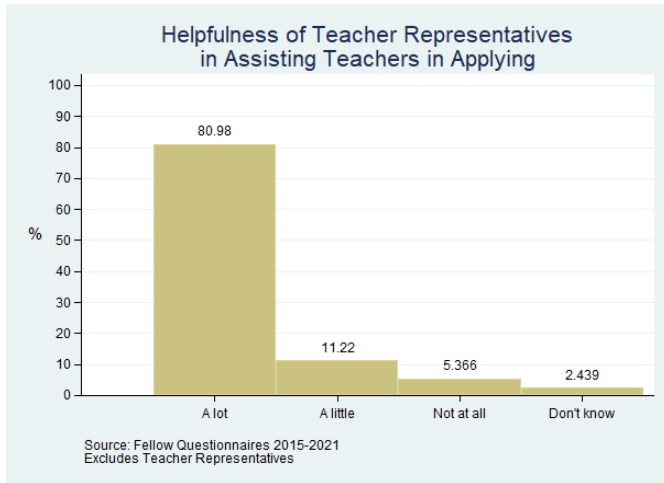
The first contact teachers have with the Yale National Initiative may be through the school district Teacher Representative. Teacher Representatives may be helpful in multiple ways. Fellows in the Yale National Initiative (excluding Teacher Representatives after 2014) were most likely to report that their school district’s Teacher Representative was very helpful in encouraging teachers to apply (83%), assisting teachers in applying (80%), maintaining frequent contact with prospective National Fellows (80%), and promoting use of curriculum units (75%).

	Number	Percent
Maintaining frequent contact with prospective National Fellows	265	
A lot (%)	211	79.62
A little (%)	32	12.08
Not at all (%)	12	4.53
Don't know (%)	10	3.77
Encouraging teachers to apply	266	
A lot (%)	220	82.71
A little (%)	25	9.40
Not at all (%)	11	4.14
Don't know (%)	10	3.76
Assisting teachers in applying	261	
A lot (%)	209	80.08
A little (%)	28	10.73
Not at all (%)	11	4.21
Don't know (%)	13	4.98
Promoting use of curriculum units	255	
A lot (%)	191	74.90
A little (%)	42	16.47
Not at all (%)	12	4.71
Don't know (%)	10	3.92

\* After 2014, these measures exclude Teacher Representatives.

Variations from year to year are expected as Teacher Representatives change, and the performance of Teacher Representatives varies due to changing circumstances. It appears, for example, that Teacher Representatives were especially helpful during the last two years, when the COVID-19 pandemic forced the program to be conducted online. On the whole, in most years at least two thirds of National Fellows found their district’s Teacher Representative to be very helpful in most ways.





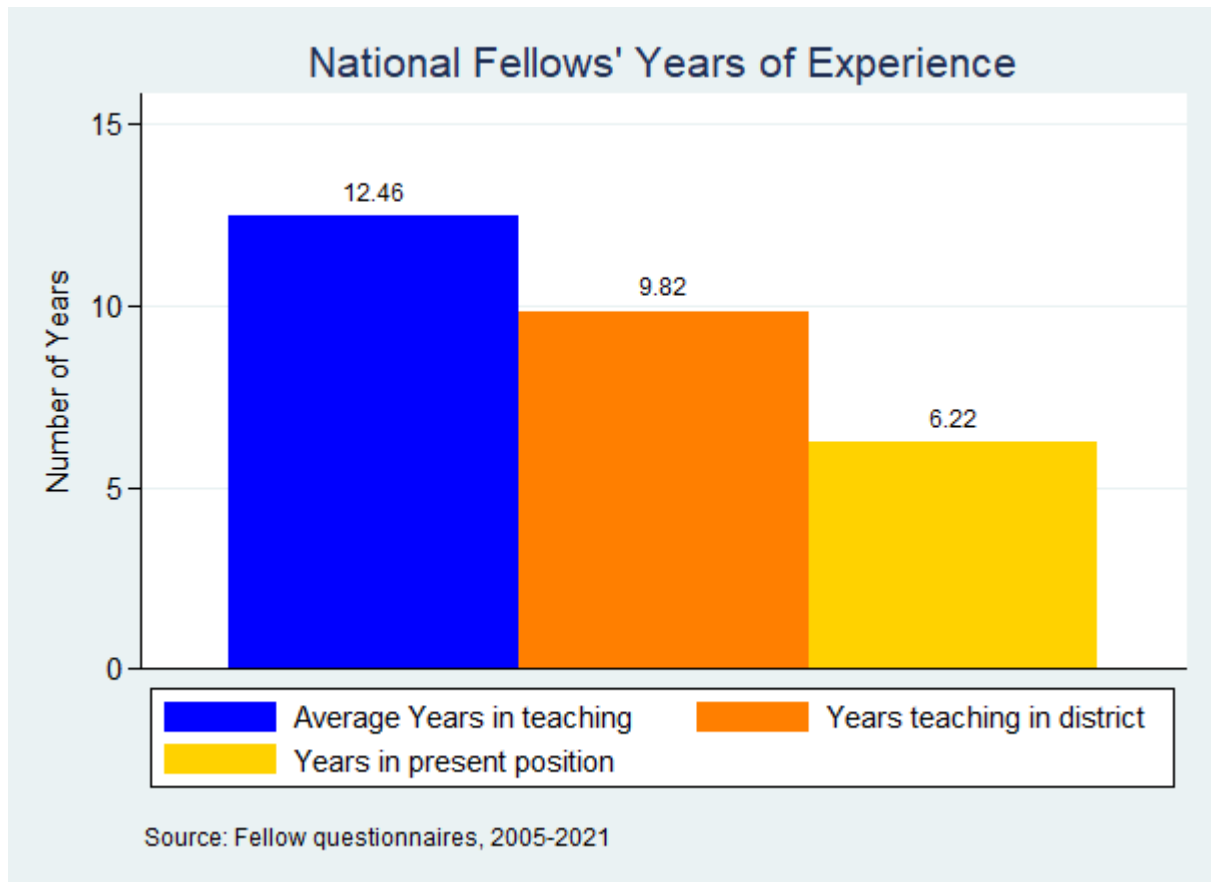
**National Fellows Participating in the Yale National Initiative**

**Teaching Experience (2005-2021)**

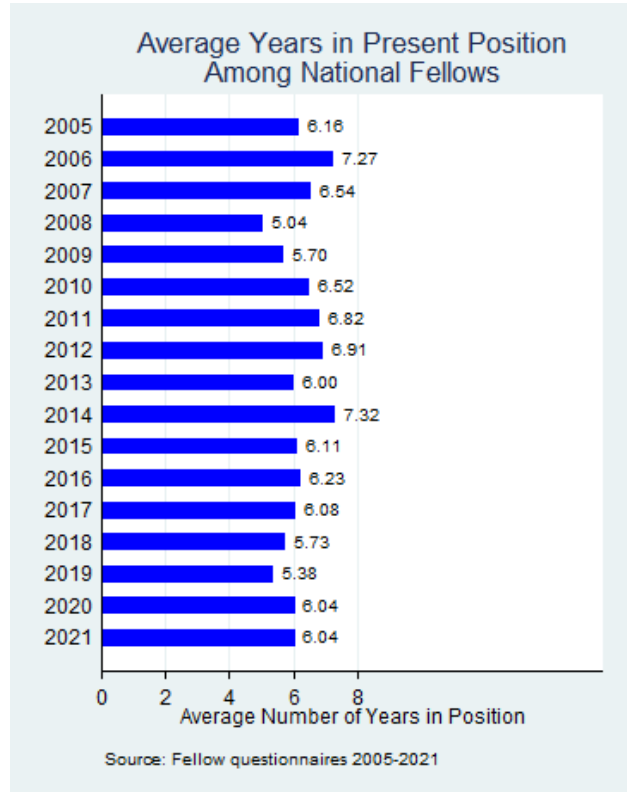
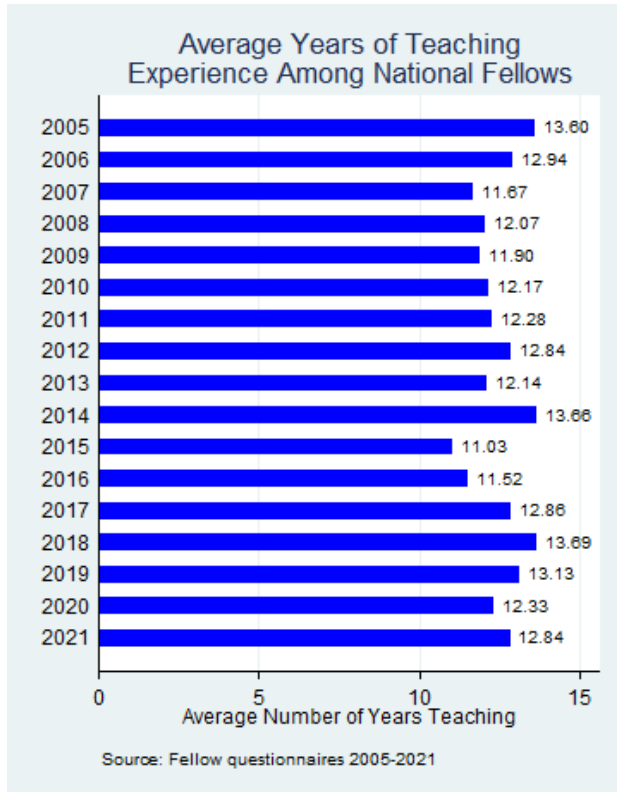
On average, Fellows of the Yale National Initiative had 12 years of teaching experience, 10 of which were in their current school district. The National Fellows included teachers with a wide range of experience, from new teachers who had less than 1 year of teaching experience to highly experienced teachers who had as many as 41 years of teaching experience.

National Fellows had been in their present positions for a shorter time, on average (6 years). Some had been in their present position for less than 1 year.

	Number	Mean	Standard Deviation	Minimum	Maximum
Total years in teaching	986	12.46	8.22	0.00	41.00
Total years teaching in school district	986	9.82	7.45	0.00	41.00
Total years in present position	985	6.22	5.53	0.00	38.00



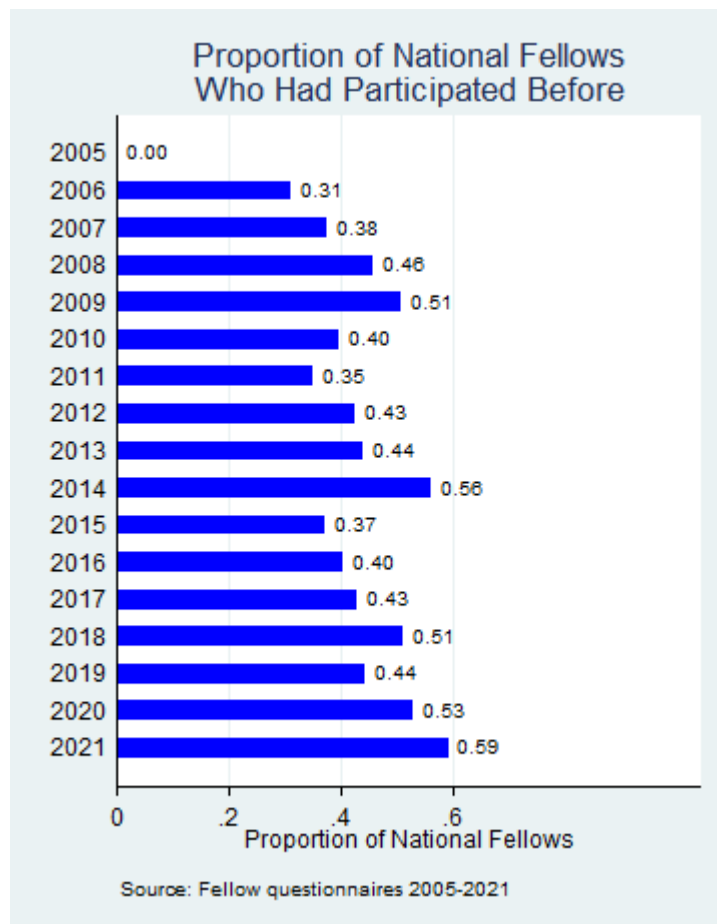
The average years of teaching experience among National Fellows has varied slightly from year to year but within a narrow range (11 to 14 years). Similarly, average years in the teacher’s present position has varied around 6 years between 2005 and 2021.



**Previous Participation in the Yale National Initiative (2005-2021)**

The Yale National Initiative aims to expose the highest number of teachers to the Teachers Institute approach to teacher professional development, but also seeks a balance of new and returning Fellows each year because of the ways that experienced Fellows can support those participating for the first time. As a result, 58% of 2005-2021 National Fellows were participating for the first time (42% had participated at least once before). The percentage of National Fellows who had participated before varied from year to year between 31% in 2006 and 59% in 2021.

	Number	Percent
Participated in a previous National Initiative seminar	987	
	416	42.15



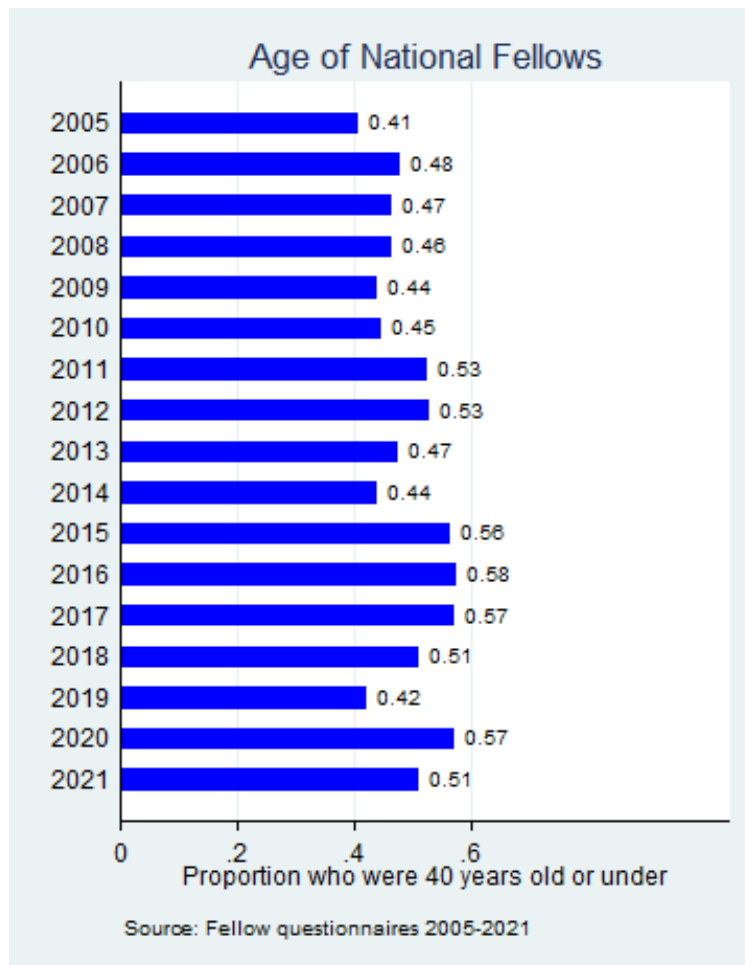


**Age (2005-2021)**

Consistent with the wide range in their years of teaching experience, National Fellows have varied in age. Overall, about half were between 21 and 40 years old, and most of those who were older were between 41 and 60 years old.

	Number	Percent
Age group	983	
21-30 years (%)	177	18.01
31-40 years (%)	310	31.54
41-50 years (%)	245	24.92
51-60 years (%)	220	22.38
61+ years (%)	31	3.15

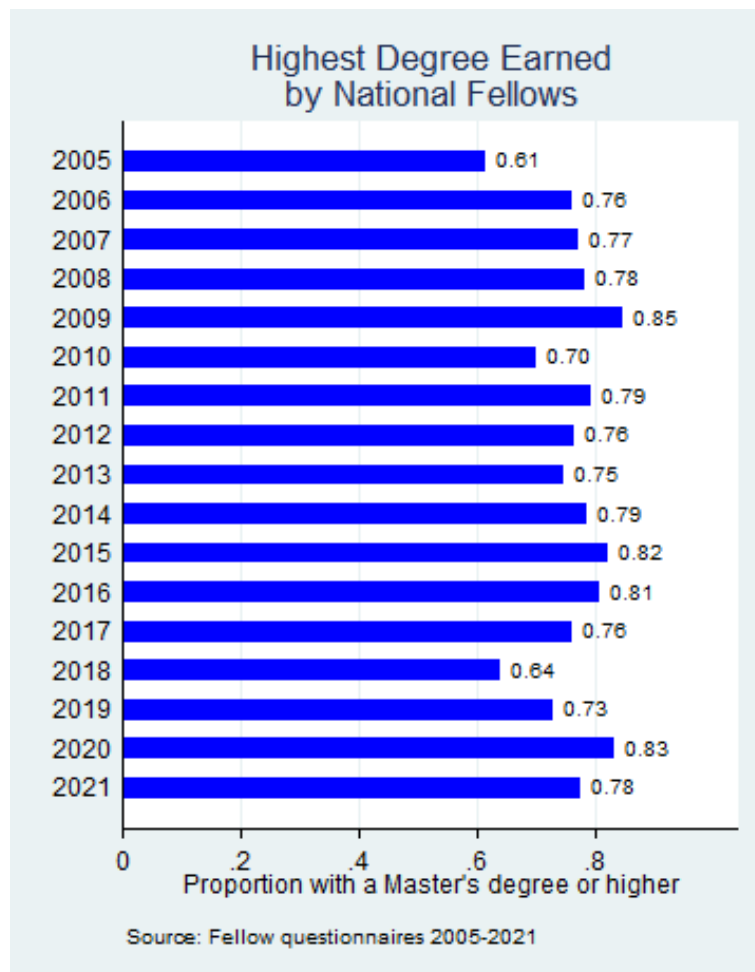
Between 2005 and 2021, the proportion of National Fellows who were age 40 or younger has generally varied between 40% and 60%. No clear trend in the age of Fellows is apparent.



**Degrees (2005-2021)**

Most Fellows of the Yale National Initiative (77%) had at least a master’s degree. Some (8%) had a higher degree or education beyond a master’s degree. The highest degree earned by some National Fellows (23%) was a bachelor’s degree.

Highest degree earned by National Fellows	Number	Percent
Bachelor's degree (%)	229	23.49
Master's degree (%)	669	68.62
Post Master's degree (%)	77	7.90



### Subject Areas (2005-2021)

The highest proportion of Fellows of the Yale National Initiative were teaching subjects in the area of English and language arts (43%). Nearly one third were teaching subjects in the natural sciences (32%) and history and social sciences (31%). One quarter were teaching subjects in mathematics and computer science (26%).

Teachers in high school grades were most likely to be teaching subjects in the areas of English and language arts (39%) and natural sciences (25%), and 22% were teaching subjects in history and social sciences. Teachers in lower grades were more likely to teach subjects in multiple areas. Thus, as the proportion of Fellows teaching in elementary grades has increased over time (see page 32), the proportions of Fellows teaching in all core subject areas have also tended to increase.

The proportion of Fellows teaching in each subject area has varied over the years, partly reflecting variations in seminar subjects over time.

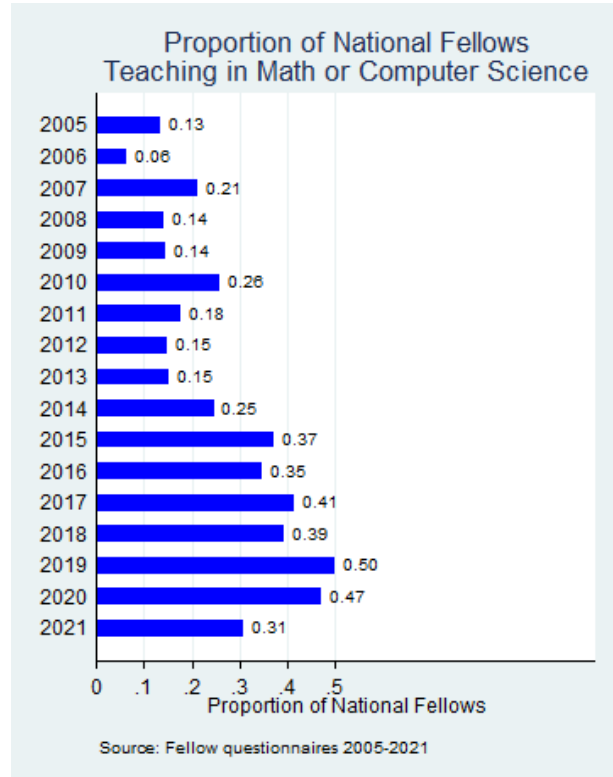
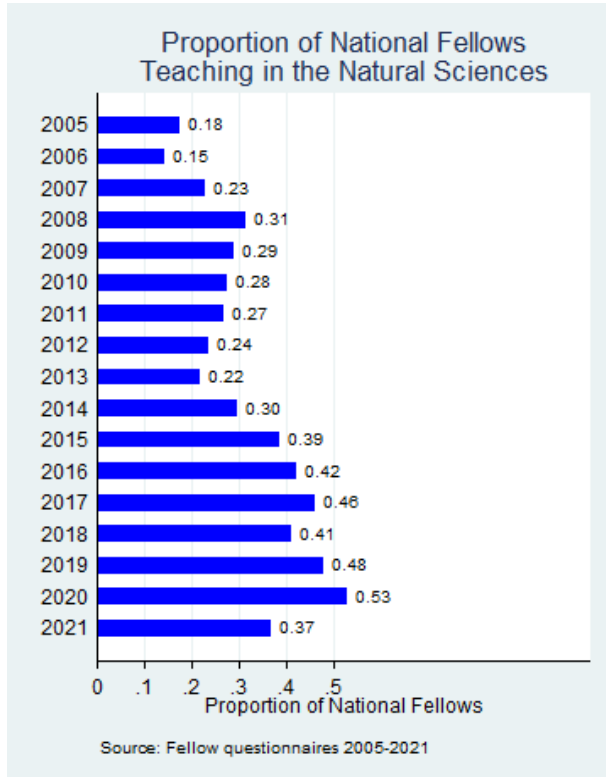
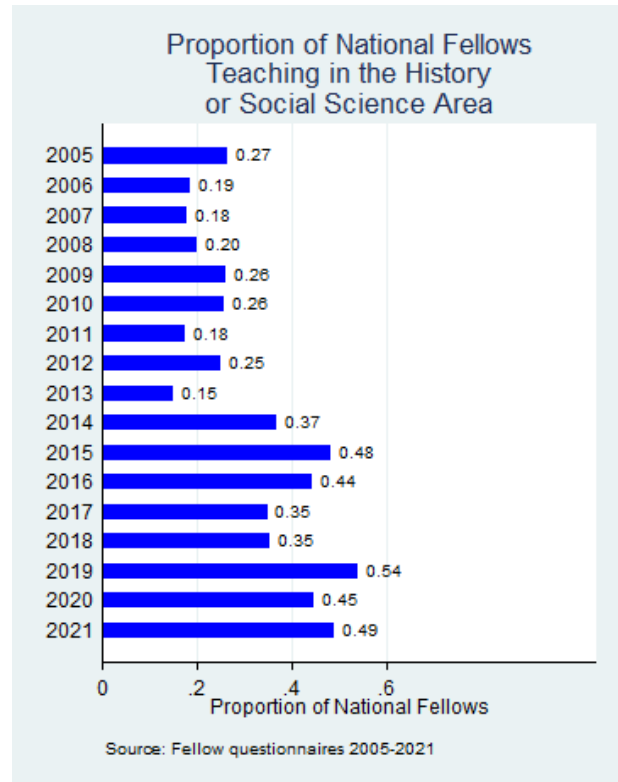
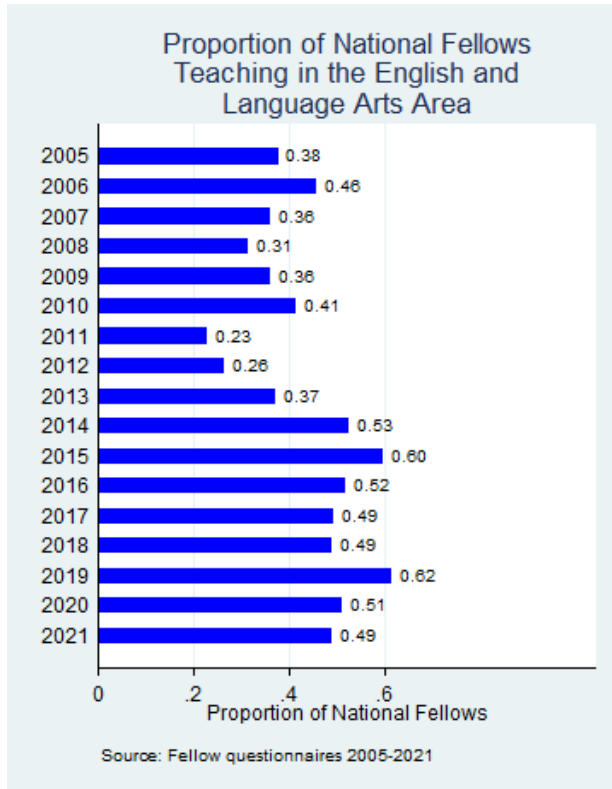
	Number	Percent
	987	
Teach English and Language Arts	420	42.55
Teach History and Social Sciences	306	31.00
Teach Languages Other Than English	46	4.66
Teach Arts and Music	61	6.18
Teach Natural Sciences	318	32.22
Teach Mathematics and Computer Science	254	25.73
Teach Vocational, Career, or Technical Education*	8	1.84
Teach ESL or ESOL	74	7.50
Teach Other (specify)*	20	4.60
<b>Grade K-5 teachers</b>	<b>263</b>	
Teach English and Language Arts	145	55.13
Teach History and Social Sciences	143	54.37
Teach Languages Other Than English	18	6.84
Teach Arts and Music	19	7.22
Teach Natural Sciences	133	50.57
Teach Mathematics and Computer Science	147	55.89
Teach Vocational, Career, or Technical Education*	0	0.00
Teach ESL or ESOL	43	16.35
Teach Other (specify)*	5	3.45
<b>Grade 6-8 teachers</b>	<b>252</b>	
Teach English and Language Arts	93	36.90
Teach History and Social Sciences	61	24.21
Teach Languages Other Than English	6	2.38
Teach Arts and Music	17	6.75
Teach Natural Sciences	67	26.59
Teach Mathematics and Computer Science	61	24.21
Teach Vocational, Career, or Technical Education	3	2.70
Teach ESL or ESOL	19	7.54
Teach Other (specify)	7	6.31
<b>Grade 9-12 teachers</b>	<b>468</b>	
Teach English and Language Arts	182	38.89
Teach History and Social Sciences	102	21.79
Teach Languages Other Than English	21	4.49
Teach Arts and Music	25	5.34
Teach Natural Sciences	118	25.21
Teach Mathematics and Computer Science	46	9.83
Teach Vocational, Career, or Technical Education	5	2.79
Teach ESL or ESOL	12	2.56
Teach Other (specify)	8	4.47

(continued)

	Number	Percent
Teachers in departmentalized classrooms (2014-2021)	277	
Teach English and Language Arts	108	38.99
Teach History and Social Sciences	75	27.08
Teach Languages Other Than English	8	2.89
Teach Arts and Music	12	4.33
Teach Natural Sciences	79	28.52
Teach Mathematics and Computer Science	47	16.97
Teach Vocational, Career, or Technical Education	3	1.08
Teach ESL or ESOL	15	5.42
Teach Other (specify)	13	4.69
Elementary subject specialists (2014-2021)	35	
Teach English and Language Arts	10	28.57
Teach History and Social Sciences	9	25.71
Teach Languages Other Than English	4	11.43
Teach Arts and Music	10	28.57
Teach Natural Sciences	14	40.00
Teach Mathematics and Computer Science	12	34.29
Teach Vocational, Career, or Technical Education	0	0.00
Teach ESL or ESOL	5	14.29
Teach Other (specify)	0	0.00
Teachers in self-contained classrooms (2014-2021)	105	
Teach English and Language Arts	98	93.33
Teach History and Social Sciences	95	90.48
Teach Languages Other Than English	10	9.52
Teach Arts and Music	6	5.71
Teach Natural Sciences	81	77.14
Teach Mathematics and Computer Science	94	89.52
Teach Vocational, Career, or Technical Education	0	0.00
Teach ESL or ESOL	31	29.52
Teach Other (specify)	5	4.76

Note: The proportions add up to more than 100% because National Fellows may teach subjects in more than one area.

\* Not asked before 2014.



Most of the 2005-2021 National Fellows expected to teach in the same subject area in the following school year. The percentage was higher (95%) among National Fellows who taught high school grades.

	Number	Percent
Expected to teach in same subject area next year	845	85.61

The most common subject areas in which the 2005-2021 Fellows of the Yale National Initiative reported majoring at the undergraduate or graduate level include English and language arts (57%), history and social sciences (26%), and natural sciences (18%). Nearly three quarters had a degree in education (73%).

	Number	Percent
	987	
Degree in English and Language Arts	560	56.74
Degree in History and Social Sciences	256	25.94
Degree in Languages Other Than English	76	7.70
Degree in Arts and Music	80	8.11
Degree in Natural Sciences	178	18.03
Degree in Mathematics and Computer Science	60	6.08
Degree in Vocational, Career, or Technical Education	28	2.84
Degree in ESL or ESOL	72	7.29
Degree in Education	723	73.25
Degree in Other (specify)	76	7.70
Grade K-5 teachers	263	
Degree in English and Language Arts	157	59.70
Degree in History and Social Sciences	52	19.77
Degree in Languages Other Than English	31	11.79
Degree in Arts and Music	25	9.51
Degree in Natural Sciences	23	8.75
Degree in Mathematics and Computer Science	17	6.46
Degree in Vocational, Career, or Technical Education	11	4.18
Degree in ESL or ESOL	44	16.73
Degree in Education	239	90.87
Degree in Other (specify)	23	8.75
Grade 6-8 teachers	252	
Degree in English and Language Arts	136	53.97
Degree in History and Social Sciences	76	30.16
Degree in Languages Other Than English	14	5.56
Degree in Arts and Music	19	7.54
Degree in Natural Sciences	34	13.49
Degree in Mathematics and Computer Science	17	6.75
Degree in Vocational, Career, or Technical Education	9	3.57
Degree in ESL or ESOL	21	8.33
Degree in Education	190	75.40
Degree in Other (specify)	21	8.33

(continued)

	Number	Percent
Grade 9-12 teachers	468	
Degree in English and Language Arts	265	56.62
Degree in History and Social Sciences	127	27.14
Degree in Languages Other Than English	29	6.20
Degree in Arts and Music	36	7.69
Degree in Natural Sciences	121	25.85
Degree in Mathematics and Computer Science	26	5.56
Degree in Vocational, Career, or Technical Education	8	1.71
Degree in ESL or ESOL	7	1.50
Degree in Education	293	62.61
Degree in Other (specify)	32	6.84

Note: Percentages add to more than 100% because teachers could report majoring in more than one field.

In most subject areas, equal or higher proportions of National Fellows reported they feel best prepared to teach subjects in that area than teach in that area.

	Number	Percent
All teachers	987	
Best prepared to teach English and Language Arts	443	44.88
Best prepared to teach History and Social Sciences	334	33.84
Best prepared to teach Languages Other Than English	85	8.61
Best prepared to teach Arts and Music	88	8.92
Best prepared to teach Natural Sciences	332	33.64
Best prepared to teach Mathematics and Computer Science	250	25.33
Best prepared to teach Vocational, Career, or Technical Education*	23	5.29
Best prepared to teach ESL or ESOL	92	9.32
Best prepared to teach Other	114	11.55
Grade K-5 teachers	263	
Best prepared to teach English and Language Arts	145	55.13
Best prepared to teach History and Social Sciences	131	49.81
Best prepared to teach Languages Other Than English	28	10.65
Best prepared to teach Arts and Music	28	10.65
Best prepared to teach Natural Sciences	133	50.57
Best prepared to teach Mathematics and Computer Science	130	49.43
Best prepared to teach Vocational, Career, or Technical Education*	4	2.76
Best prepared to teach ESL or ESOL	45	17.11
Best prepared to teach Other	21	7.98
Grade 6-8 teachers	252	
Best prepared to teach English and Language Arts	108	42.86
Best prepared to teach History and Social Sciences	85	33.73
Best prepared to teach Languages Other Than English	17	6.75
Best prepared to teach Arts and Music	26	10.32
Best prepared to teach Natural Sciences	67	26.59
Best prepared to teach Mathematics and Computer Science	68	26.98
Best prepared to teach Vocational, Career, or Technical Education*	8	7.21
Best prepared to teach ESL or ESOL	23	9.13
Best prepared to teach Other	37	14.68

(continued)

	Number	Percent
Grade 9-12 teachers	468	
Best prepared to teach English and Language Arts	189	40.38
Best prepared to teach History and Social Sciences	118	25.21
Best prepared to teach Languages Other Than English	39	8.33
Best prepared to teach Arts and Music	34	7.26
Best prepared to teach Natural Sciences	132	28.21
Best prepared to teach Mathematics and Computer Science	52	11.11
Best prepared to teach Vocational, Career, or Technical Education*	11	6.15
Best prepared to teach ESL or ESOL	24	5.13
Best prepared to teach Other	56	11.97

Note: Percentages add to more than 100% because teachers could report majoring in more than one field.

\* Not asked before 2014

In many states, teachers in kindergarten through fifth grade are not certified in specific subject areas. All grade 6 to 8 teachers and all high school teachers who participated in the Yale National Initiative from 2005 – 2021 reported being certified in at least one subject area.

	Number	Percent
	987	
Certified to teach English	357	36.17
Certified: History and Social Sciences	240	24.32
Certified: Languages Other Than English	54	5.47
Certified: Arts and Music	74	7.50
Certified: Natural Sciences	227	23.00
Certified: Mathematics and Computer Science	160	16.21
Certified: Vocational, Career, or Technical Education*	13	2.99
Certified: English as a Second Language	93	9.42
Certified: Specific Grade Levels	314	31.81
Certified: Special Education	55	5.57
Grade K-5 teachers	263	
Certified: English and Language Arts	65	24.71
Certified: History and Social Sciences	55	20.91
Certified: Languages Other Than English	14	5.32
Certified: Arts and Music	18	6.84
Certified: Natural Sciences	44	16.73
Certified: Mathematics and Computer Science	48	18.25
Certified: Vocational, Career, or Technical Education*	6	4.14
Certified: English as a Second Language	53	20.15
Certified: Specific Grade Levels	183	69.58
Certified: Special Education	9	3.42
Grade 6-8 teachers	252	
Certified to teach English	105	41.67
Certified: History and Social Sciences	71	28.17
Certified: Languages Other Than English	10	3.97
Certified: Arts and Music	28	11.11
Certified: Natural Sciences	59	23.41
Certified: Mathematics and Computer Science	54	21.43
Certified: Vocational, Career, or Technical Education*	2	1.80
Certified: English as a Second Language	26	10.32
Certified: Specific Grade Levels	104	41.27
Certified: Special Education	26	10.32



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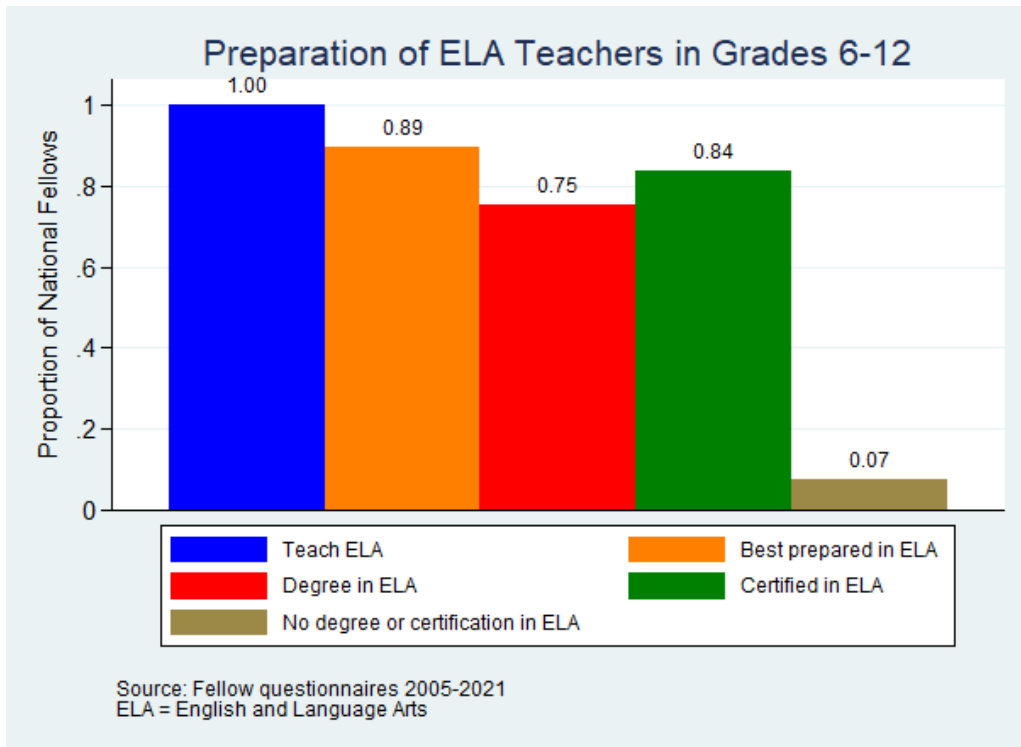
	Number	Percent
Grade 9-12 teachers	468	
Certified to teach English	186	39.74
Certified: History and Social Sciences	114	24.36
Certified: Languages Other Than English	29	6.20
Certified: Arts and Music	28	5.98
Certified: Natural Sciences	124	26.50
Certified: Mathematics and Computer Science	58	12.39
Certified: Vocational, Career, or Technical Education*	5	2.79
Certified: English as a Second Language	14	2.99
Certified: Specific Grade Levels	27	5.77
Certified: Special Education	20	4.27

\* Not asked before 2014

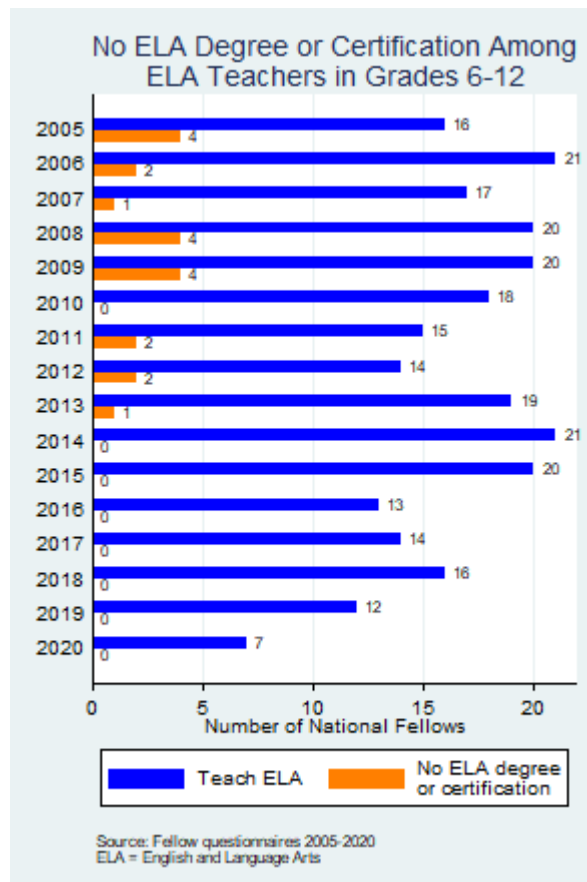
**Subject Area Background of National Fellows Teaching in English Language Arts (2005-2021)**

Among those 2005-2021 National Fellows who taught subjects in the English and Language Arts (ELA) area in grades 6 to 8 or in high school, 75% reported that they had a college or graduate degree in this area and 89% felt best prepared to teach in this area. Nearly three quarters had earned a degree in education. More than one third had an undergraduate degree in ELA and a master’s degree in education. Most (84%) were certified to teach ELA. A small proportion of National Fellows who taught subjects in the ELA area in the middle or high school grades (7%) had neither a degree nor certification in this area. Seminar participation may have been especially beneficial for these National Fellows.

	Number	Percent
Teach English and Language Arts	275	100.00
Expect to teach English and Language Arts	262	95.27
Degree in English and Language Arts	207	75.27
Best prepared to teach English and Language Arts	246	89.45
Certified: English and Language Arts	230	83.64
Has neither a degree nor certification in ELA	20	7.27
Undergraduate degree in English and Language Arts	207	75.27
Postgraduate degree in English and Language Arts	115	41.82
Degree in English and Language Arts	207	75.27
Undergraduate degree in Education	101	36.73
Postgraduate degree in Education	154	56.00
Degree in Education	198	72.00
Has undergraduate degree in ELA & graduate degree in education	104	37.82



Over time, fewer National Fellows teaching ELA subjects have lacked both a degree and certification in ELA.



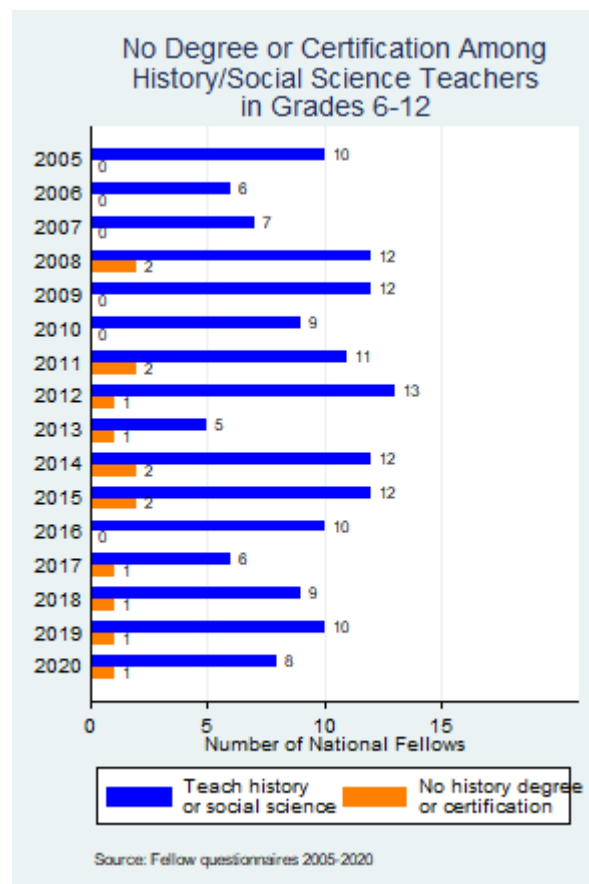
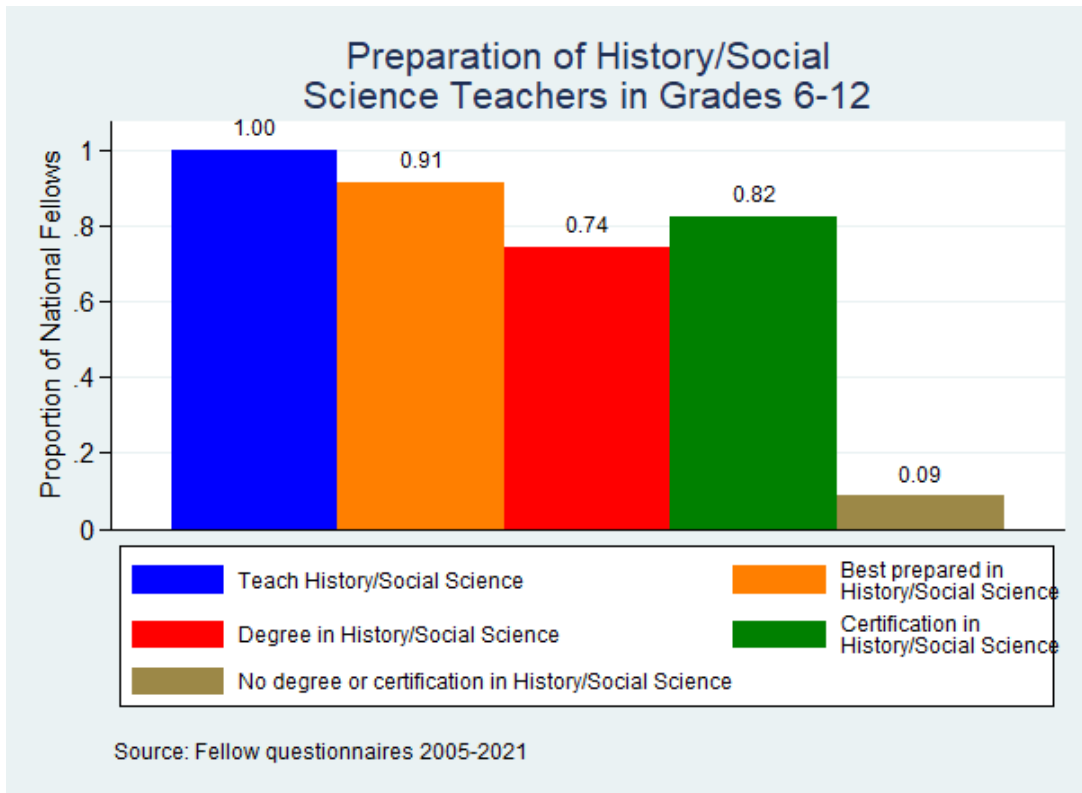
In 2014-2021 it is possible to examine the preparation of ELA teachers in departmentalized classrooms and teachers who were elementary subject specialists. Among these teachers, all had a degree or certification in English and language arts, but only 78 percent were certified to teach in that subject area (in some states certification is not offered in specific subject areas in elementary grades).

	Number	Percent
Teach English and Language Arts	118	
Expect to teach English and Language Arts	118	100.00
Degree in English and Language Arts	115	97.46
Best prepared to teach English and Language Arts	73	100.00
Certified: English and Language Arts	117	99.15
Has neither a degree nor certification in ELA	92	77.97
	118	0.00

**Subject Area Background of National Fellows Teaching in History and Social Sciences (2005-2021)**

Among those 2005-2021 National Fellows who taught subjects in history or the social sciences in grades 6-12, three quarters (74%) had a degree in this subject area, and 91% felt best prepared to teach in this area. Nearly two thirds had earned a degree in education, and nearly one third had an undergraduate degree in history or a social science and a master’s degree in education. Most National Fellows teaching history or a social science subject (82%) had certification to teach it. A small proportion (9%) had neither a degree nor certification in the history/social sciences subject area.

	Number	Percent
Teach History and Social Sciences	163	
Expect to teach History and Social Sciences	163	100.00
Degree in History and Social Sciences	152	93.25
Best prepared to teach History and Social Sciences	121	74.23
Certified: History and Social Sciences	149	91.41
Has neither a degree nor certification in history or social sciences	134	82.21
	14	8.59
Undergraduate degree in History and Social Sciences	107	65.64
Postgraduate degree in History and Social Sciences	46	28.22
Degree in History and Social Sciences	121	74.23
Undergraduate degree in Education	44	26.99
Postgraduate degree in Education	79	48.47
Degree in Education	100	61.35
Has undergraduate degree in history or social science & a graduate degree in education	50	30.92



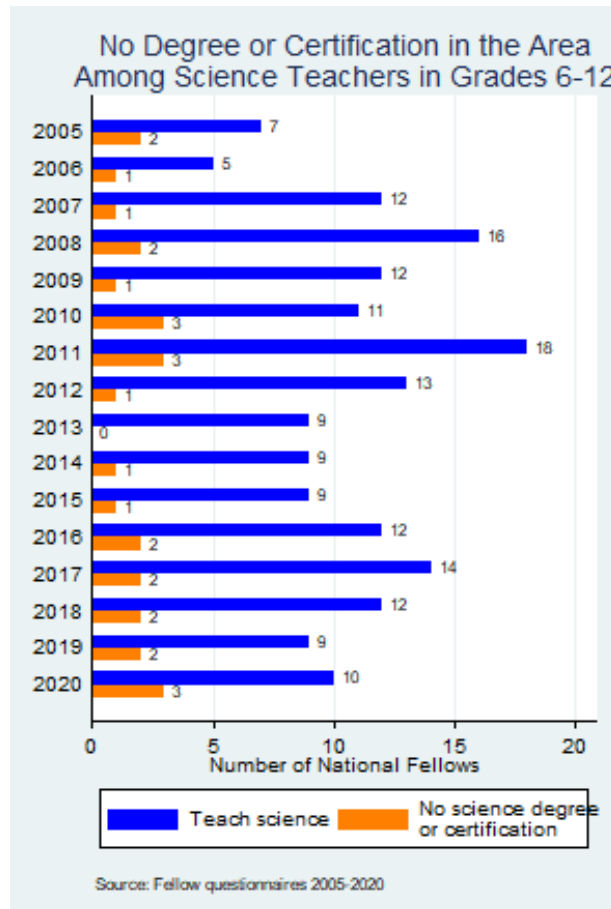
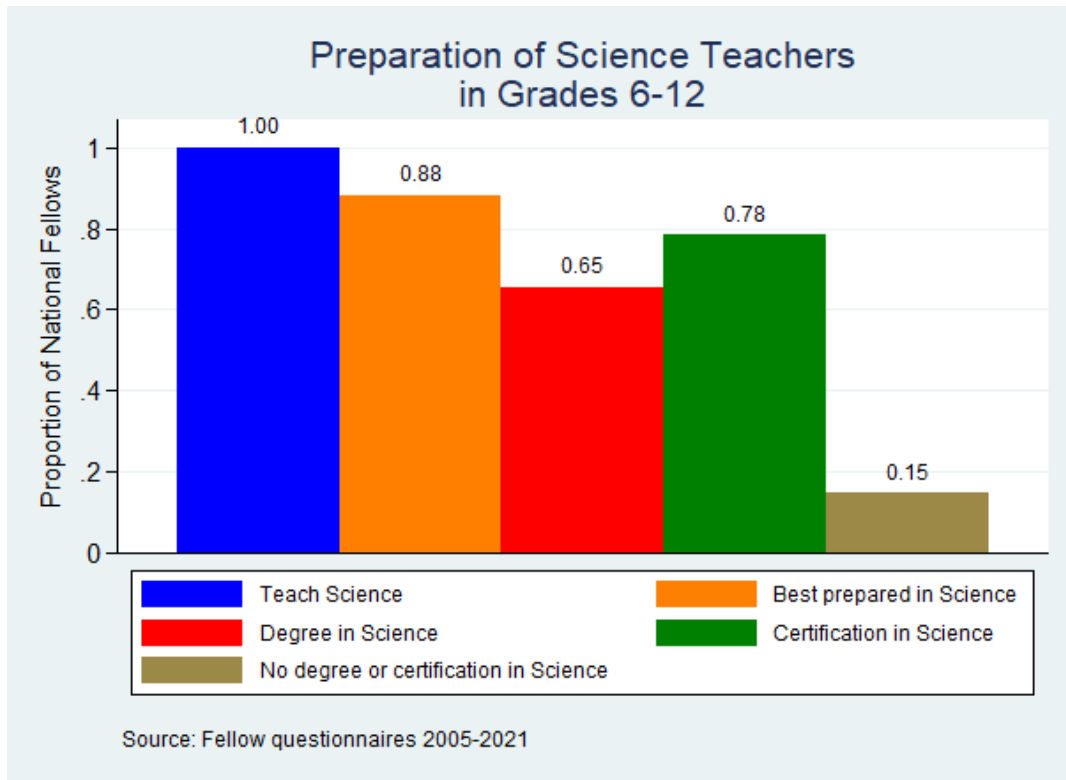
In 2014-2021 it is possible to examine the preparation of history and social science teachers in departmentalized classrooms and teachers who were elementary subject specialists. Thirteen percent of these teachers did not have a degree or certification in history or social science subjects, and only 76 percent were certified to teach in that subject area (in some states certification is not offered in specific subject areas in elementary grades).

	Number	Percent
Teach History and Social Sciences	84	100.00
Expect to teach History and Social Sciences	80	95.24
Degree in History and Social Sciences	57	67.86
Best prepared to teach History and Social Sciences	78	92.86
Certified: History and Social Sciences	64	76.19
Has neither a degree nor certification in history or social sciences	11	13.10

**Subject Area Background of National Fellows Teaching in Natural Sciences (2005-2021)**

Among those 2005-2021 National Fellows who taught subjects in the natural sciences in grades 6 to 8 or in high school, two thirds (65%) reported that they have a degree in this area and 88% felt best prepared to teach in this area. Two thirds of National Fellows who taught subjects in the natural sciences had a degree in education, and nearly one third (30%) had an undergraduate degree in science and a master’s degree in education. More than three quarters of National Fellows who taught science (78%) reported having certification in this area. Less than one fifth (15%) had neither a degree nor certification in the natural sciences.

	Number	Percent
Teach Natural Sciences	185	100.00
Expect to teach Natural Sciences	177	95.68
Degree in Natural Sciences	121	65.41
Best prepared to teach Natural Sciences	163	88.11
Certified: Natural Sciences	145	78.38
Has neither a degree nor certification in a natural science	27	14.59
Undergraduate degree in Natural Sciences	112	60.54
Postgraduate degree in Natural Sciences	38	20.54
Degree in Natural Sciences	121	65.41
Undergraduate degree in Education	52	28.11
Postgraduate degree in Education	98	52.97
Degree in Education	122	65.95
Has undergraduate degree in science & a graduate degree in education	56	30.27



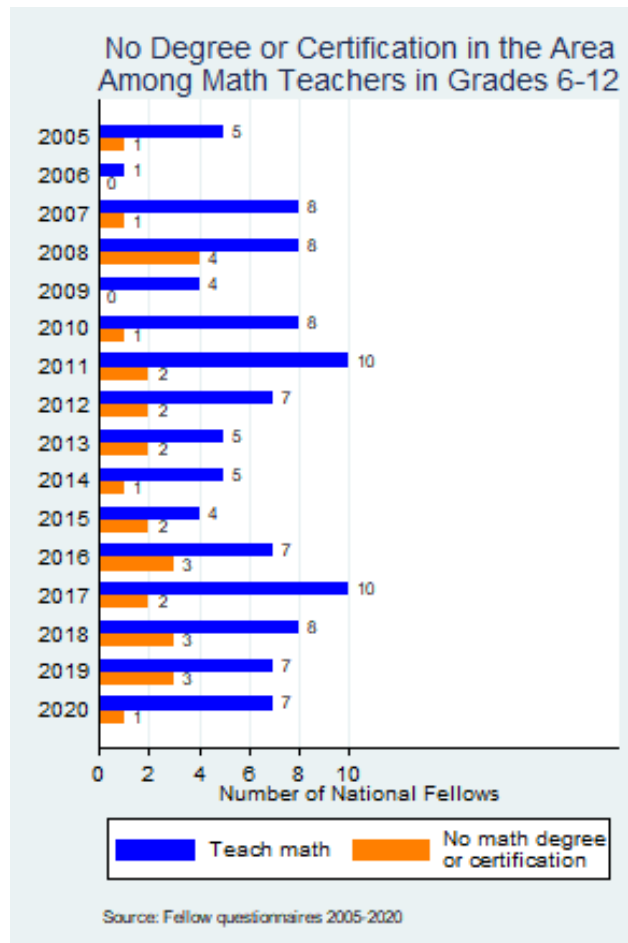
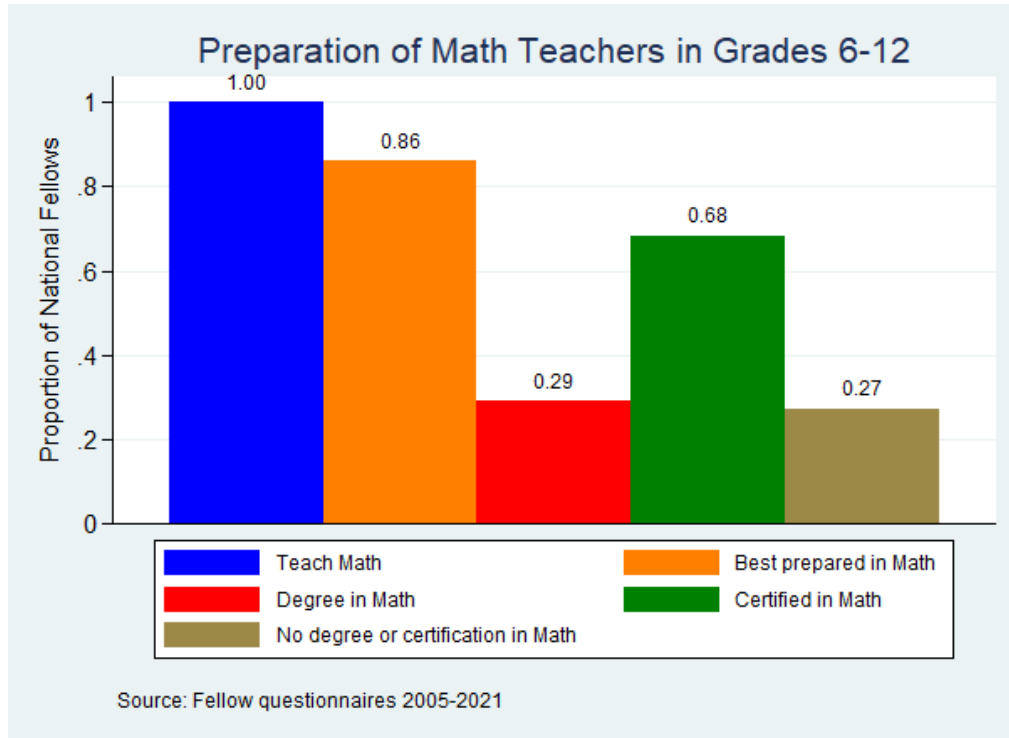
In 2014-2021 it is possible to examine the preparation of science teachers in departmentalized classrooms and teachers who were elementary subject specialists. One quarter of these teachers did not have a degree or certification in a science subject. Slightly less than two thirds were certified to teach a science subject (in some states certification is not offered in specific subject areas in elementary grades).

	Number	Percent
Teach Natural Sciences	93	100.00
Expect to teach Natural Sciences	88	94.62
Degree in Natural Sciences	53	56.99
Best prepared to teach Natural Sciences	90	96.77
Certified: Natural Sciences	60	64.52
Has neither a degree nor certification in a natural science	23	24.73

### ***Subject Area Background of National Fellows Teaching in Mathematics and Computer Science (2005-2021)***

Among the 2005-2021 National Fellows who taught in the mathematics and computer science area in grades 6 to 12, slightly less than one third (29%) had majored in that area. More than three quarters (86%) felt best prepared to teach in that area, however. Three quarters of National Fellows who taught mathematics or computer science had a degree in education. A small proportion of National Fellows teaching in this area had an undergraduate degree in a mathematics or computer science subject and a master's degree in education. Two thirds of 2005-2021 National Fellows who taught mathematics or computer science (68%) were certified to teach in this area. More than one quarter (27%) had neither a degree nor certification to teach in the mathematics and computer science area.

	Number	Percent
Teach Mathematics and Computer Science	107	100.00
Expect to teach Mathematics and Computer Science	96	89.72
Degree in Mathematics and Computer Science	31	28.97
Best prepared to teach Mathematics and Computer Science	92	85.98
Certified: Mathematics and Computer Science	73	68.22
Has neither a degree nor certification in math or computer science	29	27.10
Undergraduate degree in Mathematics and Computer Science	25	23.36
Postgraduate degree in Mathematics and Computer Science	11	10.28
Degree in Mathematics and Computer Science	31	28.97
Undergraduate degree in Education	38	35.51
Postgraduate degree in Education	63	58.88
Degree in Education	81	75.70
Has undergraduate degree in math & a graduate degree in education	15	14.02





In 2014-2021 it is possible to examine the preparation of math/computer science teachers in departmentalized classrooms and teachers who were elementary subject specialists. More than one third of these teachers did not have a degree or certification in a math or computer science subject. Nearly half were not certified to teach a math or computer science subject (in some states certification is not offered in specific subject areas in elementary grades).

	Number	Percent
Teach Mathematics and Computer Science	59	100.00
Expect to teach Mathematics and Computer Science	55	93.22
Degree in Mathematics and Computer Science	16	27.12
Best prepared to teach Mathematics and Computer Science	53	89.83
Certified: Mathematics and Computer Science	33	55.56
Has neither a degree nor certification in math or computer science	22	37.04

**Grades Taught by National Fellows (2005-2021)**

Fellows of the Yale National Initiative included teachers across all grades. Slightly more than one quarter of 2005-2021 National Fellows (29%) taught elementary grades, a similar proportion (29%) taught middle grades, and nearly half (48%) taught high school grades.

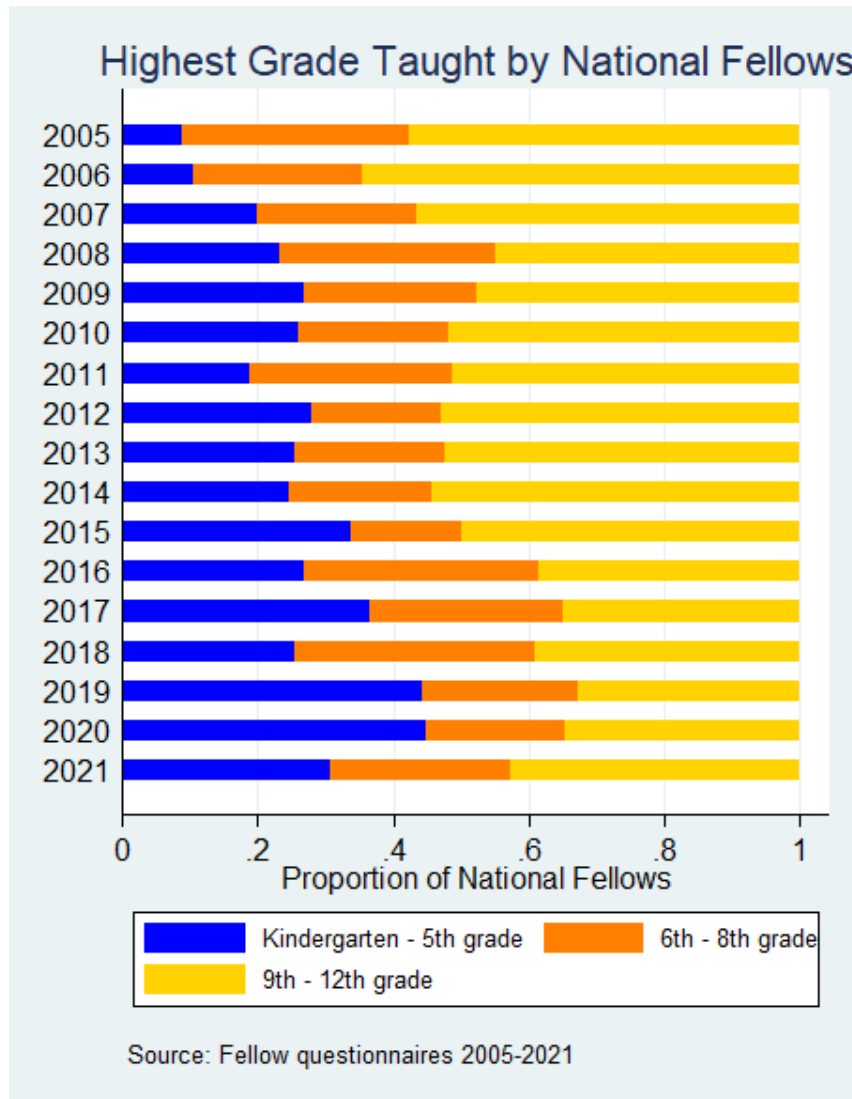
Grades	Number	Percent
	983	
Teach kindergarten	56	5.70
Teach grade 1	64	6.51
Teach grade 2	69	7.02
Teach grade 3	98	9.97
Teach grade 4	102	10.38
Teach grade 5	98	9.97
Teach grade 6	134	13.63
Teach grade 7	146	14.85
Teach grade 8	176	17.90
Teach grade 9	257	26.14
Teach grade 10	306	31.13
Teach grade 11	366	37.23
Teach grade 12	342	34.79
Grades K-5	287	29.20
Grades 6 through 8	283	28.79
Grades 9 through 12	468	47.61

Note: Percentages add up to more than 100% because some National Fellows teach more than one grade.

When National Fellows are grouped according to the highest grade they taught, one quarter taught elementary grades (but not higher grades), one quarter taught middle grades (but not high school grades), and half taught high school grades.

Highest grade range taught	Number	Percent
Grades K-5 (%)	263	26.75
Grades 6-8 (%)	252	25.64
Grades 9-12 (%)	468	47.61

While the distribution of National Fellows across grade levels has varied across years, there has generally been a slight decrease in the proportion of National Fellows teaching high school grades and an increase in the proportion of National Fellows teaching elementary grades over time.



### *Grades National Fellows Expect to Teach in Following Year (2014-2021)*

Few Fellows participating in the Initiative expected to teach a different grade in the next school year. Most of the 2014-2021 Fellows of the Yale National Initiative expected to teach in the same grade(s) in the year following their Initiative participation.

Variable	Number	Percent
Expect to teach same grade next year	435	90.80

Thus, the distribution of grades that 2014-2021 National Fellows expected to teach in the following school year is generally similar to the distribution of grades they were currently teaching. Slightly more, however, expected to be teaching elementary grades and slightly fewer expected to teach high school grades than were currently doing so.

	Number	Percent
Expect to teach kindergarten	36	8.28
Expect to teach grade 1	33	7.59
Expect to teach grade 2	38	8.74
Expect to teach grade 3	47	10.80
Expect to teach grade 4	60	13.79
Expect to teach grade 5	53	12.18
Expect to teach grade 6	48	11.03
Expect to teach grade 7	63	14.48
Expect to teach grade 8	73	16.78
Expect to teach grade 9	80	18.39
Expect to teach grade 10	101	23.22
Expect to teach grade 11	135	31.03
Expect to teach grade 12	118	27.13
Expect to teach grades K through 5	156	35.86
Expect to teach grades 6 through 8	122	28.05
Expect to teach grades 9 through 12	177	40.69

### *Reasons National Fellows Participated*

#### *Incentives to Participate (2005-2021)*

At least 90% of the 2005-2021 Fellows of the Yale National Initiative reported that the following were important incentives that attracted them to participate: the opportunity to develop materials to motivate their students (97%); the opportunity to increase their mastery of the subject they teach (97%); the opportunity for intellectual stimulation (96%); the opportunity to develop curriculum that fits their needs (96%); and the opportunity to work with university faculty (94%).

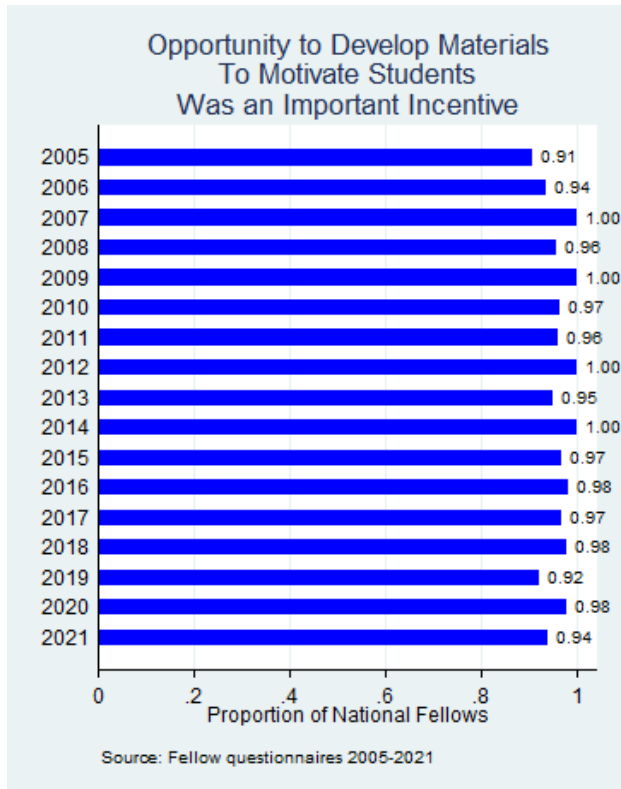
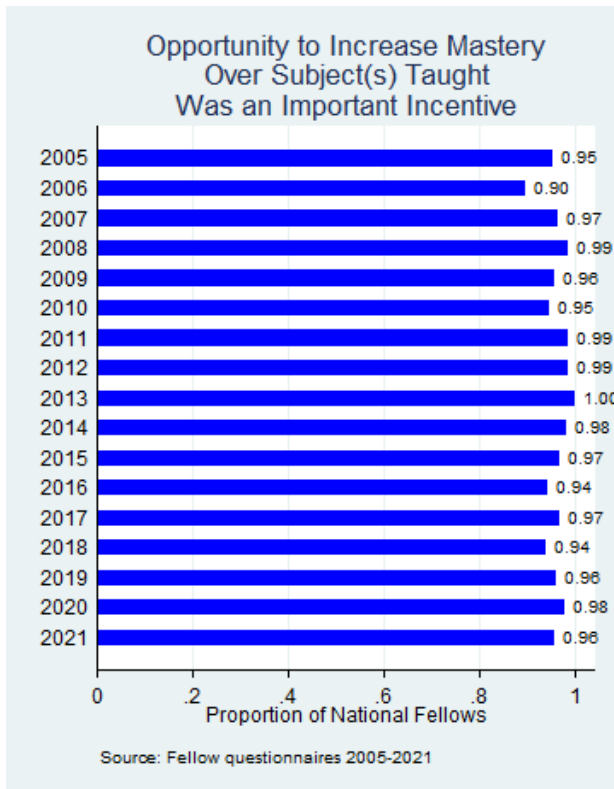
In addition, at least two thirds of the 2005-2021 National Fellows reported that the opportunity to work with teachers from other schools (88%); the possibility of increasing control over the curriculum they teach (77%); the opportunity to develop curriculum to implement standards (74%), the opportunity for interdisciplinary work (70%), and access to university academic facilities such as the library (67%) were important incentives to participate.

	Number	Percent
Opportunity to work with university faculty	981	
An important incentive (%)	923	94.09
A minor incentive (%)	51	5.20
Not an incentive (%)	7	0.71
Opportunity to work with teachers from other schools	981	
An important incentive (%)	867	88.38
A minor incentive (%)	109	11.11
Not an incentive (%)	5	0.51
Opportunity to develop curriculum that fits my needs	980	
An important incentive (%)	937	95.61
A minor incentive (%)	42	4.29
Not an incentive (%)	1	0.10
Opportunity to have my work published*	439	
An important incentive (%)	175	39.86
A minor incentive (%)	188	42.82
Not an incentive (%)	76	17.31
Opportunity to have my course of study recognized for credit in a degree program*	432	
An important incentive (%)	69	15.97
A minor incentive (%)	80	18.52
Not an incentive (%)	283	65.51
Opportunity to have my course of study recognized in my teacher evaluation*	431	
An important incentive (%)	105	24.36
A minor incentive (%)	150	34.80
Not an incentive (%)	176	40.84
Opportunity for interdisciplinary work	975	
An important incentive (%)	678	69.54
A minor incentive (%)	247	25.33
Not an incentive (%)	50	5.13
Access to university academic facilities, such as the library	982	
An important incentive (%)	655	66.70
A minor incentive (%)	277	28.21
Not an incentive (%)	50	5.09
Access to university computer facilities	976	
An important incentive (%)	222	22.75
A minor incentive (%)	364	37.30
Not an incentive (%)	390	39.96
Possibility of increasing my control over the curriculum I teach	981	
An important incentive (%)	754	76.86
A minor incentive (%)	170	17.33
Not an incentive (%)	57	5.81
Opportunity to increase my mastery of the subject(s) I teach	982	
An important incentive (%)	948	96.54
A minor incentive (%)	31	3.16
Not an incentive (%)	3	0.31

(continued)

	Number	Percent
Opportunity to develop materials to motivate my students	981	
An important incentive (%)	949	96.74
A minor incentive (%)	31	3.16
Not an incentive (%)	1	0.10
Opportunity for intellectual stimulation	980	
An important incentive (%)	944	96.33
A minor incentive (%)	33	3.37
Not an incentive (%)	3	0.31
Stipend	974	
An important incentive (%)	340	34.91
A minor incentive (%)	486	49.90
Not an incentive (%)	148	15.20
Opportunity to fulfill my professional development plan	973	
An important incentive (%)	538	55.29
A minor incentive (%)	325	33.40
Not an incentive (%)	110	11.31
Opportunity to develop curriculum to implement standards*	434	
An important incentive (%)	322	74.19
A minor incentive (%)	87	20.05
Not an incentive (%)	25	5.76

\* Not asked in all years.

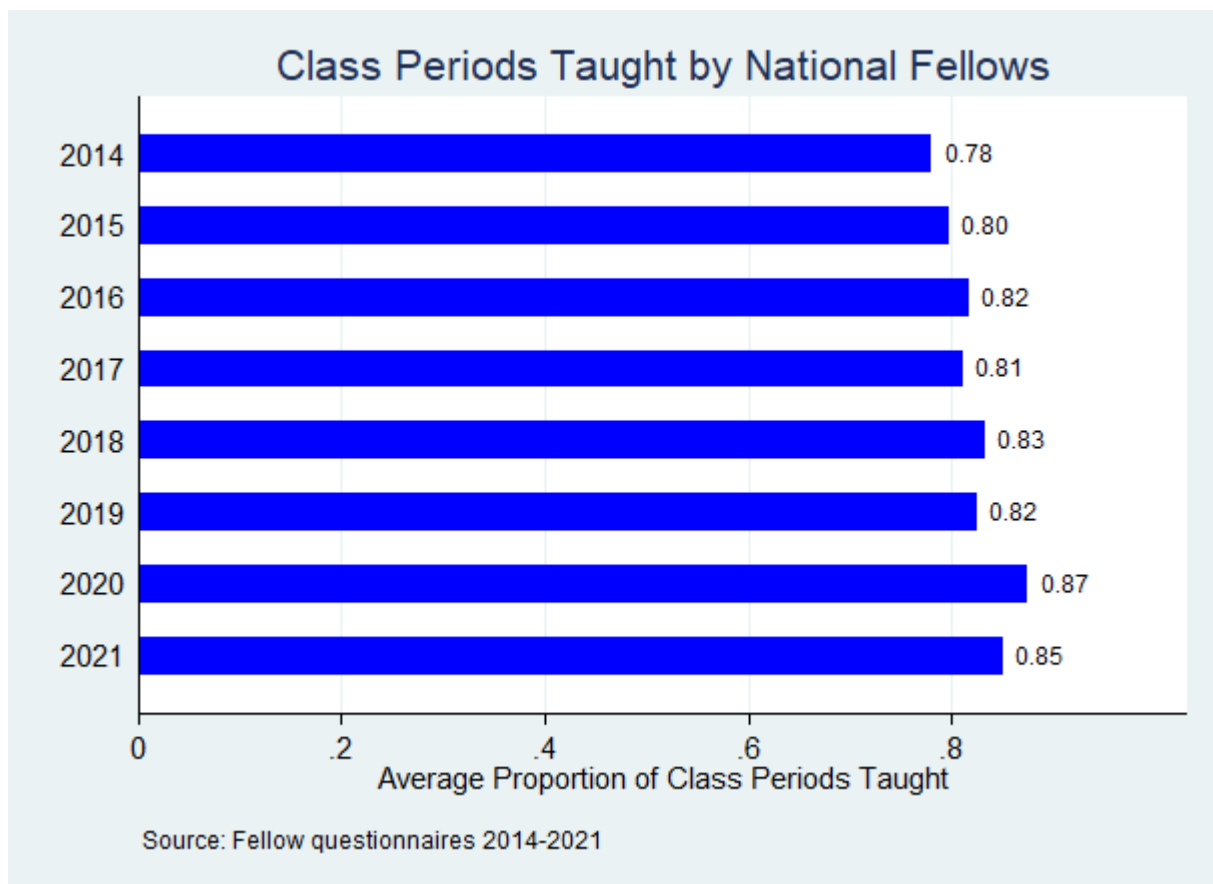


**Teaching Context of Fellows Participating in the Yale National Initiative**

**Class Periods Taught (2014-2021)**

On average, 2014-2021 Fellows of the Yale National Initiative who didn't teach in self-contained classrooms taught 5 out of 6 class periods a day, or 82% of the class periods in a typical day.

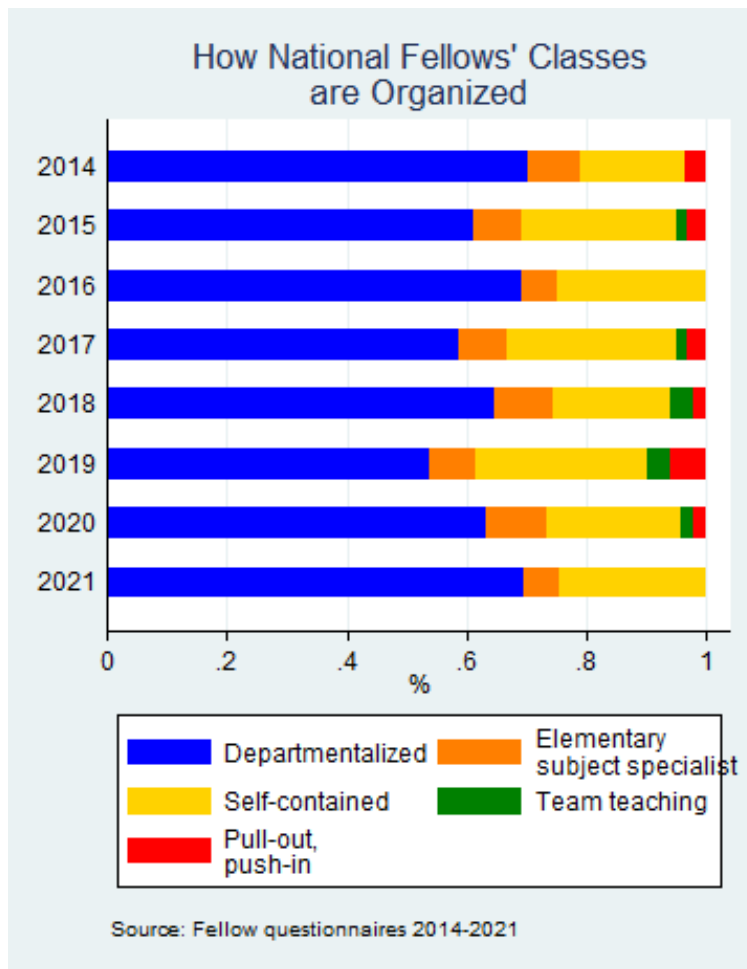
	Number	Mean	Standard Deviation	Minimum	Maximum
Number of class periods teach in typical day	328	4.48	1.21	2.00	9.00
Number of class periods in a typical day	327	5.60	1.69	2.00	10.00
Proportion of class periods taught in a typical day	327	0.82	0.14	0.50	1.00



### How Classes are Organized (2014-2021)

Nearly two thirds of the 2014-2021 Fellows of the Yale National Initiative (64%) instructed several classes of different students most or all of the day in one or more subjects (sometimes called departmentalized instruction). Nearly one quarter of National Fellows (24%) taught in a self-contained classroom in which they instructed the same group of students all or most of the day in multiple subjects. Eight percent of National Fellows were elementary teachers who taught only one subject to different classes (elementary subject specialists). A few National Fellows taught in classrooms with pull-out/push-in instruction (3%) or team teaching (2%).

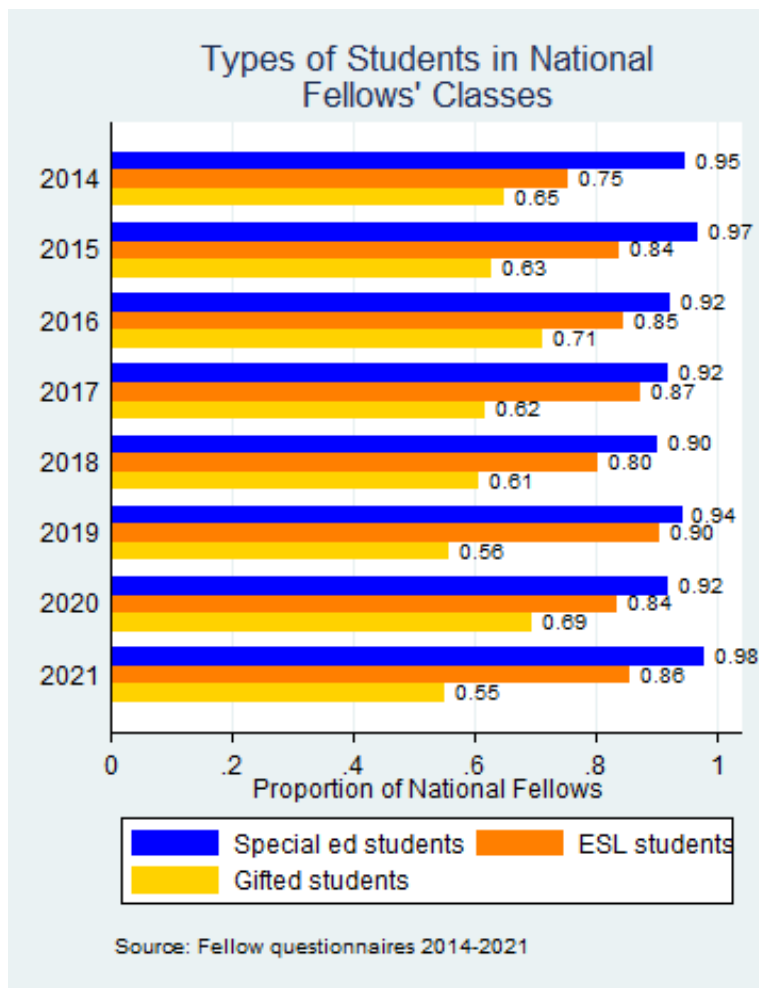
	Number	Percent
How classes are organized	435	
Departmentalized instruction (%)	277	63.68
Elementary subject specialist (%)	35	8.05
Self-contained class (%)	105	24.14
Team teaching (%)	7	1.61
Pull-out/push-in instruction (%)	11	2.53



***Inclusion of Special Education, ESL, and Gifted & Talented Students (2014-2021)***

Nearly all 2014-2021 National Fellows (94%) taught classes that included special education students. Nearly two thirds of the 2014-2021 National Fellows (63%) taught classes that included gifted and talented students. Most of the 2014-2021 National Fellows (84%) taught classes that included students for whom English is their second language.

	Number	Percent
	435	
Classes include special ed students	408	93.79
Classes include ESL students	365	83.91
Classes include GATE students	273	62.76





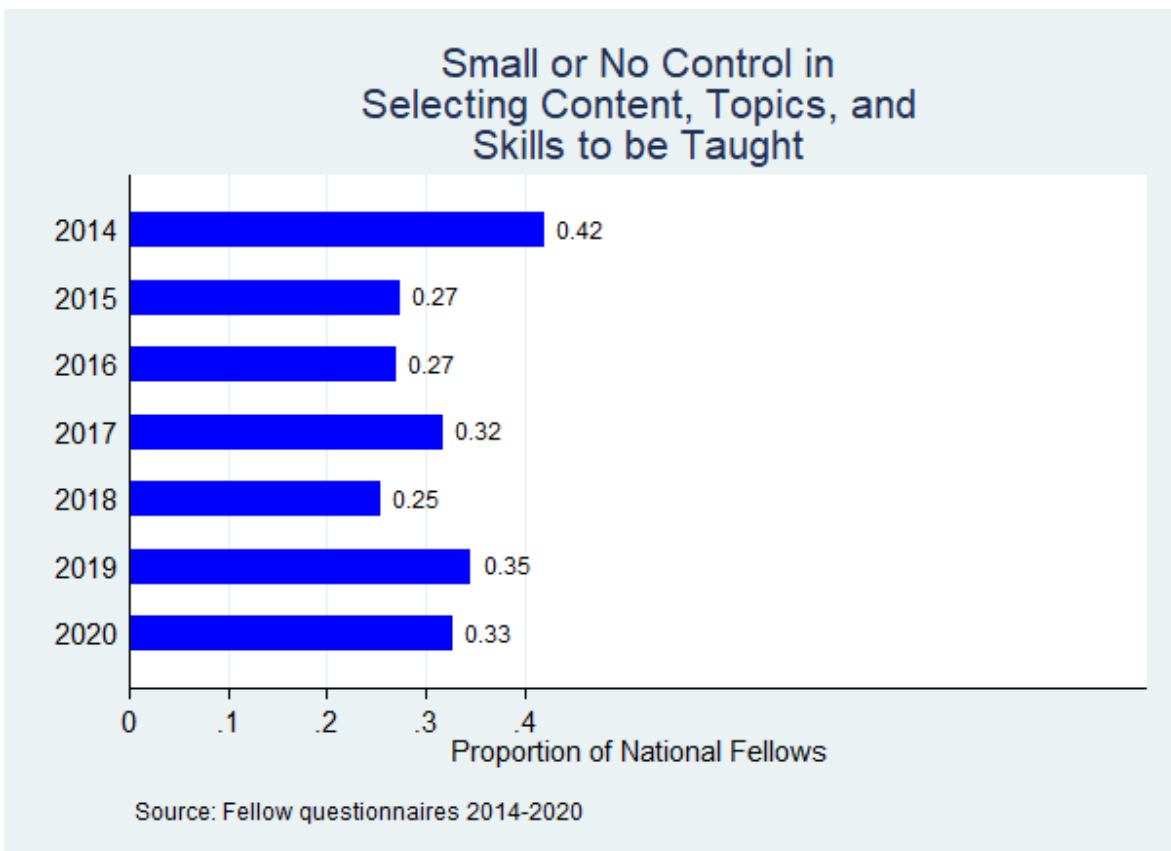
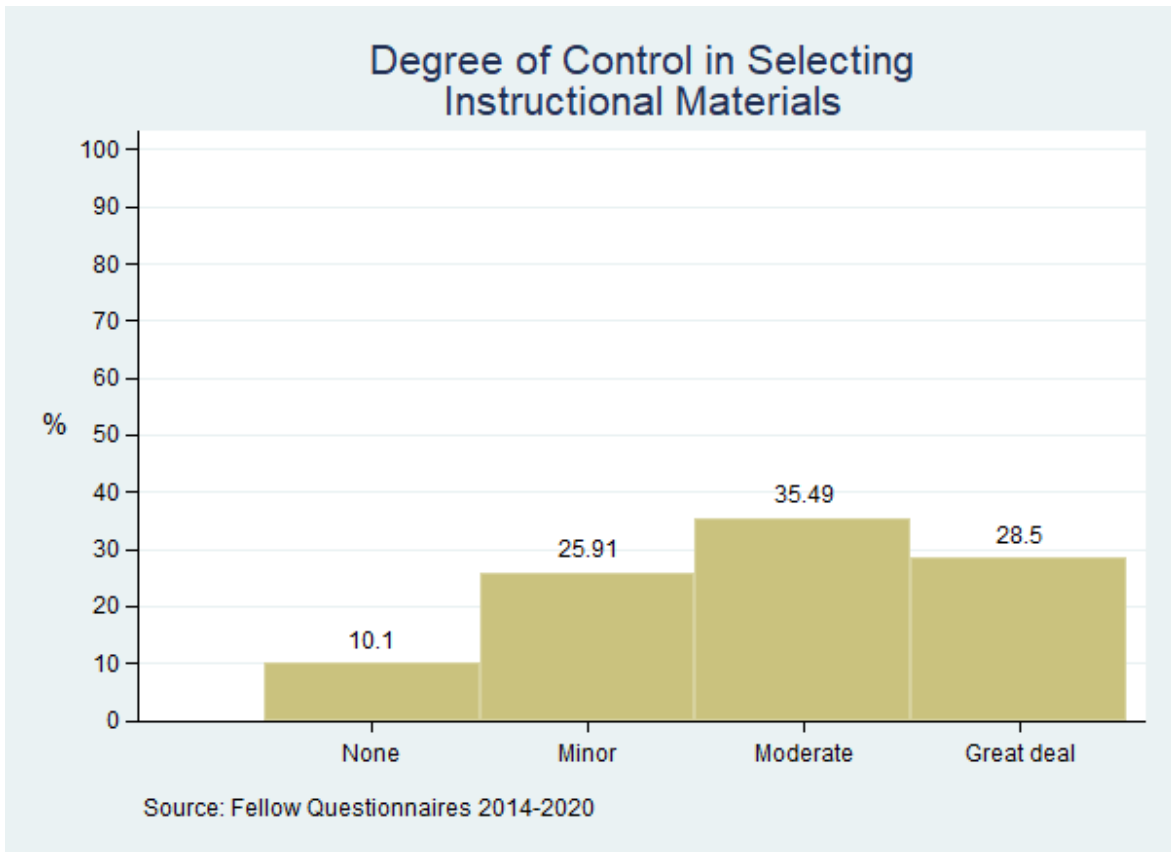
### *Control in the Classroom over Planning and Teaching<sup>5</sup>*

The extent to which the 2014-2020 Fellows of the Yale National Initiative reported that they have control over specific aspects of their planning and teaching varied. The majority reported having a great deal of control over selecting teaching techniques (79%), determining the amount of homework to be assigned (77%), and evaluating and grading students (66%).

National Fellows were most likely to report they had minor or no control over selecting textbooks and other instructional materials (36%) and selecting content, topics, and skills to be taught (32%).

	Number	Percent
Selecting textbooks and other instructional materials	386	
No control (%)	39	10.10
Minor control (%)	100	25.91
Moderate control (%)	137	35.49
A great deal of control (%)	110	28.50
Selecting content, topics, and skills to be taught	386	
No control (%)	27	6.99
Minor control (%)	95	24.61
Moderate control (%)	123	31.87
A great deal of control (%)	141	36.53
Selecting teaching techniques	382	
No control (%)	1	0.26
Minor control (%)	7	1.83
Moderate control (%)	73	19.11
A great deal of control (%)	301	78.80
Evaluating and grading students	386	
No control (%)	2	0.52
Minor control (%)	19	4.92
Moderate control (%)	112	29.02
A great deal of control (%)	253	65.54
Disciplining students	386	
No control (%)	4	1.04
Minor control (%)	34	8.81
Moderate control (%)	166	43.01
A great deal of control (%)	182	47.15
Determining the amount of homework to be assigned	386	
No control (%)	2	0.52
Minor control (%)	12	3.11
Moderate control (%)	76	19.69
A great deal of control (%)	296	76.68

<sup>5</sup> This topic was not included in the 2021 Fellow Questionnaire due to the COVID-19 pandemic. In 2020, the question referred to the Fellow's school prior to the pandemic.



### Teaching and Learning Strategies Ordinarily Used (2014-2021)

Most 2014-2021 Fellows of the Yale National Initiative reported that ordinarily to a moderate or great degree they conduct formative assessment (98%), differentiate learning (93%), do demonstrations and model tasks (87%), and lead discussions with students (85%). Most also ordinarily to a moderate or great extent ask students to generate ideas and refine them (91%), apply facts and processes to real-world situations (91%), work collaboratively in small groups (90%), and articulate ideas in writing (87%).

Other teaching and learning strategies used to a moderate or great degree by at least three quarters of National Fellows include administering summative assessments (82%) and asking students to give and receive feedback and incorporate it into their work (84%), reflect on their learning experience (83%), use digital tools and resources (83%), analyze and interpret information and data (79%), make something (77%), and gather needed information and data (76%).

The teaching and learning strategies ordinarily used to a great degree by the highest proportion of National Fellows include conducting formative assessment (74%), differentiating learning (62%), and asking students to work collaboratively in small groups (59%), articulate ideas in writing (53%), and use digital tools and resources (51%).

	Number	Percent
Teacher lectures, makes presentations	435	
To a great extent (%)	60	13.79
To a moderate extent (%)	187	42.99
To a small extent (%)	173	39.77
Not at all (%)	15	3.45
Teacher leads discussions with students	433	
To a great extent (%)	158	36.49
To a moderate extent (%)	208	48.04
To a small extent (%)	66	15.24
Not at all (%)	1	0.23
Teacher does demonstrations or models tasks	432	
To a great extent (%)	186	43.06
To a moderate extent (%)	191	44.21
To a small extent (%)	53	12.27
Not at all (%)	2	0.46
Teacher or students Socratically question ideas	435	
To a great extent (%)	92	21.15
To a moderate extent (%)	167	38.39
To a small extent (%)	135	31.03
Not at all (%)	41	9.43
Teacher differentiates learning*	378	
To a great extent (%)	235	62.17
To a moderate extent (%)	118	31.22
To a small extent (%)	24	6.35
Not at all (%)	1	0.26
Teacher conducts formative assessment	435	
To a great extent (%)	324	74.48
To a moderate extent (%)	102	23.45
To a small extent (%)	9	2.07
Teacher administers summative assessments	433	
To a great extent (%)	168	38.80
To a moderate extent (%)	186	42.96
To a small extent (%)	70	16.17
Not at all (%)	9	2.08

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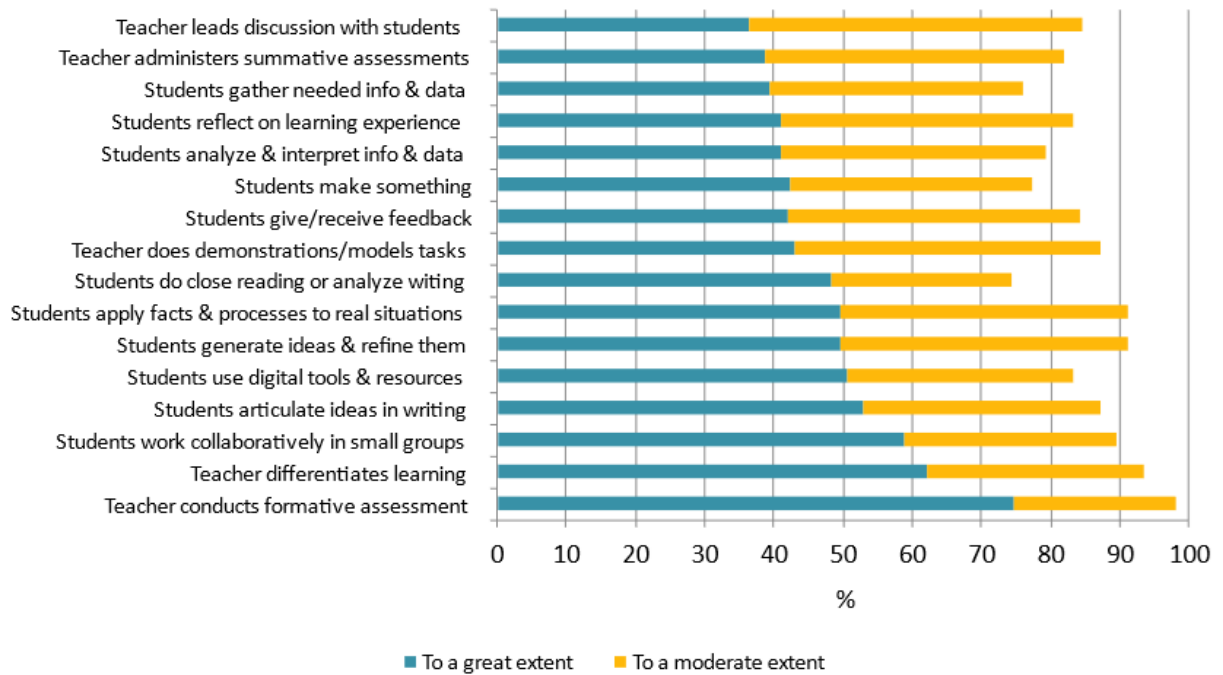
	Number	Percent
Students generate ideas & refine them*	378	
To a great extent (%)	187	49.47
To a moderate extent (%)	157	41.53
To a small extent (%)	34	8.99
Students apply facts & processes to real situation*	378	
To a great extent (%)	187	49.47
To a moderate extent (%)	157	41.53
To a small extent (%)	34	8.99
Students conduct experiments*	377	
To a great extent (%)	77	20.42
To a moderate extent (%)	118	31.30
To a small extent (%)	94	24.93
Not at all (%)	88	23.34
Students conduct case studies	430	
To a great extent (%)	36	8.37
To a moderate extent (%)	80	18.60
To a small extent (%)	156	36.28
Not at all (%)	158	36.74
Students do close reading or analyze writing	432	
To a great extent (%)	208	48.15
To a moderate extent (%)	113	26.16
To a small extent (%)	84	19.44
Not at all (%)	27	6.25
Students formulate problems & generate hypotheses*	378	
To a great extent (%)	73	19.31
To a moderate extent (%)	139	36.77
To a small extent (%)	105	27.78
Not at all (%)	61	16.14
Students gather needed info & data*	378	
To a great extent (%)	149	39.42
To a moderate extent (%)	138	36.51
To a small extent (%)	76	20.11
Not at all (%)	15	3.97
Students analyze & interpret info & data	435	
To a great extent (%)	179	41.15
To a moderate extent (%)	166	38.16
To a small extent (%)	75	17.24
Not at all (%)	15	3.45
Students make something*	371	
To a great extent (%)	157	42.32
To a moderate extent (%)	130	35.04
To a small extent (%)	79	21.29
Not at all (%)	5	1.35
Students articulate ideas in writing	434	
To a great extent (%)	229	52.76
To a moderate extent (%)	149	34.33
To a small extent (%)	51	11.75
Not at all (%)	5	1.15

(continued)

	Number	Percent
Students make oral presentations*	378	
To a great extent (%)	100	26.46
To a moderate extent (%)	155	41.01
To a small extent (%)	121	32.01
Not at all (%)	2	0.53
Students present ideas in drama & other ways	432	
To a great extent (%)	54	12.50
To a moderate extent (%)	114	26.39
To a small extent (%)	176	40.74
Not at all (%)	88	20.37
Students work collaboratively in small groups	433	
To a great extent (%)	254	58.66
To a moderate extent (%)	134	30.95
To a small extent (%)	41	9.47
Not at all (%)	4	0.92
Students give/receive feedback & incorporate into work*	375	
To a great extent (%)	158	42.13
To a moderate extent (%)	158	42.13
To a small extent (%)	56	14.93
Not at all (%)	3	0.80
Students use digital tools & resources*	376	
To a great extent (%)	190	50.53
To a moderate extent (%)	123	32.71
To a small extent (%)	61	16.22
Not at all (%)	2	0.53
Students use social media	433	
To a great extent (%)	30	6.93
To a moderate extent (%)	74	17.09
To a small extent (%)	162	37.41
Not at all (%)	167	38.57
Teachers & students visit resources outside school*	377	
To a great extent (%)	35	9.28
To a moderate extent (%)	94	24.93
To a small extent (%)	190	50.40
Not at all (%)	58	15.38
Outside resources come into class*	377	
To a great extent (%)	26	6.90
To a moderate extent (%)	92	24.40
To a small extent (%)	209	55.44
Not at all (%)	50	13.26
Students set goals & monitor progress on tasks*	376	
To a great extent (%)	104	27.66
To a moderate extent (%)	154	40.96
To a small extent (%)	104	27.66
Not at all (%)	14	3.72
Students reflect on their learning experiences*	376	
To a great extent (%)	154	40.96
To a moderate extent (%)	159	42.29
To a small extent (%)	58	15.43
Not at all (%)	5	1.33

\* Not asked prior to 2015, when items were added to learn about deeper learning strategies used by Fellows in their teaching.

## Teaching and Learning Strategies Most Used Ordinarily by National Fellows



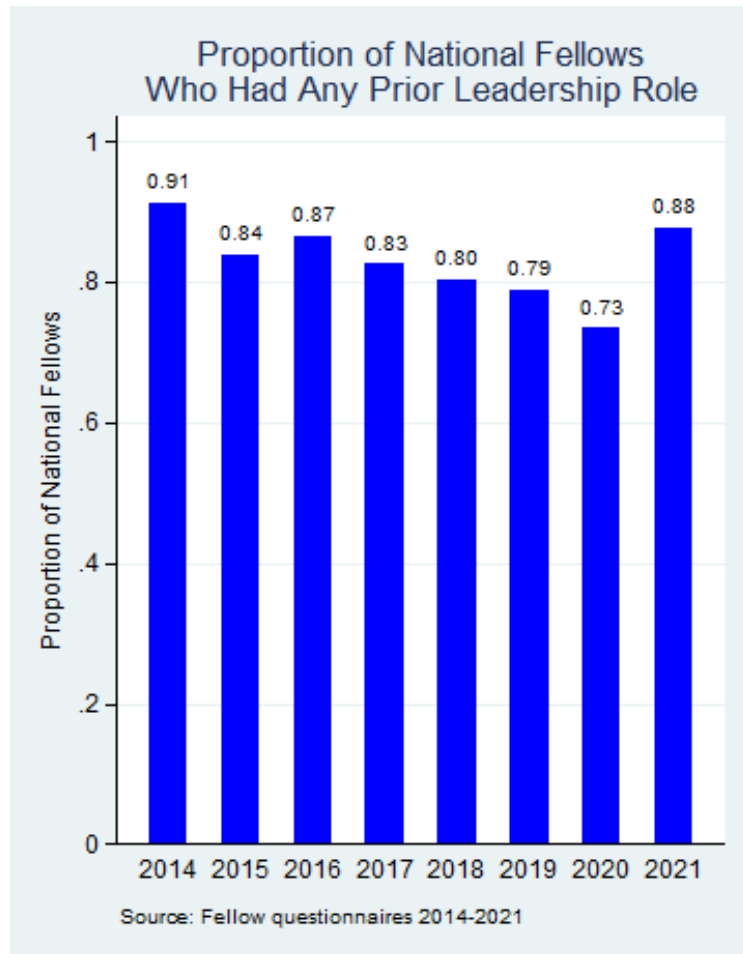
Source: 2014-2021 Yale National Initiative Fellow questionnaires

### Leadership Roles at the Time of Application to the Yale National Initiative (2014-2021)

Most of the 2014-2021 Fellows of the Yale National Initiative (83%) served in a leadership role at the time they applied. Nearly two thirds (61%) served on a school-wide committee or task force at the time they applied, and one third (30%) served on a district-wide committee or task force. Similarly, one third (31%) were serving as a Department lead or chair. Smaller proportions were serving as a lead curriculum specialist (10%), as a union leader (9%), or in some other leadership role (18%).

Leadership role	Number	Percent
Department lead or chair	135	31.03
Lead curriculum specialist	42	9.66
Member of a school-wide committee or task force	265	60.92
Member of a district-wide committee or task force	130	29.89
Union leader	41	9.43
Other leadership role	78	17.93
<b>Any leadership role at time of application</b>	<b>362</b>	<b>83.22</b>

The proportion of National Fellows who served in a leadership role when they applied has generally been decreasing over time, but it rebounded in 2021.



## ***School Context in Which National Fellows Work***

### ***Teacher Roles at National Fellow's School (2014-2020)<sup>6</sup>***

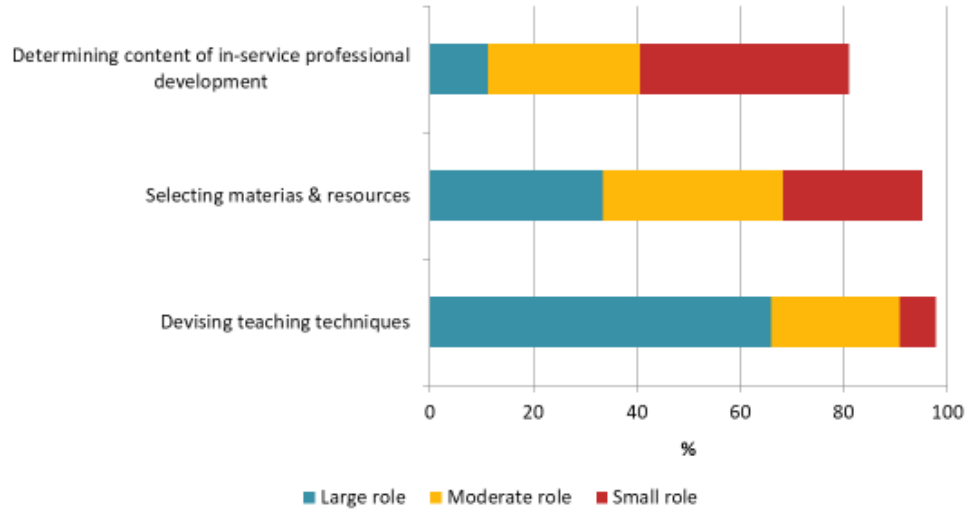
Most of the 2014-2020 National Fellows (91%) indicated that the majority of teachers in their school have a moderate or large role in devising teaching techniques, and two thirds (68%) indicated that teachers in their school had a moderate or large role in selecting materials and resources. More than half of National Fellows indicated, however, that teachers in their school have a small role or no role in determining the content of in-service professional development (59%). This is in contrast to the National Initiative, which provides seminars on topics for which Teacher Representatives and Steering Committee members have identified a need.

	Number	Percent
Selecting materials & resources.	379	
No role at all (%)	18	4.75
Small role (%)	102	26.91
Moderate role (%)	132	34.83
Large role (%)	127	33.51
Devising teaching techniques	382	
No role at all (%)	8	2.09
Small role (%)	27	7.07
Moderate role (%)	95	24.87
Large role (%)	252	65.97
Determining content of in-service PD	384	
No role at all (%)	73	19.01
Small role (%)	155	40.36
Moderate role (%)	113	29.43
Large role (%)	43	11.20

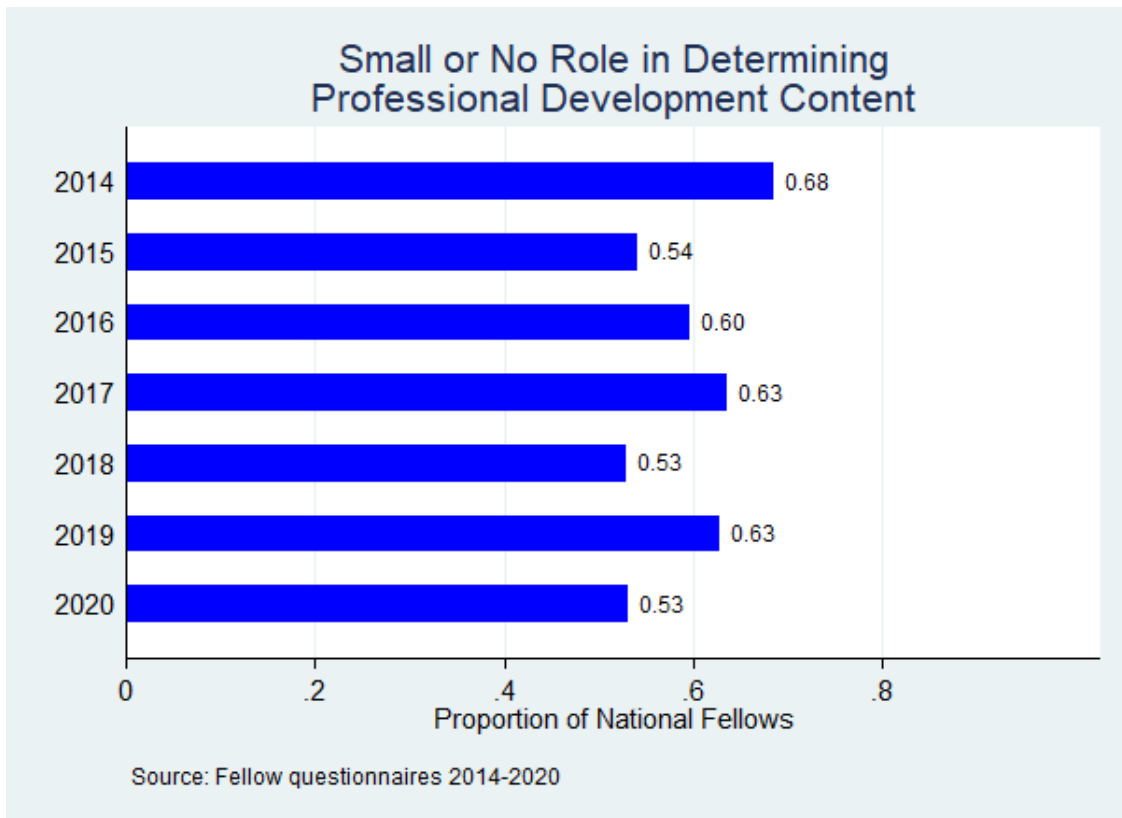
<sup>6</sup> This topic was not included in the 2021 Fellow Questionnaire due to the COVID-19 pandemic. In 2020, the question referred to the Fellow's school prior to the pandemic.



## Teacher Roles at National Fellows' Schools



Source: 2014-2020 Yale National Initiative Fellow questionnaires



*Leadership in National Fellow's School (2014-2020)*<sup>7</sup>

At least two thirds of the 2014-2020 National Fellows agreed that teachers in their school are encouraged to participate in leadership roles (79%), teachers are trusted to make sound professional decisions about instruction (75%), teachers are recognized as educational experts (73%), and teachers are effective leaders in their school (68%). Smaller proportions of National Fellows agreed that teachers are relied on to make decisions about educational issues (65%) and that the faculty in their school has an effective process for making group decisions to solve problems (45%).

	Number	Percent
Teachers are recognized as educational experts.	386	
Strongly disagree (%)	18	4.66
Disagree (%)	38	9.84
Neither agree nor disagree (%)	47	12.18
Agree (%)	205	53.11
Strongly agree (%)	78	20.21
Teachers are trusted to make sound professional decisions about instruction.	385	
Strongly disagree (%)	17	4.42
Disagree (%)	37	9.61
Neither agree nor disagree (%)	41	10.65
Agree (%)	193	50.13
Strongly agree (%)	97	25.19
Teachers are relied upon to make decisions about educational issues.	386	
Strongly disagree (%)	18	4.66
Disagree (%)	56	14.51
Neither agree nor disagree (%)	61	15.80
Agree (%)	174	45.08
Strongly agree (%)	77	19.95
Teachers are encouraged to participate in school leadership roles.	385	
Strongly disagree (%)	12	3.12
Disagree (%)	22	5.71
Neither agree nor disagree (%)	46	11.95
Agree (%)	189	49.09
Strongly agree (%)	116	30.13
The faculty has an effective process for making group decisions to solve problem	386	
Strongly disagree (%)	32	8.29
Disagree (%)	75	19.43
Neither agree nor disagree (%)	106	27.46
Agree (%)	130	33.68
Strongly agree (%)	43	11.14

<sup>7</sup> This topic was not included in the 2021 Fellow Questionnaire due to the COVID-19 pandemic. In 2020, the question referred to the Fellow's school prior to the pandemic.

(continued)

	Number	Percent
Teachers are effective leaders in my school.	385	
Strongly disagree (%)	15	3.90
Disagree (%)	34	8.83
Neither agree nor disagree (%)	74	19.22
Agree (%)	191	49.61
Strongly agree (%)	71	18.44

Note: These questions were derived from the TELL (Teaching, Empowering, Leading, and Learning) Survey in Delaware. While the Yale National Initiative serves teachers in high-poverty, high-minority traditional public schools, the Delaware survey is conducted with all Delaware teachers. Thus, the results of the Delaware survey can only provide a general context for the results in this table. In 2017, 39% of Delaware teachers responded to the survey. The summary of results posted at [www.telldelaware.org](http://www.telldelaware.org) indicates that in Delaware in 2017, 80% of teachers who responded agreed that teachers are effective leaders in their schools, 79% agreed that teachers are recognized as educational experts, and 82% are encouraged to participate in a school leadership role.

## Teacher Leadership in National Fellows' Schools



*Instructional Practices and Supports in National Fellow's School (2014-2020)*<sup>8</sup>

More than two thirds of the 2014-2020 Fellows of the Yale National Initiative agreed that teachers in their school are encouraged to try new things (82%) and that curriculum is aligned with the Common Core State Standards (CCSS; 71%). Two thirds of 2014-2020 National Fellows also agreed that teachers in their school have autonomy in decisions about instruction (66%) and that teachers in their school work in Professional Learning Communities to align instruction (66%).

	Number	Percent
Curriculum is aligned with CCSS.	385	
Strongly disagree (%)	23	5.97
Disagree (%)	32	8.31
Neither agree nor disagree (%)	57	14.81
Agree (%)	153	39.74
Strongly agree (%)	120	31.17
Teachers work in PLCs to align instruction.	385	
Strongly disagree (%)	11	2.86
Disagree (%)	56	14.55
Neither agree nor disagree (%)	64	16.62
Agree (%)	172	44.68
Strongly agree (%)	82	21.30
Teachers are encouraged to try new things.	385	
Strongly disagree (%)	10	2.60
Disagree (%)	17	4.42
Neither agree nor disagree (%)	43	11.17
Agree (%)	174	45.19
Strongly agree (%)	141	36.62
Teachers have autonomy in decision about instruction.	385	
Strongly disagree (%)	10	2.60
Disagree (%)	43	11.17
Neither agree nor disagree (%)	79	20.52
Agree (%)	163	42.34
Strongly agree (%)	90	23.38

CCSS = Common Core State Standards

<sup>8</sup> This topic was not included in the 2021 Fellow Questionnaire due to the COVID-19 pandemic. In 2020, the question referred to the Fellow's school prior to the pandemic.

## Teacher Leadership in National Fellows' Schools



Source: 2014-2020 Yale National Initiative Fellow questionnaires

### School Facilities and Resources (2014-2020)<sup>9</sup>

2014-2020 Fellows of the Yale National Initiative were most likely to agree that they have reliable communication technology (85%). Two thirds to three quarters of National Fellows agreed that they have classroom physical environments that support teaching and learning (74%), sufficient Internet connections to support instructional practices (68%) and sufficient access in their school to office equipment/supplies (68%). At least half agreed that they have sufficient access to instructional materials (63%), instructional technology (61%) and professional support personnel (58%).

	Number	Percent
Sufficient access to appropriate instructional materials.	385	
Strongly disagree (%)	17	4.42
Disagree (%)	56	14.55
Neither agree nor disagree (%)	68	17.66
Agree (%)	196	50.91
Strongly agree (%)	48	12.47

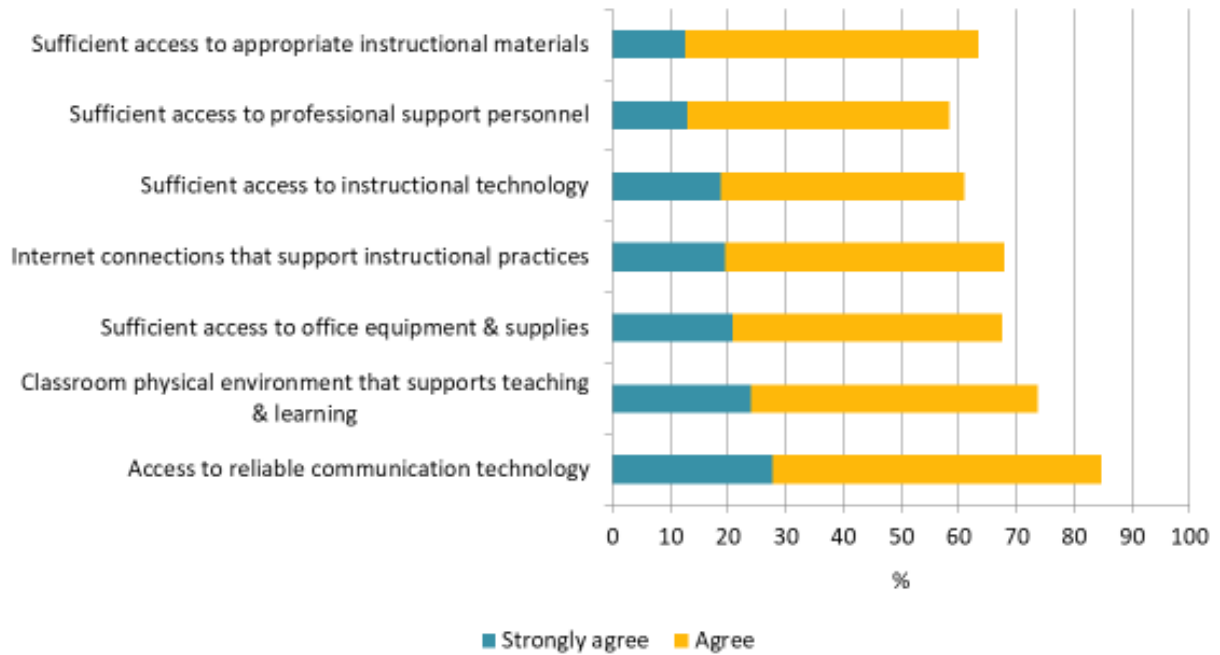
<sup>9</sup> This topic was not included in the 2021 Fellow Questionnaire due to the COVID-19 pandemic. In 2020, the question referred to the Fellow's school prior to the pandemic.

(continued)

	Number	Percent
Sufficient access to instructional technology.	384	
Strongly disagree (%)	22	5.73
Disagree (%)	70	18.23
Neither agree nor disagree (%)	58	15.10
Agree (%)	162	42.19
Strongly agree (%)	72	18.75
Access to reliable communication technology.	383	
Strongly disagree (%)	7	1.83
Disagree (%)	31	8.09
Neither agree nor disagree (%)	21	5.48
Agree (%)	218	56.92
Strongly agree (%)	106	27.68
Sufficient access to office equipment and supplies.	385	
Strongly disagree (%)	19	4.94
Disagree (%)	51	13.25
Neither agree nor disagree (%)	55	14.29
Agree (%)	180	46.75
Strongly agree (%)	80	20.78
Sufficient access to professional support personnel.	384	
Strongly disagree (%)	26	6.77
Disagree (%)	73	19.01
Neither agree nor disagree (%)	61	15.89
Agree (%)	174	45.31
Strongly agree (%)	50	13.02
Classroom physical environment supports teaching and learning.	384	
Strongly disagree (%)	15	3.91
Disagree (%)	29	7.55
Neither agree nor disagree (%)	57	14.84
Agree (%)	191	49.74
Strongly agree (%)	92	23.96
Internet connections support instructional practices.	385	
Strongly disagree (%)	21	5.45
Disagree (%)	60	15.58
Neither agree nor disagree (%)	43	11.17
Agree (%)	186	48.31
Strongly agree (%)	75	19.48

Note: These questions were derived from the TELL (Teaching, Empowering, Leading, and Learning) Survey in Delaware. While the Yale National Initiative serves teachers in high-poverty, high-minority traditional public schools, the Delaware survey is conducted with all Delaware teachers. Thus, the results of the Delaware survey can only provide a general context for the results in this table. In 2017, 39% of Delaware teachers responded to the survey. The summary of results posted at [www.telldelaware.org](http://www.telldelaware.org) indicates that in Delaware in 2017, 75% of teachers who responded to the survey have sufficient access to appropriate instructional materials, instructional technology, and internet connections to support instructional practices. 83% agreed that they have classroom physical environments that support teaching and learning, and 84% have sufficient access to professional support personnel and office equipment and supplies.

## Facilities and Resources in National Fellows' Schools



Source: 2014-2020 Yale National Initiative Fellow questionnaires

### Professional Development in School (2014-2021)

2014-2021 Fellows of the Yale National Initiative were most likely to agree that teachers in their school are encouraged to reflect on practice (65%) and they have opportunities aligned with the school improvement plan (59%). Between one third and one half agreed that their school provides sufficient resources for professional development (43%), they have opportunities to work with colleagues to refine teaching practices (42%), and their school provides appropriate time for professional development (39%).

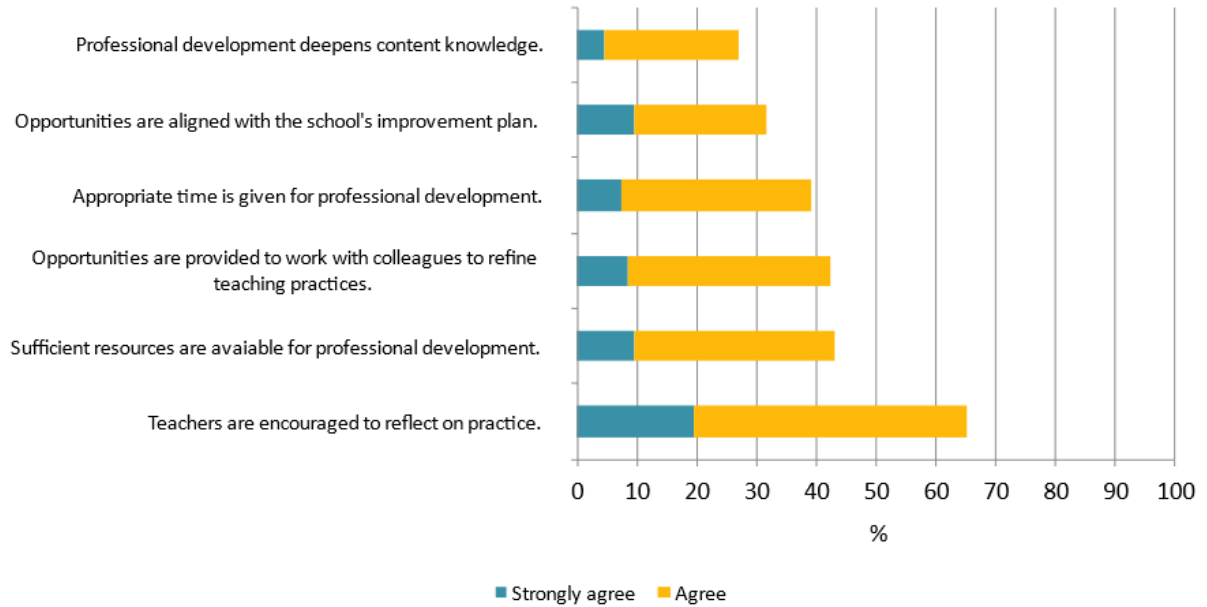
In contrast to the Teachers Institute approach, which emphasizes content knowledge, school professional development opportunities often don't include opportunities to focus on content knowledge. Only one quarter of 2014-2021 National Fellows agree that their school provides professional development that deepens content knowledge (27%); however, over time this proportion has generally been increasing.

	Number	Percent
Sufficient resources for professional development	434	
Strongly disagree (%)	24	5.53
Disagree (%)	115	26.50
Neither agree nor disagree (%)	109	25.12
Agree (%)	145	33.41
Strongly agree (%)	41	9.45
Appropriate time for professional development	434	
Strongly disagree (%)	32	7.37
Disagree (%)	132	30.41
Neither agree nor disagree (%)	101	23.27
Agree (%)	137	31.57
Strongly agree (%)	32	7.37
Opportunities aligned with school's improvement plan	434	
Strongly disagree (%)	18	4.15
Disagree (%)	48	11.06
Neither agree nor disagree (%)	110	25.35
Agree (%)	217	50.00
Strongly agree (%)	41	9.45
Professional development deepens content knowledge	433	
Strongly disagree (%)	88	20.32
Disagree (%)	139	32.10
Neither agree nor disagree (%)	90	20.79
Agree (%)	96	22.17
Strongly agree (%)	20	4.62
Teacher are encouraged to reflect on practice	434	
Strongly disagree (%)	21	4.84
Disagree (%)	40	9.22
Neither agree nor disagree (%)	90	20.74
Agree (%)	198	45.62
Strongly agree (%)	85	19.59
Opportunities to work with colleagues to refine teaching practices	434	
Strongly disagree (%)	35	8.06
Disagree (%)	98	22.58
Neither agree nor disagree (%)	117	26.96
Agree (%)	148	34.10
Strongly agree (%)	36	8.29

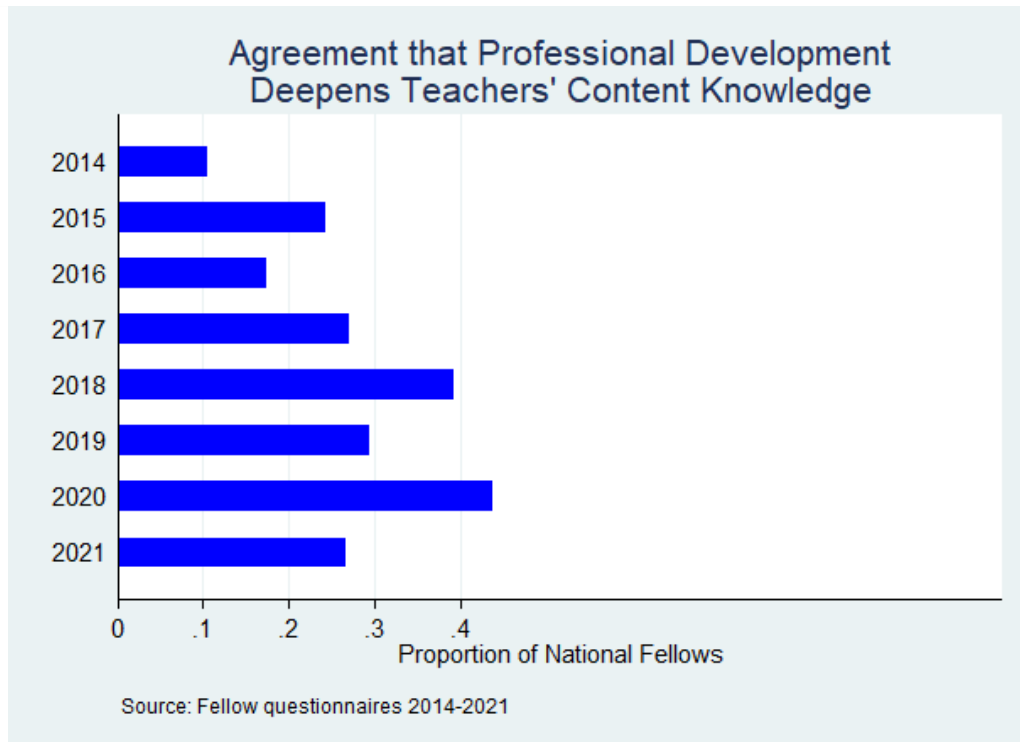
Note: These questions were derived from the TELL (Teaching, Empowering, Leading, and Learning) Survey in Delaware. While the Yale National Initiative serves teachers in high-poverty, high-minority traditional public schools, the Delaware survey is conducted with all Delaware teachers. Thus, the results of the Delaware survey can only provide a general context for the results in this table. In 2017, 39% of Delaware teachers responded to the survey. The summary of results posted at [www.telldelaware.org](http://www.telldelaware.org) indicates that in Delaware in 2017, 75% of teachers have sufficient access to appropriate instructional materials, instructional technology, and internet connections to support instructional practices. 83% agreed that they have classroom physical environments that support teaching and learning, and 84% have sufficient access to professional support personnel and office equipment and supplies.



## Professional Development in National Fellows' Schools



Source: 2014-2021 Yale National Initiative Fellow questionnaires



### **Other Professional Development Received by National Fellows in the Past Year (2014-2021)**

Most of the 2014-2021 Fellows of the Yale National Initiative (90%) reported participating in other professional development in the past 12 months.<sup>10</sup>

Excluding their participation in the National Initiative or a local Teachers Institute, three quarters or more of 2014-2021 National Fellows had participated in the past year in other professional development focused on curriculum materials or frameworks (88%), teaching methods (82%), content or performance standards (78%), and the content of the subject(s) they teach (78%).

Many of these other professional development activities consisted of 1 to 2 sessions. Few other professional development activities of National Fellows were intensive, as the Yale National Initiative seminars are (12 sessions). Only 4% to 13% of the professional development activities National Fellows participated in on a topic consisted of 8 or more sessions.

	Number	Percent
Student assessment	381	
None (%)	117	30.71
1 to 2 sessions (%)	183	48.03
3 to 7 sessions (%)	67	17.59
8 or more sessions (%)	14	3.67
Curriculum materials or frameworks	384	
None (%)	47	12.24
1 to 2 sessions (%)	157	40.89
3 to 7 sessions (%)	141	36.72
8 or more sessions (%)	39	10.16
Content or performance standards	376	
None (%)	84	22.34
1 to 2 sessions (%)	173	46.01
3 to 7 sessions (%)	93	24.73
8 or more sessions (%)	26	6.91
The content of the subject(s) you teach	384	
None (%)	84	21.88
1 to 2 sessions (%)	147	38.28
3 to 7 sessions (%)	103	26.82
8 or more sessions (%)	50	13.02
Teaching methods	382	
None (%)	69	18.06
1 to 2 sessions (%)	165	43.19
3 to 7 sessions (%)	116	30.37
8 or more sessions (%)	32	8.38
Use of technology in instruction	385	
None (%)	112	29.09
1 to 2 sessions (%)	177	45.97
3 to 7 sessions (%)	77	20.00
8 or more sessions (%)	19	4.94

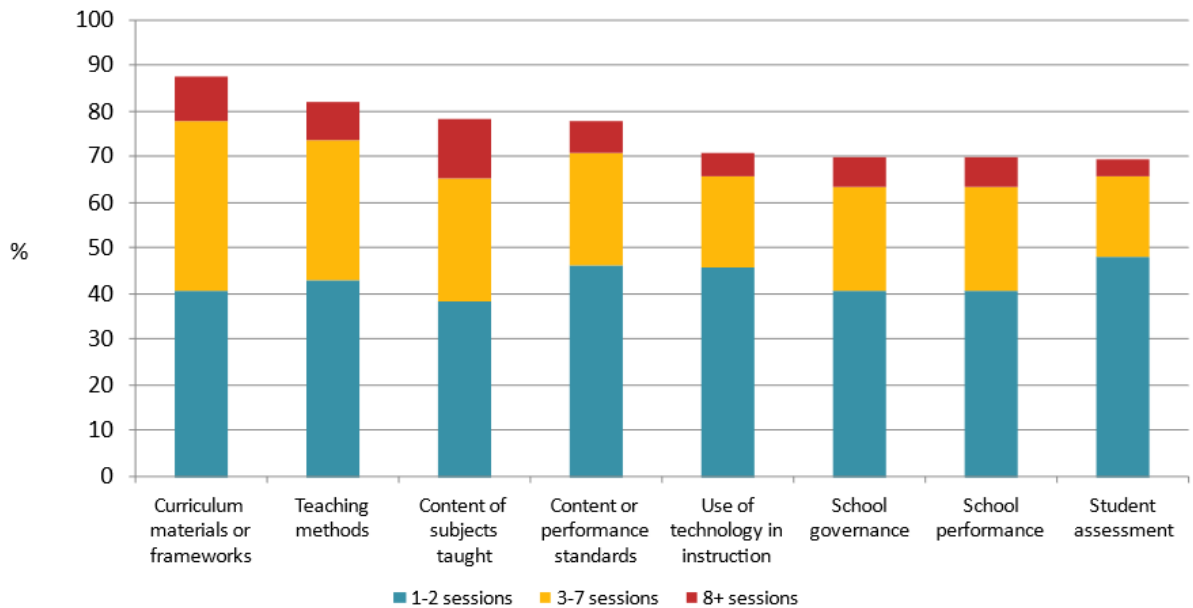
<sup>10</sup> Fellows were explicitly instructed not to include participation in the Yale National Initiative, and starting in 2019, also explicitly instructed not to include participation, if any, in a local Teachers Institute.

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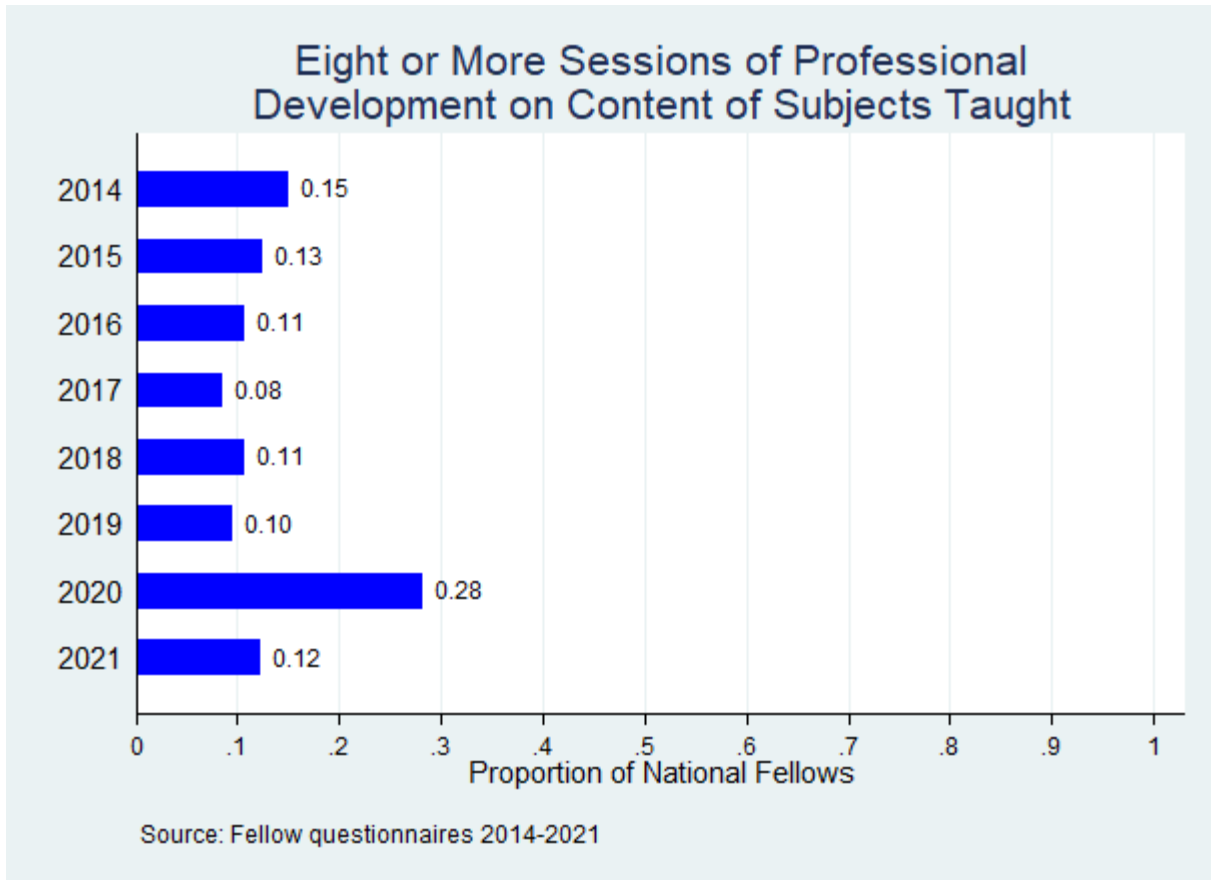
	Number	Percent
School improvement	384	
None (%)	230	59.90
1 to 2 sessions (%)	78	20.31
3 to 7 sessions (%)	55	14.32
8 or more sessions (%)	21	5.47
School governance	383	
None (%)	115	30.03
1 to 2 sessions (%)	155	40.47
3 to 7 sessions (%)	88	22.98
8 or more sessions (%)	25	6.53

Note: This question was adapted from the Study of Instructional Improvement (SII) Teacher Questionnaire 2000-2001. Data for comparison can be found at <http://www.sii.soe.umich.edu/documents/codebooks/Year%201%20-%20Teacher%20Questionnaire%20Codebook.pdf>

## Other Professional Development National Fellows Received Within Last 12 Months



Source: 2014-2021 Yale National Initiative Fellow questionnaires



Nearly one third of 2014-2021 Fellows of the Yale National Initiative (31%) reported that they had a written professional development plan. Of those with a written plan, 63% reported that their plan included participation in the National Initiative.

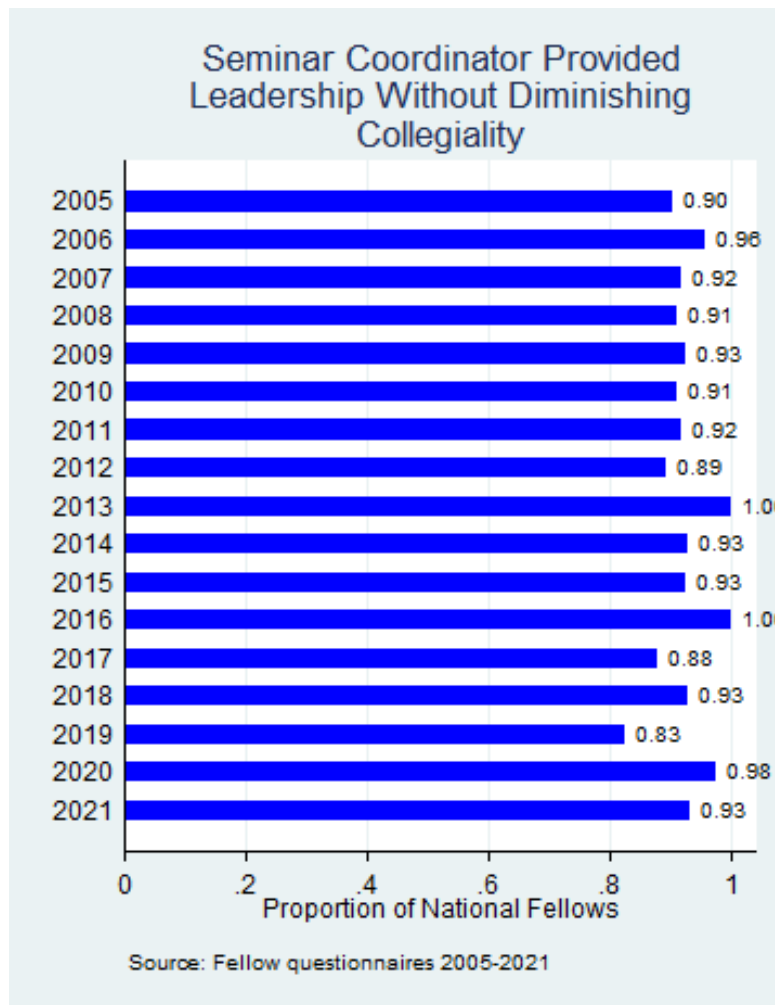
	Number	Percent
Have written professional development plan	134	30.88
Written professional development plan includes Yale National Initiative	84	62.69

**Experiences of 2005-2021 National Fellows in the Seminar**

**Helpfulness of the Seminar Coordinator**

Most Fellows of the Yale National Initiative (92%) agreed that their Seminar Coordinator provided teacher leadership without diminishing the collegial relationships within the seminar.

Coordinator provided leadership	Number	Percent
Strongly disagree (%)	8	0.86
Disagree (%)	26	2.80
Neither agree nor disagree (%)	36	3.88
Agree (%)	198	21.36
Strongly agree (%)	659	71.09

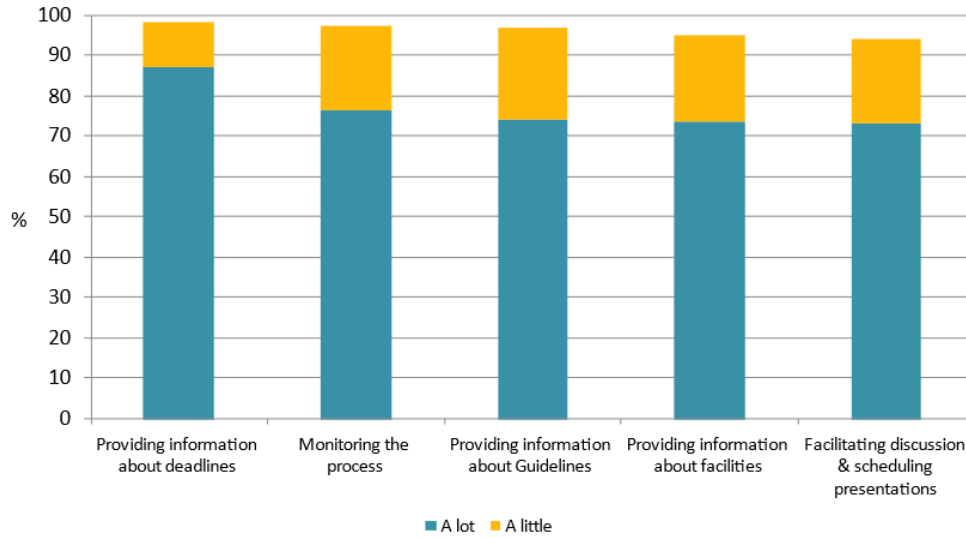


Among the 2005-2021 National Fellows (excluding Coordinators after 2014), approximately three quarters reported that their Seminar Coordinator was very helpful in providing information about unit writing deadlines (87%), monitoring the process of the seminar through observation and conversations with seminar members (77%), providing information about the use of University facilities (74%), providing information about Guidelines for unit writing (74%), and facilitating discussions and scheduling presentations of work in progress on National Fellows' units (73%).

How helpful was the Coordinator in your seminar in the following ways?	Number	Percent
Monitoring the process	913	
A lot (%)	699	76.56
A little (%)	189	20.70
Not at all (%)	25	2.74
Providing information about facilities	915	
A lot (%)	676	73.88
A little (%)	193	21.09
Not at all (%)	46	5.03
Providing information about Guidelines	914	
A lot (%)	676	73.96
A little (%)	210	22.98
Not at all (%)	28	3.06
Providing information about deadlines	910	
A lot (%)	793	87.14
A little (%)	101	11.10
Not at all (%)	16	1.76
Facilitating discussions & scheduling presentations	913	
A lot (%)	670	73.30
A little (%)	189	20.70
Not at all (%)	54	5.91

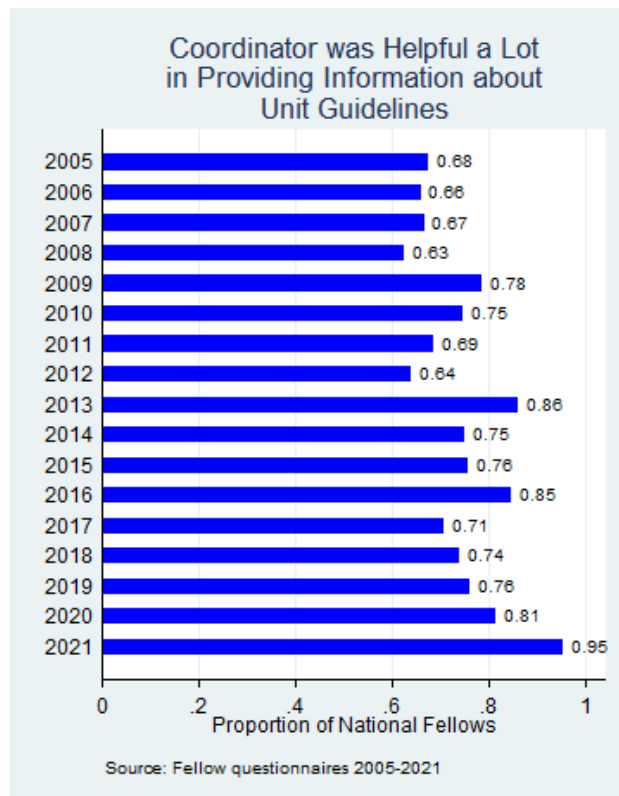
Note: Includes Coordinators prior to 2015

## Helpfulness of the Seminar Coordinator



Source: 2005-2021 Yale National Initiative Fellow questionnaires

The helpfulness of the Seminar Coordinator in providing information about the Unit Guidelines has generally increased over time.



**Program Schedule (2005-2021)**

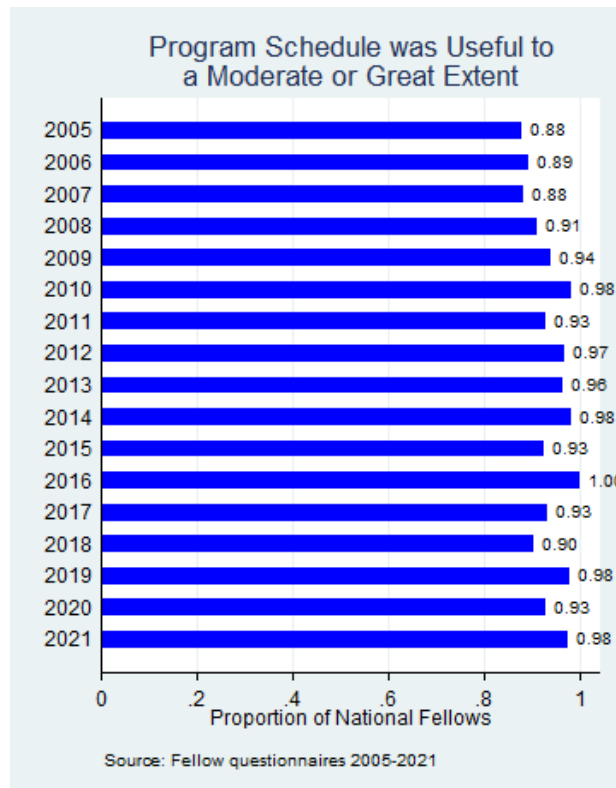
Typically, the first seminar meeting took place in May during a two-day organizational session. National Fellows submitted a curriculum unit prospectus by late June, prior to a two-week Intensive Session in early July during which seminars met daily. The first draft of their curriculum unit was due near the end of the Intensive Session. The second draft was due in late July, while the final draft was due by mid-August.

Most of the 2005-2021 Fellows of the Yale National Initiative were satisfied with the program schedule. 95% reported that the program schedule was useful to them to at least a moderate extent, and 77% disagreed that there were too few seminar meetings.

The extent to which the program schedule was useful			
	Number	Percent	
To a great extent (%)	675	69.02	
To a moderate extent (%)	251	25.66	
To a small extent (%)	45	4.60	
Not at all (%)	6	0.61	
Did not use (%)	1	0.10	

The extent to which Fellow agreed there were too few seminar meetings			
	Number	Percent	
Strongly disagree (%)	215	21.98	
Disagree (%)	542	55.42	
Neither agree nor disagree (%)	88	9.00	
Agree (%)	98	10.02	
Strongly agree (%)	35	3.58	





**Talks (2005-2021)**

On mornings during the Intensive Session, all National Fellows met for a series of talks by current or prospective seminar leaders. The talks were designed to acquaint National Fellows with the work of seminars other than their own or with subjects of possible future seminars.

Most of the 2005-2021 National Fellows who reported attending talks<sup>11</sup> found them to be successful to a moderate or great extent in providing intellectual stimulation (98%), a sense of collegiality and common purpose (97%), and an overview of work in the seminars (93%).

-----+-----			
Extent to which this year's			
talks were successful in			
providing the following:			
		Number	Percent
-----+-----			
Overview of work in seminars		969	
To a great extent (%)		590	60.89
To a moderate extent (%)		310	31.99
To a small extent (%)		65	6.71
Not at all (%)		4	0.41
 Sense of collegiality & common purpose		971	
To a great extent (%)		757	77.96
To a moderate extent (%)		180	18.54
To a small extent (%)		27	2.78
Not at all (%)		7	0.72
 Intellectual stimulation		968	
To a great extent (%)		843	87.09
To a moderate extent (%)		106	10.95
To a small extent (%)		14	1.45
Not at all (%)		5	0.52
-----+-----			

<sup>11</sup> In an effort to streamline the Fellow questionnaire, during 2014 to 2018 Fellows were first asked whether they had attended the talks, then if they had, they were asked about the talks. A small proportion of Fellows in each of those years did not report attending talks (even though it was known that they had attended them) and did not receive these questions. Prior to 2014 and starting again in 2019, all Fellows were asked about the talks.

The majority of 2005-2021 National Fellows who attended talks indicated that to a moderate or great extent the talks prompted them to discuss the topics with other teachers (94%), read about the topics (75%), or discuss the topics with students (73%).

To what extent did the talks prompt you to do the following?	Number	Percent
Read about the topics	966	
To a great extent (%)	377	39.03
To a moderate extent (%)	348	36.02
To a small extent (%)	185	19.15
Not at all (%)	56	5.80
Talks->discuss with students	951	
To a great extent (%)	331	34.81
To a moderate extent (%)	367	38.59
To a small extent (%)	173	18.19
Not at all (%)	80	8.41
Talks->discuss with other teachers	969	
To a great extent (%)	659	68.01
To a moderate extent (%)	251	25.90
To a small extent (%)	47	4.85
Not at all (%)	12	1.24

Most National Fellows (88%) agreed that the Yale National Initiative scheduled the right number of talks.

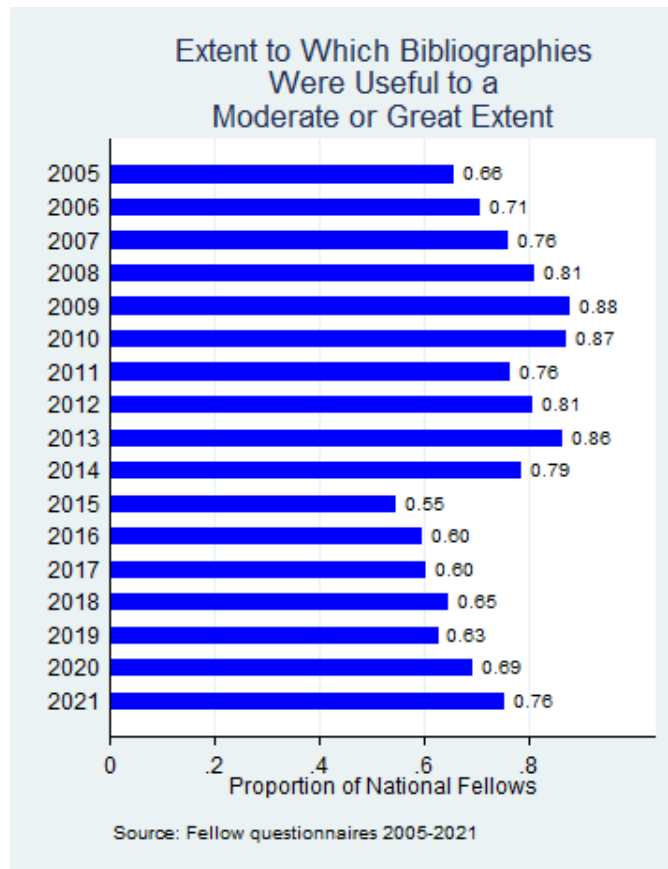
The Initiative scheduled the right number of talks.	Number	Percent
Strongly disagree (%)	22	2.27
Disagree (%)	62	6.39
Neither agree nor disagree (%)	29	2.99
Agree (%)	491	50.57
Strongly agree (%)	367	37.80

### **Reading, Research, and Bibliographies (2005-2021)**

At the first organizational meeting of each seminar, the seminar leader distributed an annotated bibliography in the seminar subject and proposed the syllabus of readings the seminar would consider. Three quarters of the 2005-2021 Fellows of the Yale National Initiative found the seminar bibliographies useful to at least a moderate extent (73%). However, 8% did not use them or found them to be not at all useful.

Usefulness of bibliographies	Number	Percent
To a great extent (%)	370	37.99
To a moderate extent (%)	345	35.42
To a small extent (%)	179	18.38
Not at all (%)	23	2.36
Did not use (%)	57	5.85

The proportion of National Fellows who found the bibliographies to be useful to at least a moderate extent dropped in 2015 and has been climbing again since then.



Most 2014-2021 National Fellows agreed that the bibliographies were sufficiently annotated (74%) and that they had ample opportunity to discuss readings for their seminar (86%). Similarly, 77% of 2005-2013 National Fellows responded affirmatively that bibliographies were sufficiently annotated, and 92% responded affirmatively that they had ample opportunity to discuss readings.

Agreement with the following statements	Number	Percent
<b>2014-2021</b>		
Bibliographies were sufficiently annotated	410	
Strongly disagree (%)	10	2.44
Disagree (%)	14	3.41
Neither agree nor disagree (%)	73	17.80
Agree (%)	164	40.00
Strongly agree (%)	139	33.90
Did not receive (%)	10	2.44
Ample opportunity to discuss readings	427	
Strongly disagree (%)	11	2.58
Disagree (%)	15	3.51
Neither agree nor disagree (%)	32	7.49
Agree (%)	156	36.53
Strongly agree (%)	212	49.65
Did not receive (%)	1	0.23

(continued)

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 How much do you agree or disagree with  
 the following statements? |        Number    Percent  
 -----+-----

**2005-2013**

Bibliographies were sufficiently annotated		541	
No (%)		13	2.40
Yes (%)		416	76.89
Not sure (%)		112	20.70
 Ample opportunity to discuss readings		544	
No (%)		19	3.49
Yes (%)		503	92.46
Not sure (%)		22	4.04

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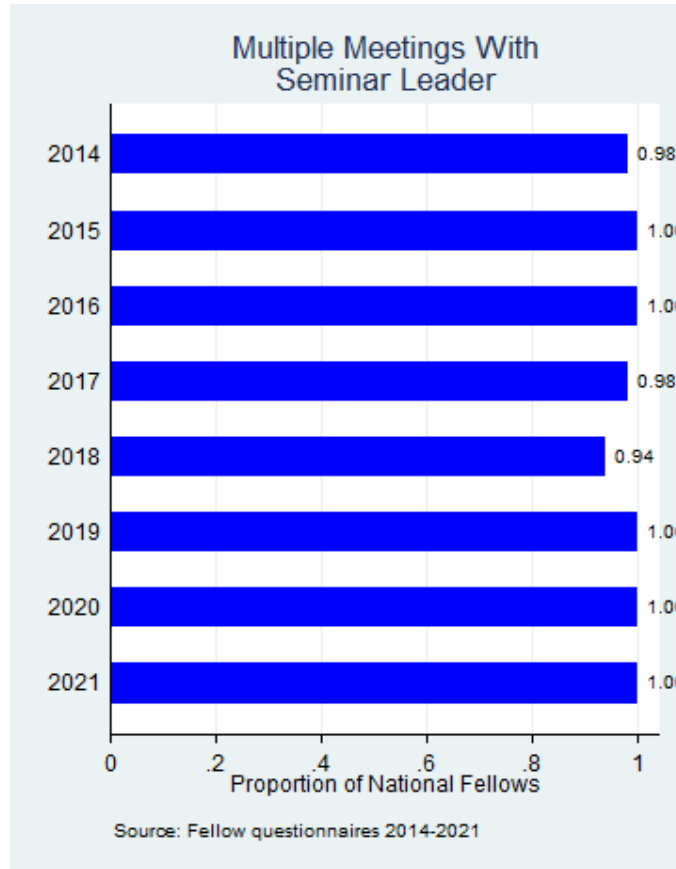
**Meetings with the Seminar Leader (2014-2021)**

All 2014-2021 National Fellows met individually with their seminar leader to discuss their projects. The Yale National Initiative requires that National Fellows schedule at least four such conferences as part of the unit writing process (two during the Organizational Session in May<sup>12</sup> and two during the Intensive Session in July). More than half of the 2014-2018 National Fellows (57%) reported they met with their seminar leader 3 or more times, and an additional 41% reported that they met with their seminar leader twice. (Some National Fellows may have been thinking only of the Intensive Session when answering this question.)

Starting in 2019, the Fellow questionnaire included separate questions about meetings with the seminar leader during the Organizational Session and the Intensive Sessions. Half of the 2019-2021 National Fellows met at least twice with their seminar leader during the Organizational Session, and nearly all met at least twice with their seminar leader during the Intensive Session.

		Number	Percent
-----+-----			
2019-2021			
How often met with seminar leader to discuss unit			
During the Organizational Session		150	
Once (%)		75	50.00
Twice (%)		61	40.67
Three or more times (%)		14	9.33
During the Intensive Session		148	
Once (%)		12	8.11
Twice (%)		87	58.78
Three or more times (%)		49	33.11
-----+-----			
2014-2018			
How often met with seminar leader to discuss unit		285	
Once (%)		5	1.75
Twice (%)		117	41.05
Three or more times (%)		163	57.19
-----+-----			

<sup>12</sup> In practice, seminar leaders have not insisted on a second meeting during the Organizational Session if they were reasonably satisfied after the first meeting that the Fellow was working on an appropriate topic for a curriculum unit.



All 2005-2021 Fellows of the Yale National initiative reported that their seminar leader was useful to at least a small extent, and most indicated that their seminar leader was useful to a great extent (92%).

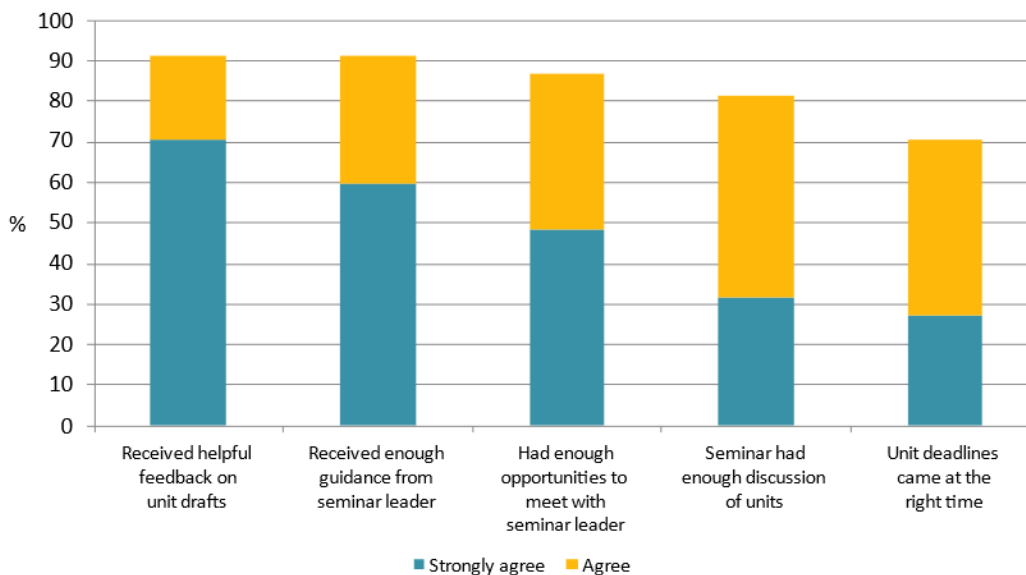
Extent to which my seminar leader was useful	Number	Percent
To a great extent (%)	906	92.35
To a moderate extent (%)	66	6.73
To a small extent (%)	9	0.92



Most of the 2014-2021 National Fellows indicated that they received enough guidance from their seminar leader (91%). Most National Fellows also indicated that they had enough opportunities to meet with their seminar leader (87%) and agreed that they received helpful feedback on their unit drafts (91%).

Agreement with the following statements	Number	Percent
Not enough guidance from seminar leader	435	
Strongly disagree (%)	260	59.77
Disagree (%)	137	31.49
Neither agree nor disagree (%)	21	4.83
Agree (%)	13	2.99
Strongly agree (%)	4	0.92
Not enough opportunities to meet with seminar leader	434	
Strongly disagree (%)	211	48.62
Disagree (%)	166	38.25
Neither agree nor disagree (%)	28	6.45
Agree (%)	15	3.46
Strongly agree (%)	14	3.23
Received helpful feedback on unit drafts	424	
Strongly disagree (%)	10	2.36
Disagree (%)	8	1.89
Neither agree nor disagree (%)	12	2.83
Agree (%)	88	20.75
Strongly agree (%)	299	70.52
Did not receive (%)	7	1.65

## National Fellows' Satisfaction With Seminar Leader and Unit Development



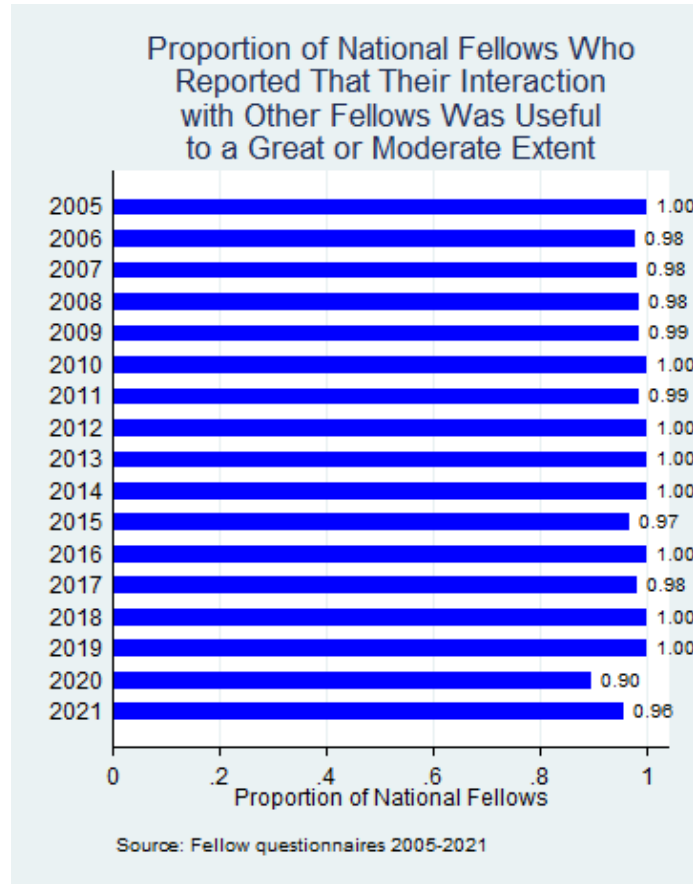
Source: 2014-2021 Yale National Initiative Fellow questionnaires

### Collegiality (2005-2021)

The seminars are the core collaborative experience of the Yale National Initiative. Nearly all of the 2005-2021 National Fellows reported that their interaction with other National Fellows was useful to a moderate or great extent (98%). 87% indicated that it was useful to them to a great extent.<sup>13</sup>

Please indicate the extent to which the following were useful to you.		Number	Percent
Interaction with other Fellows		979	
To a great extent (%)		849	86.72
To a moderate extent (%)		115	11.75
To a small extent (%)		11	1.12
Not at all (%)		4	0.41

<sup>13</sup> In 2020 and 2021 the Yale National Initiative seminars were conducted online due to the COVID-19 pandemic.



Among the National Fellows who indicated that the opportunity to work with teachers from other schools was an important incentive for participating, 89% said that interacting with other National Fellows was useful to a great extent.

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+-----+
| Key    |
+-----+
|  frequency  |
|  row percentage  |
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Opportunity to work with teachers from other schools	Extent of usefulness of Interaction with other Fellows				Total
	Great	Moderate	Small	Not at all	
Important incentive	767 88.98	87 10.09	7 0.81	1 0.12	862 100.00
minor incentive	77 71.30	26 24.07	4 3.70	1 0.93	108 100.00
not an incentive	2 40.00	1 20.00	0 0.00	2 40.00	5 100.00
<b>Total</b>	<b>846 86.77</b>	<b>114 11.69</b>	<b>11 1.13</b>	<b>4 0.41</b>	<b>975 100.00</b>



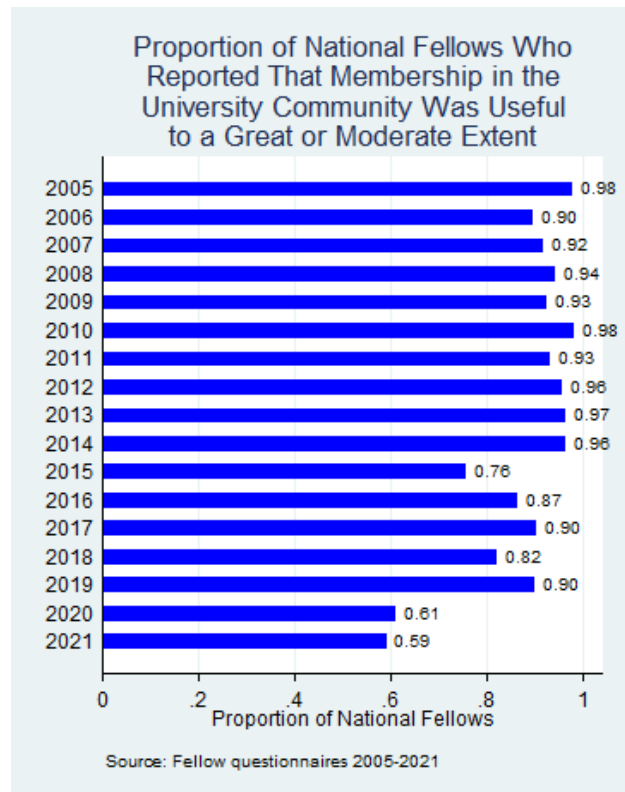
**Contact with University Community (2005-2021)**

Most of the 2005-2021 Fellows of the Yale National Initiative indicated that contact with Yale faculty members and membership in the Yale community were useful to at least a moderate extent (96% and 88%, respectively).<sup>14</sup>

Please indicate the extent to which the following were useful to you.

	Number	Percent
The contact with university faculty members	980	
To a great extent (%)	748	76.33
To a moderate extent (%)	189	19.29
To a small extent (%)	35	3.57
Not at all (%)	6	0.61
Did not use (%)	2	0.20
Membership in the university community	982	
To a great extent (%)	639	65.07
To a moderate extent (%)	229	23.32
To a small extent (%)	81	8.25
Not at all (%)	19	1.93
Did not use (%)	14	1.43

Not surprisingly, the proportion of National Fellows who reported that contact with Yale faculty members and membership in the Yale University community were useful declined in the years that the program was conducted online.



<sup>14</sup> In 2020 and 2021 the Yale National Initiative seminars were conducted online due to the COVID-19 pandemic.

National Fellows who indicated that the opportunity to work with university faculty was an important reason they participated were much more likely than other National Fellows to report that contact with university faculty members was useful to them to a great extent (78% vs. 42%).

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+-----+
| Key    |
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Opportunity to work with university faculty	Extent to which contact with university faculty members was useful					Total
	Great	Moderate	Small	Not at all	Did not use	
An important incentive	721	164	27	5	2	919
	78.45	17.85	2.94	0.54	0.22	100.00
minor incentive	20	22	7	1	0	50
	40.00	44.00	14.00	2.00	0.00	100.00
not an incentive	4	2	1	0	0	7
	57.14	28.57	14.29	0.00	0.00	100.00
Total	745	188	35	6	2	976
	76.33	19.26	3.59	0.61	0.20	100.00

National Fellows who indicated that the opportunity to work with university faculty was an important reason they participated were much more likely than other National Fellows to report that membership in the university community was useful to them to a great extent (68% vs. 25%).

Opportunity to work with university faculty	Extent to which membership in the university community was useful					Total
	Great	Moderate	Small	Not at all	Did not use	
An important incentive	622	208	65	14	12	921
	67.54	22.58	7.06	1.52	1.30	100.00
minor incentive	12	18	14	4	2	50
	24.00	36.00	28.00	8.00	4.00	100.00
not an incentive	2	2	2	1	0	7
	28.57	28.57	28.57	14.29	0.00	100.00
Total	636	228	81	19	14	978
	65.03	23.31	8.28	1.94	1.43	100.00

**Usefulness of Stipend (2005-2021)**

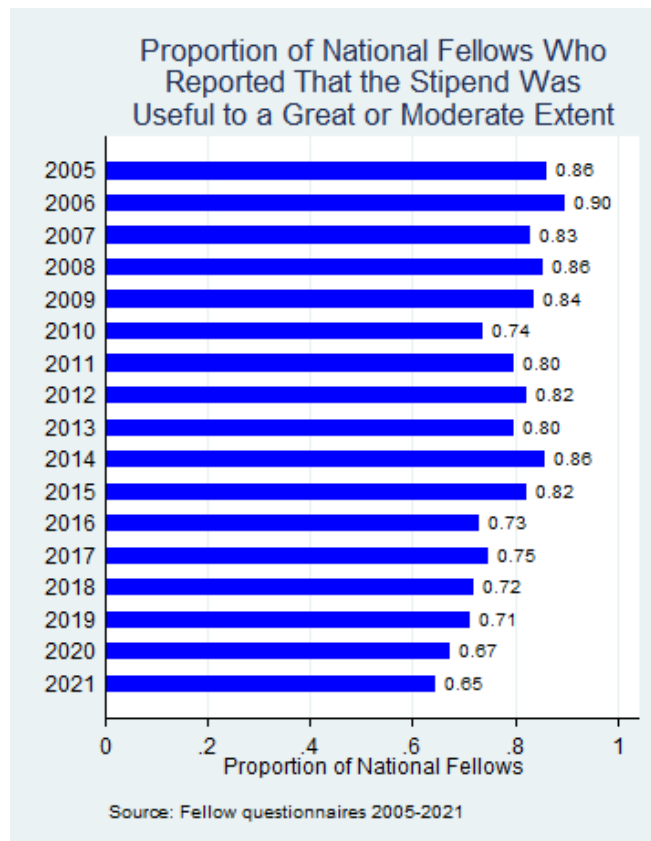
Half of the 2005-2021 Fellows of the Yale National Initiative (51%) reported that the stipend was useful to a great extent, and another 28% of National Fellows said it was useful to a moderate extent. The stipend was mostly likely to be useful to a great extent among National Fellows for whom it was an important incentive for participating.

Variable	Number	Percent
The stipend	978	
To a great extent (%)	498	50.92
To a moderate extent (%)	273	27.91
To a small extent (%)	171	17.48
Not at all (%)	25	2.56
Did not use (%)	11	1.12

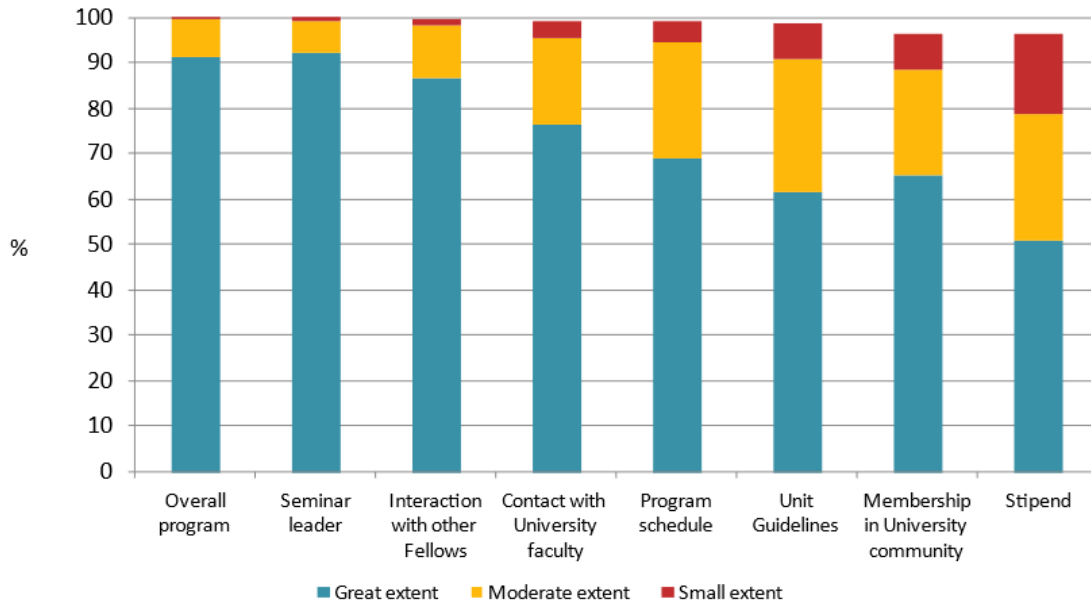
National Fellows who indicated that the stipend was an important reason they participated were much more likely than other National Fellows to report that the stipend was useful to them to a great extent (88% vs. 31%).

Stipend	Extent to which the stipend was useful					Total
	Great	Moderate	Small	Not at all	Did not use	
An important incentive	297 87.87	39 11.54	1 0.30	0 0.00	1 0.30	338 100.00
minor incentive	168 34.71	202 41.74	104 21.49	3 0.62	7 1.45	484 100.00
not an incentive	28 19.31	28 19.31	64 44.14	22 15.17	3 2.07	145 100.00
<b>Total</b>	<b>493</b> <b>50.98</b>	<b>269</b> <b>27.82</b>	<b>169</b> <b>17.48</b>	<b>25</b> <b>2.59</b>	<b>11</b> <b>1.14</b>	<b>967</b> <b>100.00</b>

The proportion of Fellows who reported that the stipend was useful to a great or moderate extent has declined over time. In 2018, the stipend was increased from \$1,000 to \$1,500, but that change was not associated with an increase in Fellows reporting that the stipend was useful to a great or moderate extent.



## National Fellows' Assessments of the Usefulness of Key Aspects of the Program

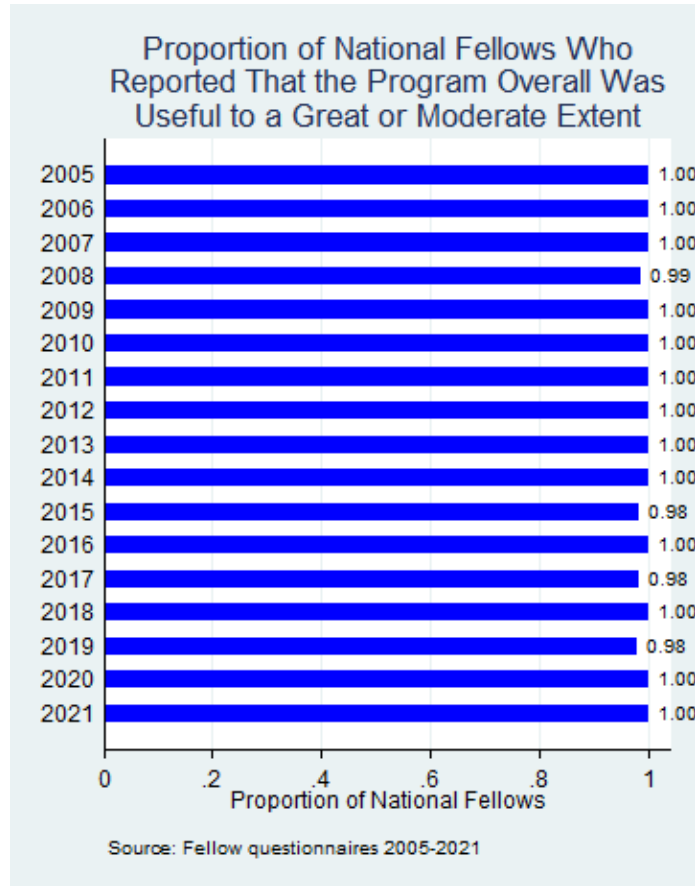


Source: 2005-2021 Yale National Initiative Fellow questionnaires

### Overall Conclusion of National Fellows (2005-2021)

Most of the 2005-2021 Fellows of the Yale National Initiative (91%) reported that the program overall was useful to a great extent, and nearly all of the remaining National Fellows said it was useful to a moderate extent.

Usefulness of the program overall	Number	Percent
The program overall	982	
To a great extent (%)	897	91.34
To a moderate extent (%)	81	8.25
To a small extent (%)	3	0.31
Not at all (%)	1	0.10

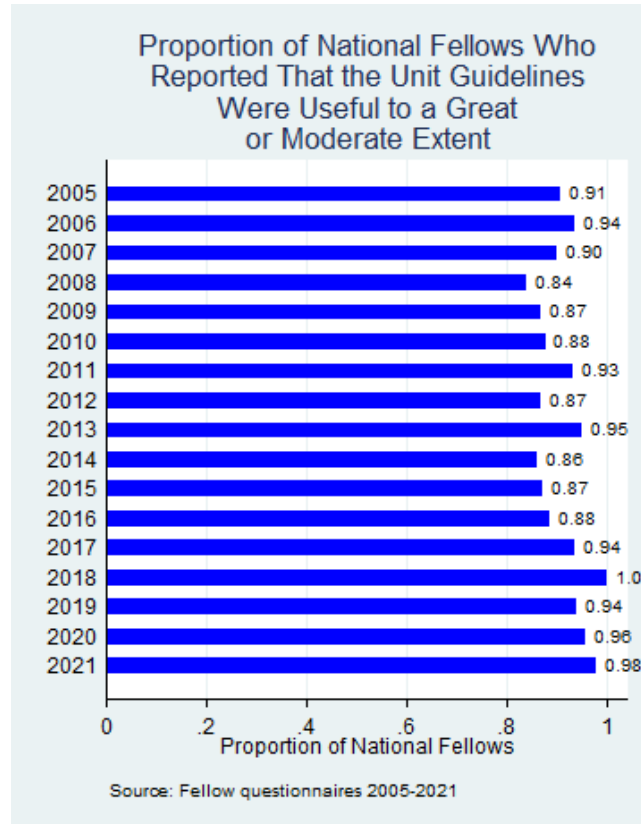


**Curriculum Unit Development**

*Usefulness of Curriculum Unit Guidelines (2005-2021)*

The Yale National Initiative attaches great importance to the process through which Fellows develop their curriculum units, as reflected in the Guidelines provided to National Fellows. 91% of the 2005-2021 Fellows of the Yale National Initiative found that the Guidelines for writing a curriculum unit were useful to at least a moderate extent, and more than half (62%) reported they were useful to a great extent.

Usefulness of Guidelines for writing a curriculum unit		
	Number	Percent
Guidelines for writing a unit	980	
To a great extent (%)	604	61.63
To a moderate extent (%)	287	29.29
To a small extent (%)	78	7.96
Not at all (%)	10	1.02
Did not use (%)	1	0.10

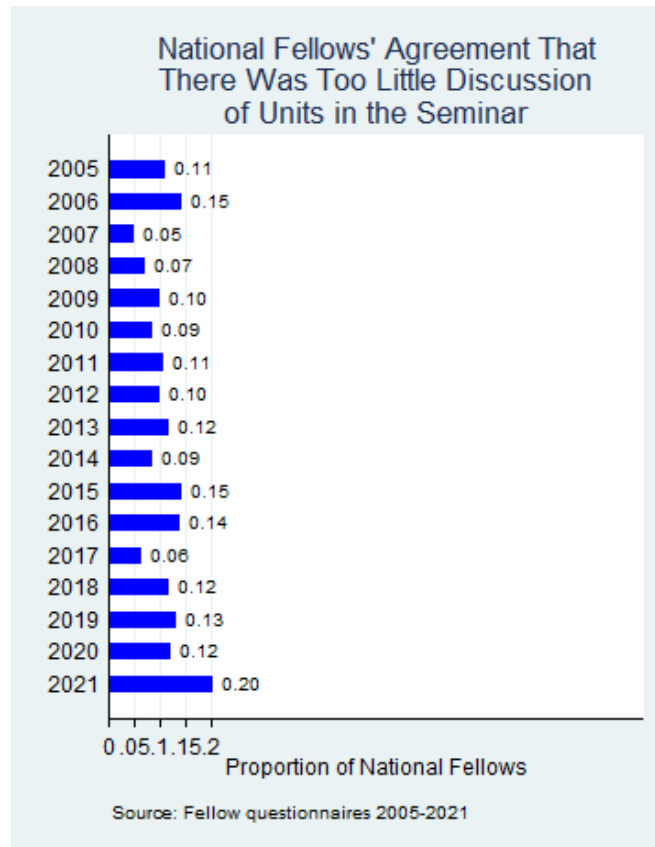


**Curriculum Unit Timeline and Process (2005-2021)**

Two thirds of 2014-2021 National Fellows (70%) did not agree that unit writing deadlines occurred at the wrong time in relation to the school calendar, but 11% agreed, and 18% neither agreed nor disagreed. (All unit writing deadlines occur during the summer, but some National Fellows begin teaching in August and final unit deadlines may coincide with preparations for or activities of the new school year.) A small percentage of 2005-2021 National Fellows agreed that there was too little discussion of units (11%), and 7% neither agreed nor disagreed, but more than three quarters (82%) did not think that there was too little discussion of the units.

	Number	Percent
Too little discussion of units	979	
Strongly disagree (%)	311	31.77
Disagree (%)	488	49.85
Neither agree nor disagree (%)	72	7.35
Agree (%)	91	9.30
Strongly agree (%)	17	1.74
Unit deadlines at wrong time*	435	
Strongly disagree (%)	118	27.13
Disagree (%)	188	43.22
Neither agree nor disagree (%)	80	18.39
Agree (%)	28	6.44
Strongly agree (%)	21	4.83

\* 2014-2021 only



***Process of Developing the Curriculum Unit (2014-2021)***

Because most unit development occurred during the summer, National Fellows had limited, if any, opportunities to try out the subject matter or strategies of their unit. Nevertheless, some of 2014-2021 Fellows of the Yale National Initiative reported that they tried out the subject matter of their unit with their students (24%) or tried out the strategies of their unit with their students (35%). Most of those who did (89%) reported that doing so influenced their final unit.

	Number	Percent
Tried out subject matter of unit with their students	104	23.91
Tried out strategies of unit with their students	151	34.87
Trying out subject or strategies of unit influenced final unit	157	89.20

Among those National Fellows who did not try out the subject matter or strategies of their unit in the classroom, it was because they were not ready to try it, they had already taught the topic to their students, they could not fit it into their schedule, or they needed to develop more classroom activities. Many Fellows also cited other reasons, such as not teaching during the summer and, in 2020 and 2021, limitations of virtual learning during the COVID-19 pandemic.

Why didn't try out the subject matter or strategies of your unit	Number	Percent
	258	
I had already taught the topic to my students	40	15.50
I could not fit it into my schedule	35	13.57
I was not ready to try it	84	32.56
I need to develop more classroom activities	17	6.59
Other reason	123	47.67

Work on the curriculum units does not end with the submission of the final unit. When they completed the Fellow questionnaire, more than three quarters (77%) of the 2014-2021 National Fellows reported that they planned to do further work on their unit before or while they taught it.

	Number	Percent
	431	
Plan to do further work on unit	332	77.03

The Curriculum Unit Guidelines specify that curriculum units should contain five elements: (1) content objectives, (2) teaching strategies, (3) three or more detailed examples of classroom activities, (4) resources (annotated lists), and (5) an appendix describing how the unit implements standards. Seminar leaders emphasize the first two elements. The expectation is that lesson plans will need to be developed after the unit is completed. Consistent with this expectation, many National Fellows plan to add these. Among those who planned to do additional work on their unit, the majority planned to add lesson plans and classroom activities (72%), half planned to add teaching strategies (54%) and classroom materials (55%), and 40% planned to do additional research on their topic.

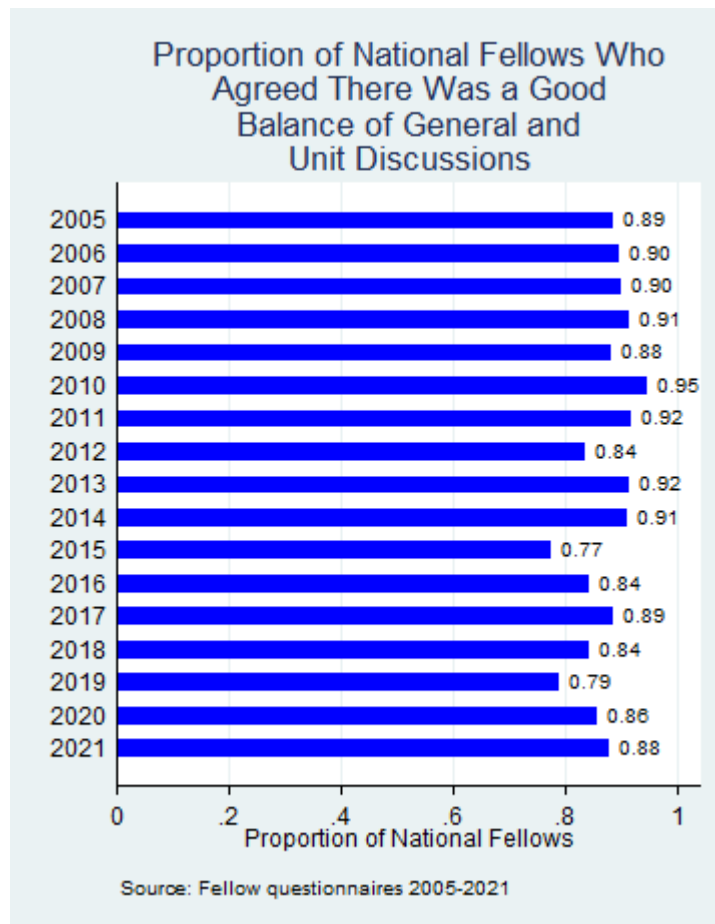
	Number	Percent
	332	
Plan additional research on topic	134	40.36
Plan to add teaching strategies	178	53.61
Plan to add lesson plans and classroom activities	240	72.29
Plan to add classroom materials	184	55.42
Other	41	12.35



**Balance between General Study and Individual Unit Development (2005-2021)**

Each Initiative seminar must balance the complementary and inseparable but sometimes competing demands for studying the seminar topic with developing applications of that knowledge for the classroom. More than three quarters of the 2005-2021 Fellows of the Yale National Initiative (88%) agreed that in their seminar there was a good balance between general study of the seminar topic and discussion of work in progress on their units. Only 11% agreed that there was too little discussion in their seminar of work-in-progress on their units.

Agreement with the following statements	Number	Percent
Good balance in seminar	979	
Strongly disagree (%)	13	1.33
Disagree (%)	75	7.66
Neither agree nor disagree (%)	33	3.37
Agree (%)	435	44.43
Strongly agree (%)	423	43.21
Too little discussion of units	979	
Strongly disagree (%)	311	31.77
Disagree (%)	488	49.85
Neither agree nor disagree (%)	72	7.35
Agree (%)	91	9.30
Strongly agree (%)	17	1.74



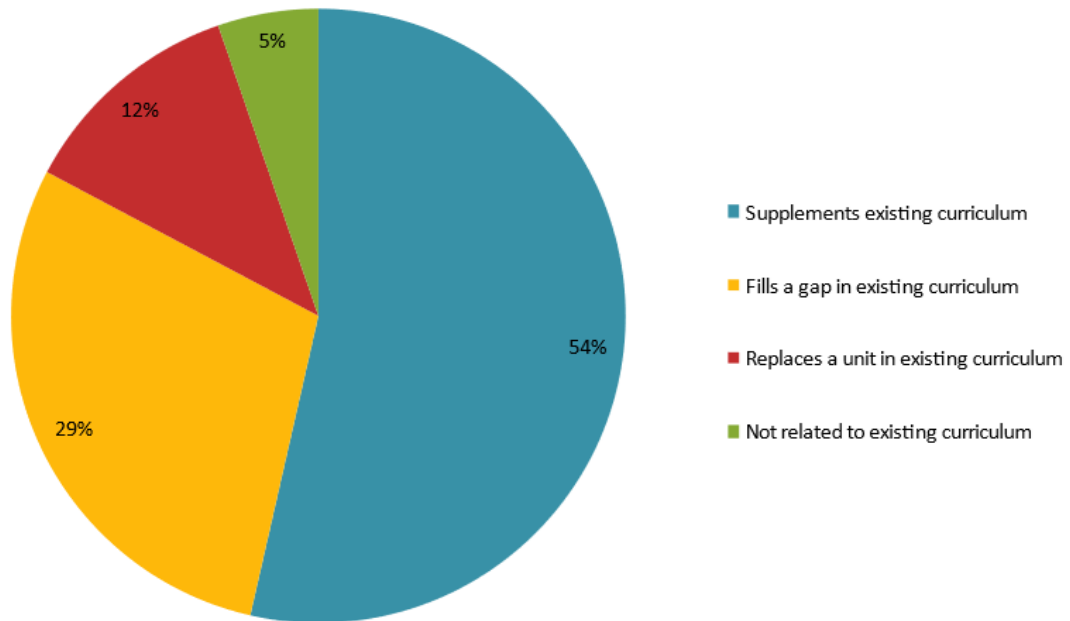
**Completed Curriculum Units**

**Connection to District Curriculum (2014-2021)**

Half of the 2014-2021 Fellows of the Yale National Initiative (54%) reported that their curriculum unit supplements a unit in their existing curriculum. Nearly one third (29%) reported that their unit fills a gap in the existing curriculum. A few National Fellows indicated that their unit replaces a unit in the existing curriculum or their unit is not related to the existing curriculum.

How is your curriculum unit related to other curriculum materials that you use?	Number	Percent
Fills a gap in existing curriculum (%)	127	29.20
Replaces a unit in existing curriculum (%)	52	11.95
Supplements existing curriculum (%)	233	53.56
Not related to existing curriculum (%)	23	5.29

## Relationship of National Fellow’s Unit to Existing Curriculum



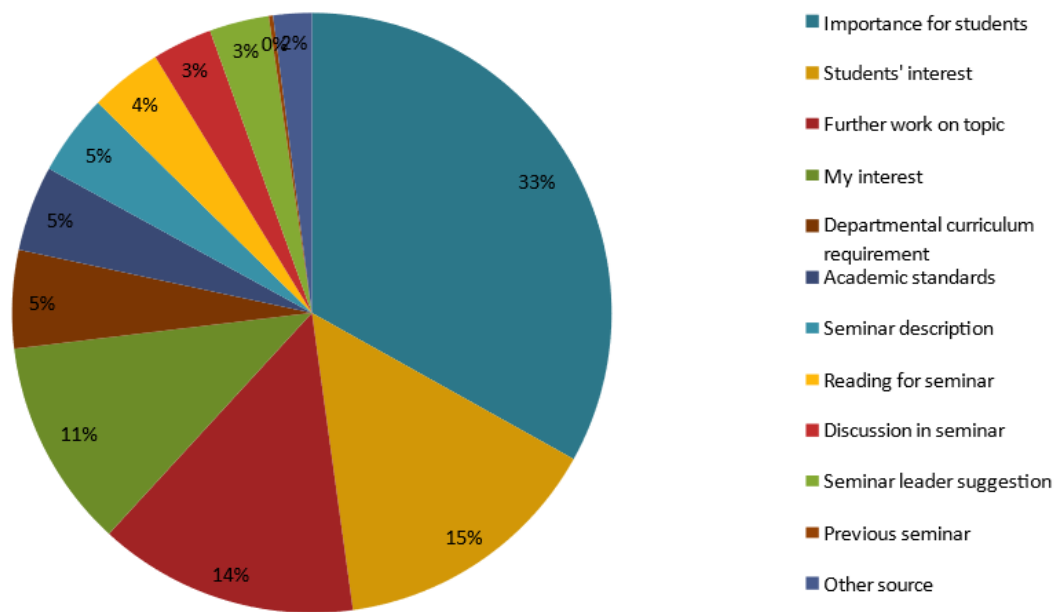
Source: 2014-2021 Yale National Initiative Fellow questionnaires

**Features of the Completed Units (2014-2021)**

The primary source of 2014-2021 National Fellows’ ideas for their curriculum units varied. The most common source was a topic the National Fellow thought was important for his or her students to study (33%).

What was the primary source of your idea for the topic of your unit?	Number	Percent
Primary source of idea for unit	435	
Students' interest (%)	64	14.71
My interest (%)	49	11.26
Seminar leader suggestion (%)	14	3.22
Departmental curriculum requirement (%)	23	5.29
Importance for students (%)	144	33.10
Academic standards (%)	20	4.60
Further work on topic (%)	61	14.02
Seminar description (%)	19	4.37
Reading for seminar (%)	17	3.91
Discussion in seminar (%)	14	3.22
Previous seminar (%)	1	0.23
Other source (%)	9	2.07

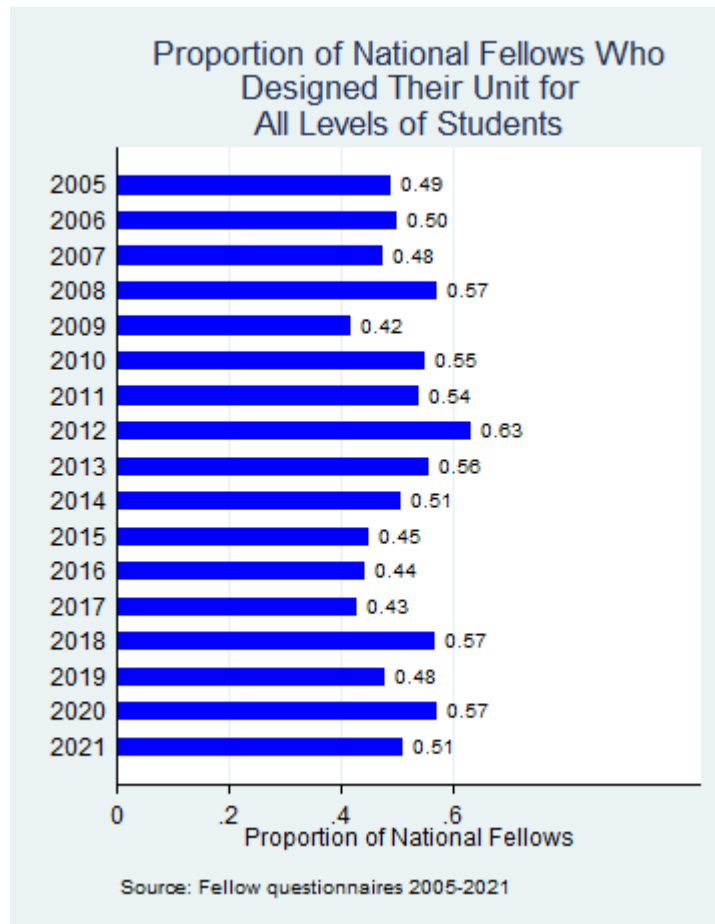
**National Fellows’ Primary Source of Idea for Unit**



Source: 2014-2021 Yale National Initiative Fellow questionnaires

The ultimate purpose of the Yale National Initiative is to strengthen teaching in public schools, and in this way to improve student learning throughout the schools. Contrary to what some would expect of a partnership involving Yale University, the Yale National Initiative’s approach intends to serve students at all achievement and performance levels. National Fellows typically write their units for students at more than one level. Most National Fellows (85%) designed their unit for average students, and two thirds designed their unit for advanced students (70%) or least advanced students (67%). Half of 2005-2021 National Fellows (51%) designed their unit for all types of students.

For which of the following groups of students is your unit designed?	Number	Percent
Unit designed for advanced students	987	
Unit designed for average students	690	69.91
Unit designed for least advanced students	843	85.41
Advanced students only (%)	64	6.48
Average students only (%)	139	14.08
Least advanced students only (%)	76	7.70
Advanced & average students (%)	120	12.16
Average & least advanced students (%)	78	7.90
All students (%)	506	51.27
No students (%)	4	0.41



### Teaching and Learning Strategies Proposed in the Curriculum Units (2014-2021)

At least three quarters of 2014-2021 Fellows of the Yale National Initiative reported that their curriculum unit proposes the following teaching and learning strategies to a moderate or great extent: students generate and refine ideas (95%); students apply facts and processes to real-world situations (91%); teacher leads discussion with students (90%); teacher differentiates learning (90%); students reflect on their learning experience (88%); students give/receive feedback and incorporate it into their work (86%); students articulate ideas in writing (85%); students work collaboratively in small groups (84%); students use digital tools and resources (83%); students make something (81%); students gather needed information and data (78%); teacher does demonstrations or models tasks (78%); students analyze and interpret information and data (77%); and students do close reading or analyze writing (77%).

The teaching and learning strategies most often used to a great extent in National Fellows' units were: students generate and refine ideas (74%); students apply facts and processes to real-world situations (72%); students work together collaboratively in small groups (63%); students articulate ideas in writing (60%); students make something (60%); teacher differentiates learning (59%); students reflect on their learning experience (56%); students give and receive feedback and incorporate it into their work (55%); students do close reading and analyze writing (54%); and students analyze and interpret information and data (51%).

These most-included teaching and learning strategies span most of the dimensions of deeper learning (the skills and knowledge students must have to succeed in 21<sup>st</sup> century jobs and civic life) identified by the William and Flora Hewlett Foundation.<sup>15</sup> They include strategies to help students **master core content**: (students apply facts and processes to real-world situations, students make something, teacher differentiates learning); **promote students' critical thinking and problem solving** (students generate ideas and refine them, students do close reading or analyze writing, students reflect on their learning experience); **improve students' communication** (students articulate ideas in writing, students give and receive feedback and incorporate it into their work); **improve students' ability to work collaboratively** (students work collaboratively in small groups); and **help students learn how to learn** (students reflect on their learning experience).

To what extent does your curriculum unit propose the following teaching and learning strategies?	Number	Percent	(Percent who use ordinarily)
Teacher lectures, makes presentations	434		
Great extent (%)	42	9.68	13.79
To a moderate extent (%)	151	34.79	42.99
To a small extent (%)	194	44.70	39.77
Not at all (%)	47	10.83	3.45
Teacher leads discussions with students	434		
Great extent (%)	210	48.39	36.49
To a moderate extent (%)	180	41.47	48.04
To a small extent (%)	41	9.45	15.24
Not at all (%)	3	0.69	0.23
Teacher does demonstrations or models tasks	435		
Great extent (%)	180	41.38	43.06
To a moderate extent (%)	161	37.01	44.21
To a small extent (%)	81	18.62	12.27
Not at all (%)	13	2.99	0.46

<sup>15</sup> William and Flora Hewlett Foundation (2013). *Deeper Learning Competencies*. Accessed at [https://www.hewlett.org/wp-content/uploads/2016/08/Deeper\\_Learning\\_Defined\\_\\_April\\_2013.pdf](https://www.hewlett.org/wp-content/uploads/2016/08/Deeper_Learning_Defined__April_2013.pdf) on November 3, 2017.

(continued)

To what extent does your curriculum unit propose the following teaching and learning strategies?		Number	Percent	(Percent who use ordinarily)
Teacher or students Socratically question ideas		435		
Great extent (%)		156	35.86	21.15
To a moderate extent (%)		143	32.87	38.39
To a small extent (%)		74	17.01	31.03
Not at all (%)		62	14.25	9.43
Teacher differentiates learning*		376		
Great extent (%)		221	58.78	62.17
To a moderate extent (%)		119	31.65	31.22
To a small extent (%)		28	7.45	6.35
Not at all (%)		8	2.13	0.26
Teacher conducts formative assessment		434		
Great extent (%)		80	18.43	74.48
To a moderate extent (%)		149	34.33	23.45
To a small extent (%)		167	38.48	2.07
Not at all (%)		38	8.76	0.00
Teacher administers summative assessments		434		
Great extent (%)		107	24.65	38.80
To a moderate extent (%)		135	31.11	42.96
To a small extent (%)		132	30.41	16.17
Not at all (%)		60	13.82	2.08
Students generate ideas & refine them*		378		
Great extent (%)		278	73.54	49.47
To a moderate extent (%)		82	21.69	41.53
To a small extent (%)		15	3.97	8.99
Not at all (%)		3	0.79	0.00
Students apply facts & processes to real situations*		377		
Great extent (%)		271	71.88	49.47
To a moderate extent (%)		73	19.36	41.53
To a small extent (%)		27	7.16	8.99
Not at all (%)		6	1.59	0.00
Students conduct experiments*		378		
Great extent (%)		76	20.11	20.42
To a moderate extent (%)		65	17.20	31.30
To a small extent (%)		72	19.05	24.93
Not at all (%)		165	43.65	23.34
Students conduct case studies		429		
Great extent (%)		72	16.78	8.37
To a moderate extent (%)		71	16.55	18.60
To a small extent (%)		82	19.11	36.28
Not at all (%)		204	47.55	36.74
Students do close reading or analyze writing		434		
Great extent (%)		234	53.92	48.15
To a moderate extent (%)		100	23.04	26.16
To a small extent (%)		51	11.75	19.44
Not at all (%)		49	11.29	6.25

(continued)

To what extent does your curriculum unit propose the following teaching and learning strategies?	Number	Percent	(Percent who use ordinarily)
Students formulate problems & generate hypotheses*	375		
Great extent (%)	111	29.60	19.31
To a moderate extent (%)	110	29.33	36.77
To a small extent (%)	64	17.07	27.78
Not at all (%)	90	24.00	16.14
Students gather needed info & data*	376		
Great extent (%)	184	48.94	39.42
To a moderate extent (%)	108	28.72	36.51
To a small extent (%)	45	11.97	20.11
Not at all (%)	39	10.37	3.97
Students analyze & interpret info & data	434		
Great extent (%)	222	51.15	41.15
To a moderate extent (%)	113	26.04	38.16
To a small extent (%)	55	12.67	17.24
Not at all (%)	44	10.14	3.45
Students make something	435		
Great extent (%)	259	59.54	42.32
To a moderate extent (%)	93	21.38	35.04
To a small extent (%)	53	12.18	21.29
Not at all (%)	30	6.90	1.35
Students articulate ideas in writing	432		
Great extent (%)	260	60.19	52.76
To a moderate extent (%)	107	24.77	34.33
To a small extent (%)	46	10.65	11.75
Not at all (%)	19	4.40	1.15
Students make oral presentations*	375		
Great extent (%)	151	40.27	26.46
To a moderate extent (%)	127	33.87	41.01
To a small extent (%)	62	16.53	32.01
Not at all (%)	35	9.33	0.53
Students present ideas in other ways	432		
Great extent (%)	85	19.68	12.50
To a moderate extent (%)	86	19.91	26.39
To a small extent (%)	93	21.53	40.74
Not at all (%)	168	38.89	20.37
Students work collaboratively in small groups	434		
Great extent (%)	274	63.13	58.66
To a moderate extent (%)	89	20.51	30.95
To a small extent (%)	42	9.68	9.47
Not at all (%)	29	6.68	0.92
Students give/receive feedback & incorporate into work*	376		
Great extent (%)	206	54.79	42.13
To a moderate extent (%)	119	31.65	42.13
To a small extent (%)	42	11.17	14.93
Not at all (%)	9	2.39	0.80

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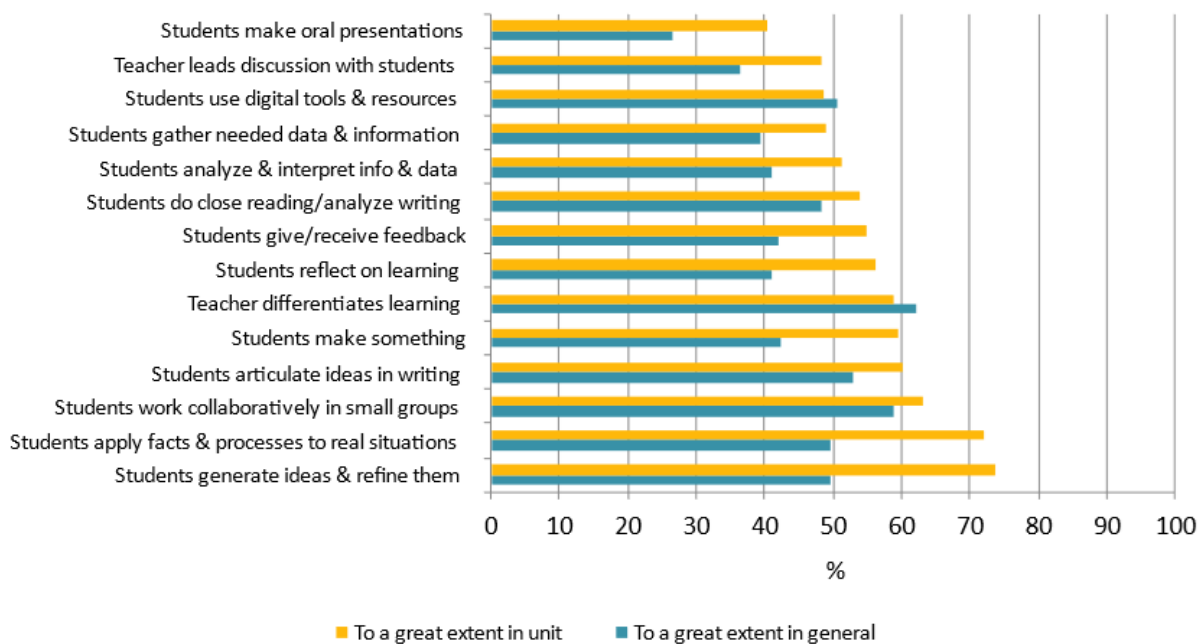
To what extent does your curriculum unit propose the following teaching and learning strategies?	Number	Percent	(Percent who use ordinarily)
Students use digital tools & resources*	378		
Great extent (%)	184	48.68	50.53
To a moderate extent (%)	131	34.66	32.71
To a small extent (%)	45	11.90	16.22
Not at all (%)	18	4.76	0.53
Students use social media	428		
Great extent (%)	24	5.61	6.93
To a moderate extent (%)	58	13.55	17.09
To a small extent (%)	117	27.34	37.41
Not at all (%)	229	53.50	38.57
Teachers & students visit resources outside school*	377		
Great extent (%)	48	12.73	9.28
To a moderate extent (%)	53	14.06	24.93
To a small extent (%)	88	23.34	50.40
Not at all (%)	188	49.87	15.38
Outside resources come into class*	376		
Great extent (%)	42	11.17	6.90
To a moderate extent (%)	67	17.82	24.40
To a small extent (%)	96	25.53	55.44
Not at all (%)	171	45.48	13.26
Students set goals & monitor progress on tasks*	377		
Great extent (%)	115	30.50	27.66
To a moderate extent (%)	127	33.69	40.96
To a small extent (%)	90	23.87	27.66
Not at all (%)	45	11.94	3.72
Students reflect on their learning experience *	376		
Great extent (%)	211	56.12	40.96
To a moderate extent (%)	118	31.38	42.29
To a small extent (%)	42	11.17	15.43
Not at all (%)	5	1.33	1.33

\* Not asked prior to 2015

2014-2021 National Fellow were more likely to include some deeper learning activities in their unit than they were in their teaching generally. For example, National Fellows were more likely in their unit than in their teaching generally to lead discussion with students (48% vs. 36%) and to Socratically question ideas (36% vs. 21%). Teachers were also more likely in their unit than in their teaching generally to ask students to formulate problems and generate hypotheses (30% vs 19%), generate ideas and refine them (74% vs 49%), apply facts and processes to real-world situations (72% vs. 49%), analyze and interpret information and data (51% vs. 41%), make something (60% vs. 42%), make oral presentations (40% vs 26%), give and receive feedback and incorporate it into their work (55% vs. 42%), and reflect on their learning (56% vs. 41%).



## National Fellows' Most Used Teaching and Learning Strategies Generally and in Curriculum Unit



Source: 2014-2021 Yale National Initiative Fellow questionnaires

### Plans for Teaching the Curriculum Units (2005-2021)

All except three of the 2014-2021 National Fellows planned to teach the curriculum unit they developed. (One of the three who did not plan to teach his or her unit had been promoted to a nonteaching position.) When they planned to begin teaching their unit varied, with the most National Fellows planning to begin in September or October.

Month in which Fellow plan to begin teaching the curriculum unit he/she developed?

	Number	Percent
	432	
August (%)	11	2.55
September (%)	123	28.47
October (%)	103	23.84
November (%)	40	9.26
December (%)	19	4.40
January (%)	36	8.33
February (%)	24	5.56
March (%)	34	7.87
April (%)	18	4.17
May (%)	10	2.31
Don't know (%)	14	3.24

More than half of the 2014-2021 National Fellows (61%) planned to teach their units over a period from three to six weeks.

Over how many weeks do you plan to teach your curriculum unit?	Number	Percent
Number of weeks over which teacher plans to teach unit	432	
1 week (%)	14	3.24
2 weeks (%)	83	19.21
3 weeks (%)	109	25.23
4 weeks (%)	76	17.59
5 to 6 weeks (%)	80	18.52
7 to 8 weeks (%)	27	6.25
More than 8 weeks (%)	7	1.62
Don't know (%)	36	8.33

On average, 2005-2021 Fellows of the Yale National Initiative expected to have 93 students enrolled in their classes. The number of enrolled students ranged from 0 to 750.

More recently, 2014-2021 National Fellows expected to have 79 students in their classes. Those who taught in departmentalized classrooms expected, on average, to have 95 students in their classes, while those who taught in self-contained classrooms expected, on average, to have 26 students in their classrooms.

	Number	Mean	SD	Min	Max
2005-2021 Teachers Number of students Fellow expects to have in classes	965	92.85	76.87	0.00	750.00
2014-2021 Teachers Number of students Fellow expects to have in classes	430	79.36	67.24	8.00	675.00
2014-2021 Teachers in Departmentalized Classrooms Number of students Fellow expects to have in classes	273	94.74	53.24	12.00	500.00
2014-2021 Teachers in Self-Contained Classrooms Number of students Fellow expects to have in classes	104	25.66	12.13	10.00	96.00
2014-2021 Teachers Who Were Elementary Subject Specialists Number of students Fellow expects to have in classes	35	134.17	136.21	20.00	675.00
2014-2021 Teachers in Team Teaching Number of students Fellow expects to have in classes	7	51.86	57.87	8.00	150.00
2014-2021 Teachers in Pull-out/Push-in Instruction Number of students Fellow expects to have in classes	11	48.18	41.10	15.00	160.00

On average, 2005-2021 National Fellows planned to teach their curriculum unit to 68 students. This ranges from 6 to 700 students. These numbers of students constituted most of the National Fellows' students. On average, the National Fellows planned to teach their unit to 81% of the students they expected to have in their classes. In total, 2005-2021 National Fellows planned to teach their units to 66,323 students in the school year following their seminar participation. Over time, repeated use of units by the teachers who developed them extends their benefits to more students, and dissemination of the Institute curriculum units to other teachers within participating school districts and through the website further increases the number of students who benefit.

2014-2021 National Fellows expected to teach their unit to 64 students, on average, in the following school year. These students comprised 89 percent of the students they expected to have in their classes. Those who taught in departmentalized classrooms expected to teach their unit to 76 students, on average (85% of the students they expected to have in their classes). Those who taught in self-contained classrooms expected to teach their unit to 26 students on average (99 percent of the students they expected to have in their classes).

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In the school year in which you
first plan to teach your unit, to how
many students do you expect to teach
your unit? |      Number      Mean      SD      Min      Max
-----+-----
2005-2021 Teachers
  Number of students to whom
  Fellow plans to teach unit |      977      67.88      52.26      6.00      700.00

  Percentage of students to whom
  Fellow plans to teach unit |      932       0.81       0.28      0.06      1.00
-----+-----
2014-2021 Teachers
  Number of students to whom
  Fellow plans to teach unit |      430      64.02      45.52      6.00      410.00

  Percentage of students to whom
  Fellow plans to teach unit |      417       0.89       0.23      0.10      1.00
-----+-----
2014-2021 Teachers in Departmentalized Classrooms*
  Number of students to whom
  Fellow plans to teach unit |      274      76.31      39.32     13.00      200.00

  Percentage of students to whom
  Fellow plans to teach unit |      264       0.85       0.25      0.10      1.00
-----+-----
2014-2021 Teachers in Self-Contained Classrooms*
  Number of students to whom
  Fellow plans to teach unit |      103      25.51     11.88      6.00      96.00

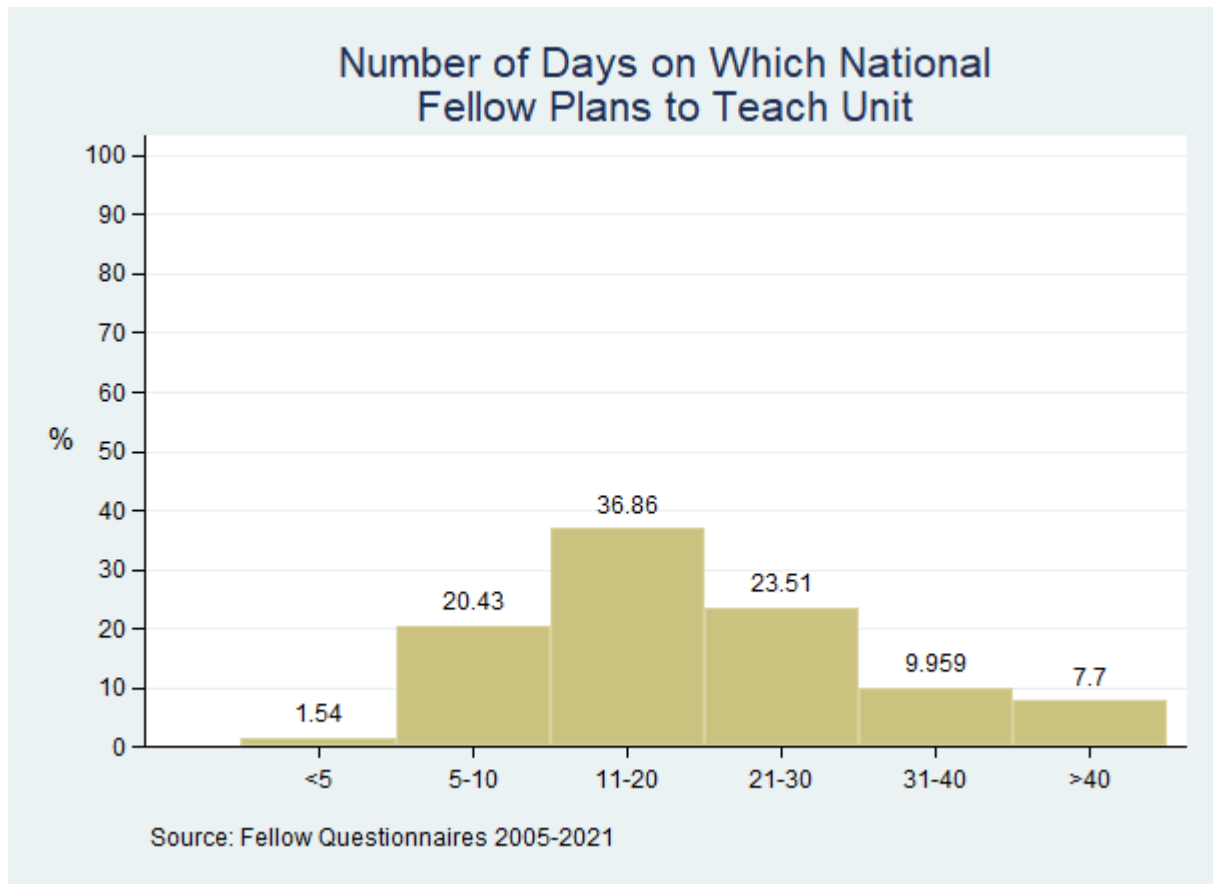
  Percentage of students to whom
  Fellow plans to teach unit |      101       0.99       0.09      0.33      1.00
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\*The numbers of teachers in these groups do not add up to the total number of teachers because the total includes elementary subject specialists, teachers in classrooms with pull-out/push-in instruction, and teachers in team teaching.

On average, 2005-2021 Fellows of the Yale National Initiative planned to teach their curriculum unit on 20 days, They were most likely to plan to teach their unit for between 11 and 20 days.

	Number	Percent
Number of days plan to teach unit	974	
<5 days (%)	15	1.54
5-10 days (%)	199	20.43
11-20 days (%)	359	36.86
21-30 days (%)	229	23.51
31-40 days (%)	97	9.96
>40 days (%)	75	7.70



On average, 2005-2021 National Fellows reported at the time they completed their curriculum units that they would encourage 6 other teachers to use or assist them in using the curriculum unit they prepared. In total, 2005-2021 National Fellows planned to share their units with 5,791 other teachers.

	Number	Standard Mean	Standard Deviation	Minimum	Maximum
Number of other teachers Fellow will encourage to use unit	927	6.25	12.26	0.00	200.00

**Experience with Previous Yale National Initiative Curriculum Unit**

As noted earlier, more than one third of 2005-2021 Fellows of the Yale National Initiative had participated in a previous Initiative seminar. More than half (57%) of the 2014-2021 National Fellows who had participated before reported that they taught their previous curriculum unit as planned. Some National Fellows reported that they used the teaching strategies to teach their existing curriculum or used the content objectives to prepare for teaching their existing curriculum. Although more than half indicated that they implemented their unit as planned, some of these National Fellows also indicated that they implemented it with adaptations or additions. Overall, 56% of National Fellows reported that they implemented their unit with adaptations or additions. Only a handful of recent National Fellows who had participated before reported that they had been unable to use their previous unit.

How did you use the unit you developed in your most recent previous Initiative seminar?	Number	Percent
	174	
Used teaching strategies in previous unit to teach existing curriculum	47	27.01
Used content objectives in previous unit to prepare for teaching existing curriculum	32	18.39
Implemented previous unit in classes with adaptations or additions	97	55.75
Implemented previous unit as planned*	112	56.85
Unable to use previous unit	10	5.75

\* In 2014, Fellows were asked only if they implemented their unit as planned. Thus, 2014 Fellows are included only in this item (142 Fellows).

Half of 2014-2021 National Fellows who had participated before (55%) reported that they had changed the previous curriculum unit during or after teaching it.

Did you make any changes to the curriculum unit during or after teaching it	Number	Percent
	196	
Changed previous curriculum unit after using it	107	54.59

Most 2014-2021 National Fellows who had participated before reported that the goals of their previous unit had been met.

	Number	Percent
	193	
Goals of previous unit were met	177	91.71

Most of the 2014-2021 National Fellows who participated in a previous Initiative seminar (95%) reported that they plan to use the curriculum unit they developed again. Nine National Fellows did not plan to teach their unit again because their teaching assignment changed, student abilities had changed, or they were promoted to a non-teaching position.

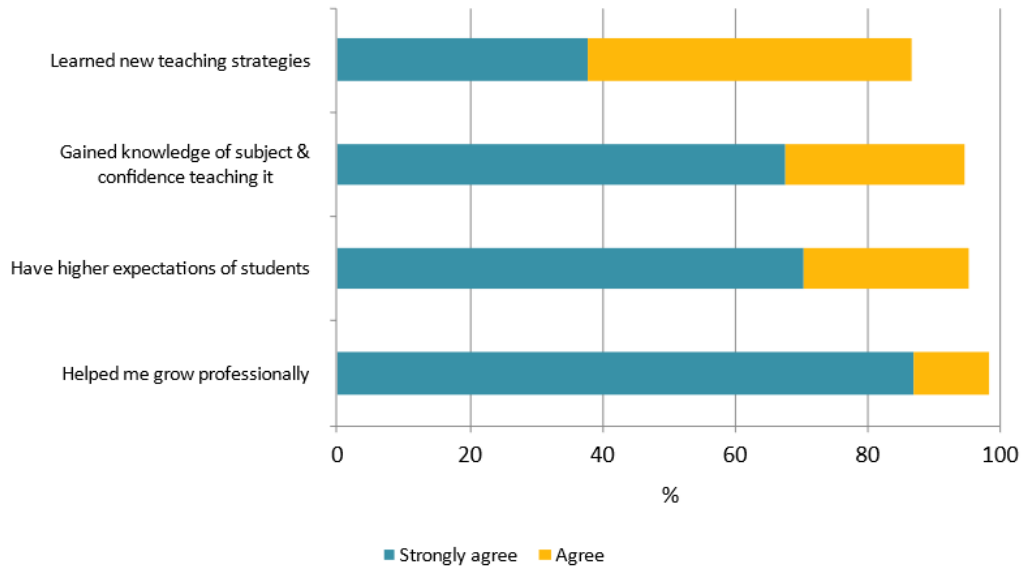
Do you plan to teach the curriculum unit again?	Number	Percent
Plan to teach previous unit again	187	95.41
	196	

### **Benefits to Teachers (2005-2021)**

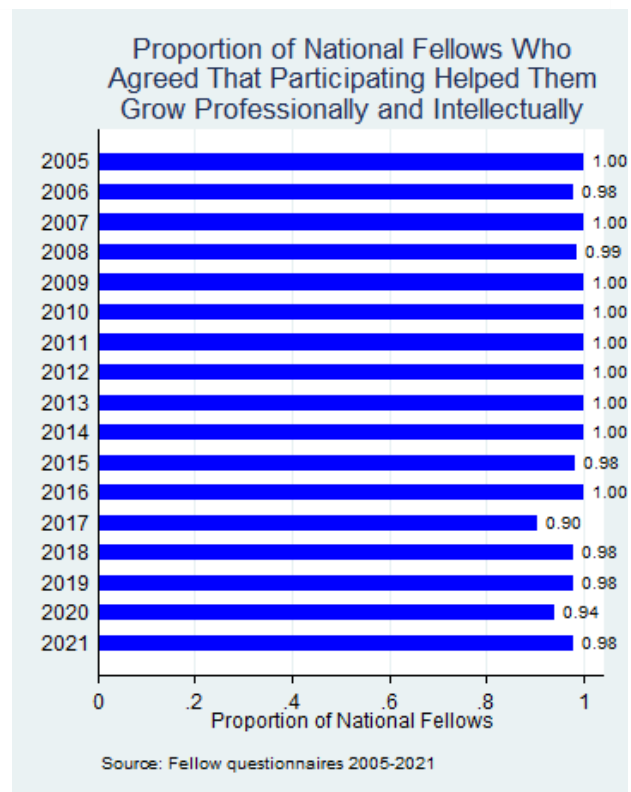
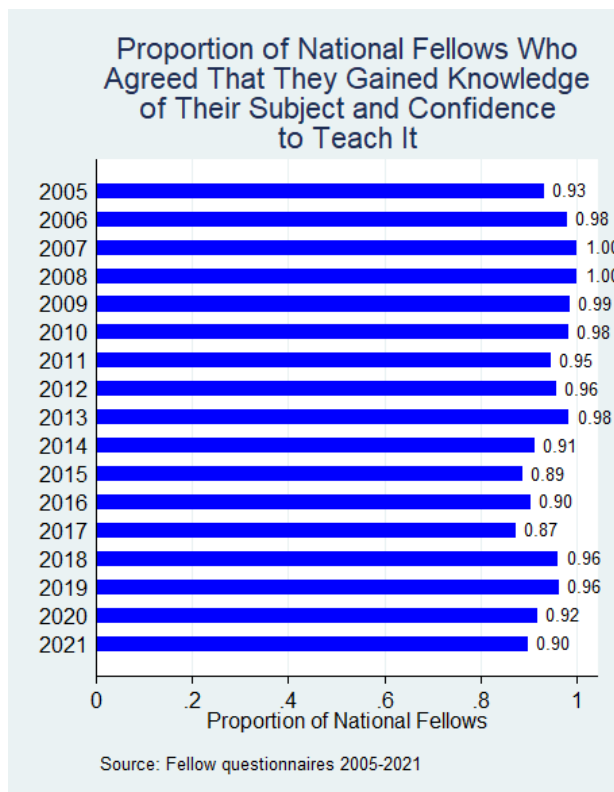
Almost all of the 2005-2021 Fellows of the Yale National Initiative agreed that the seminar helped them grow professionally and intellectually (98%; 87% strongly agreed), they gained knowledge of their subject and confidence in their ability to teach their subject (95%; 68% strongly agreed), and they have higher expectations of their students' ability to learn about the seminar subject (95%; 70% strongly agreed). Among 2014-2021 National Fellows, 87% agreed that they learned new teaching strategies from other participants in their seminar (38% strongly agreed).

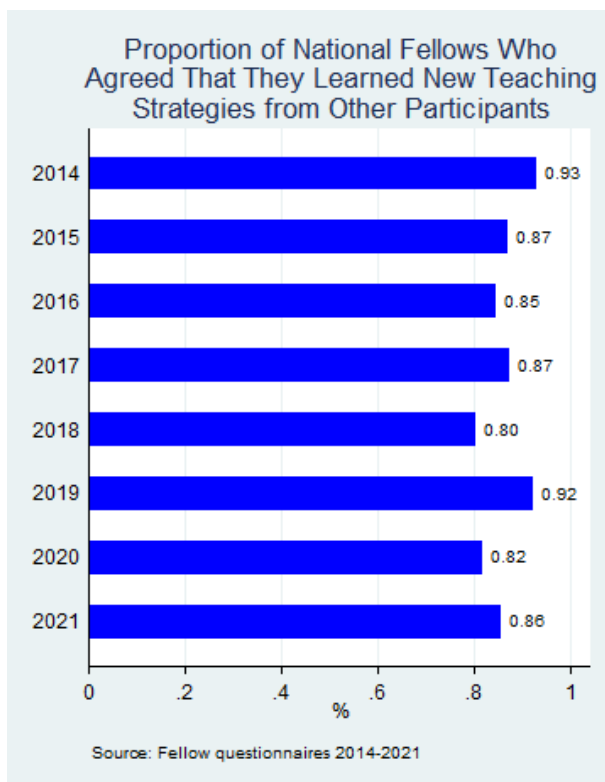
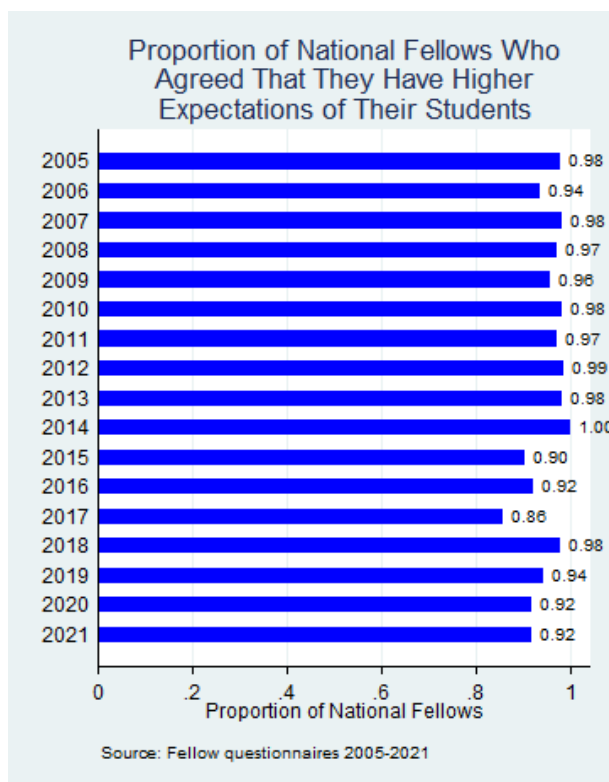
How much do you agree or disagree with the following statements?	Number	Percent
Gained knowledge of subject & confidence in teaching	984	
Strongly disagree (%)	10	1.02
Disagree (%)	16	1.63
Neither agree nor disagree (%)	26	2.64
Agree (%)	267	27.13
Strongly agree (%)	665	67.58
Helped me grow professionally	982	
Strongly disagree (%)	7	0.71
Disagree (%)	2	0.20
Neither agree nor disagree (%)	6	0.61
Agree (%)	112	11.41
Strongly agree (%)	855	87.07
Have higher expectation of students	982	
Strongly disagree (%)	6	0.61
Disagree (%)	17	1.73
Neither agree nor disagree (%)	23	2.34
Agree (%)	244	24.85
Strongly agree (%)	692	70.47
Learned new teaching strategies	435	
Disagree (%)	3	0.69
Disagree (%)	18	4.14
Neither agree nor disagree (%)	37	8.51
Agree (%)	213	48.97
Strongly agree (%)	164	37.70

## Benefits to National Fellows



Source: 2005-2021 Yale National Initiative Fellow questionnaires





Among those 2014-2021 National Fellows who reported that the opportunity to increase their mastery of the subjects they teach was an important incentive for participating in the Yale National Initiative, most agreed that they gained knowledge of the subject they teach (76% agreed strongly). Similarly, among 2005-2021 National Fellows who reported that the opportunity for intellectual stimulation was an important incentive for participating in the Yale National Initiative, nearly all agreed that the Initiative helped them grow professionally (87% agreed strongly).

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+-----+
| Key |
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| frequency |
| row percentage |
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Opportunity to increase my mastery of the subject(s) I teach	Gained knowledge of subject					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
important incentive	9 2.16	2 0.48	7 1.68	82 19.66	317 76.02	417 100.00
minor incentive	0 0.00	1 7.69	2 15.38	3 23.08	7 53.85	13 100.00
not an incentive	1 50.00	0 0.00	0 0.00	1 50.00	0 0.00	2 100.00
<b>Total</b>	10 2.31	3 0.69	9 2.08	86 19.91	324 75.00	432 100.00



Opportunity for intellectual stimulation	Helped me grow professionally					Total
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	
important incentive	6 0.64	1 0.11	5 0.53	106 11.25	824 87.47	942 100.00
minor incentive	0 0.00	0 0.00	1 3.13	5 15.63	26 81.25	32 100.00
not an incentive	1 33.33	1 33.33	0 0.00	0 0.00	1 33.33	3 100.00
Total	7 0.72	2 0.20	6 0.61	111 11.36	851 87.10	977 100.00

### Improvements in Teaching (2014-2021)

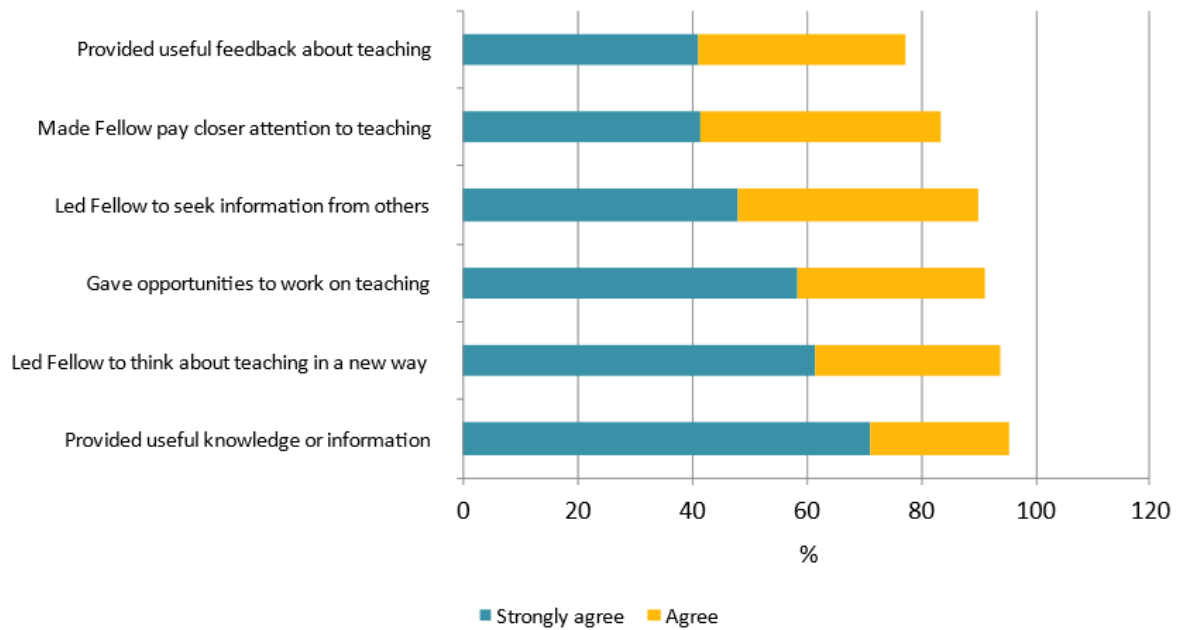
The majority of 2014-2021 Fellows of the Yale National Initiative agreed that the seminar provided useful knowledge or information (95%; 71% strongly agreed), gave them opportunities to work on their teaching (91%; 58% strongly agreed), led them to seek information from others (90%; 48% strongly agreed), led them to think about teaching in a new way (94%; 62% strongly agreed), and made them pay closer attention to their teaching (83%; 41% strongly agreed). Three quarters (77%) indicated that their seminar provided useful feedback about teaching.

Extent of agreement with the following statements	Number	Percent
Gave opportunities to work on teaching	435	
Strongly disagree (%)	15	3.45
Disagree (%)	5	1.15
Neither agree nor disagree (%)	19	4.37
Agree (%)	142	32.64
Strongly agree (%)	254	58.39
Provided useful knowledge or information	433	
Strongly disagree (%)	13	3.00
Disagree (%)	2	0.46
Neither agree nor disagree (%)	5	1.15
Agree (%)	105	24.25
Strongly agree (%)	308	71.13
Did not provide useful feedback about teaching	434	
Strongly disagree (%)	179	41.24
Disagree (%)	156	35.94
Neither agree nor disagree (%)	59	13.59
Agree (%)	24	5.53
Strongly agree (%)	16	3.69
Made me pay closer attention to teaching	434	
Strongly disagree (%)	11	2.53
Disagree (%)	12	2.76
Neither agree nor disagree (%)	49	11.29
Agree (%)	182	41.94
Strongly agree (%)	180	41.47

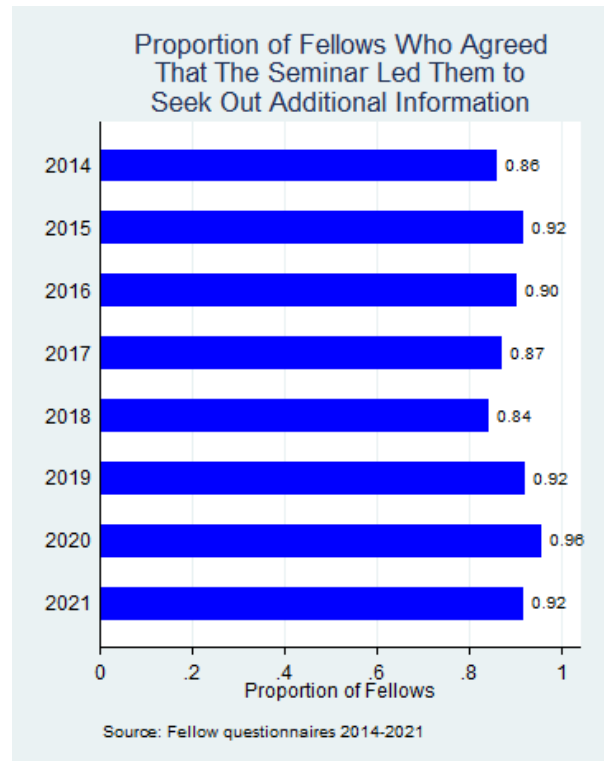
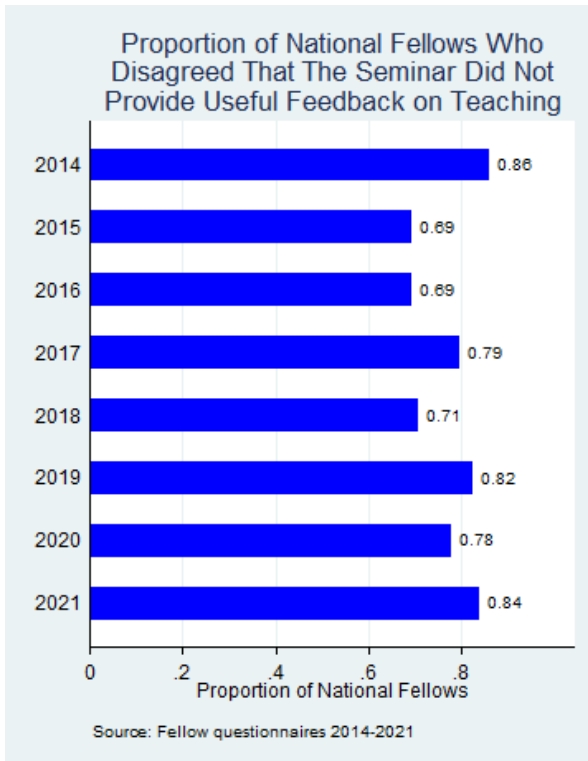
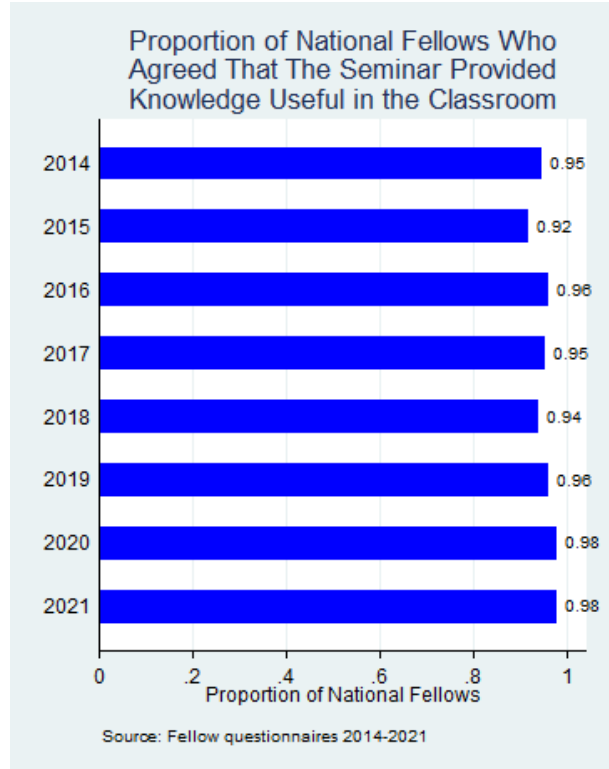
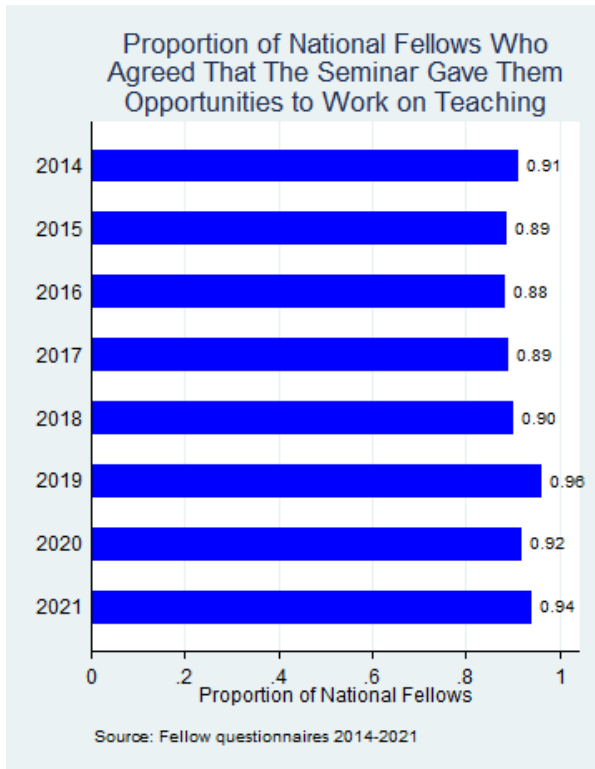
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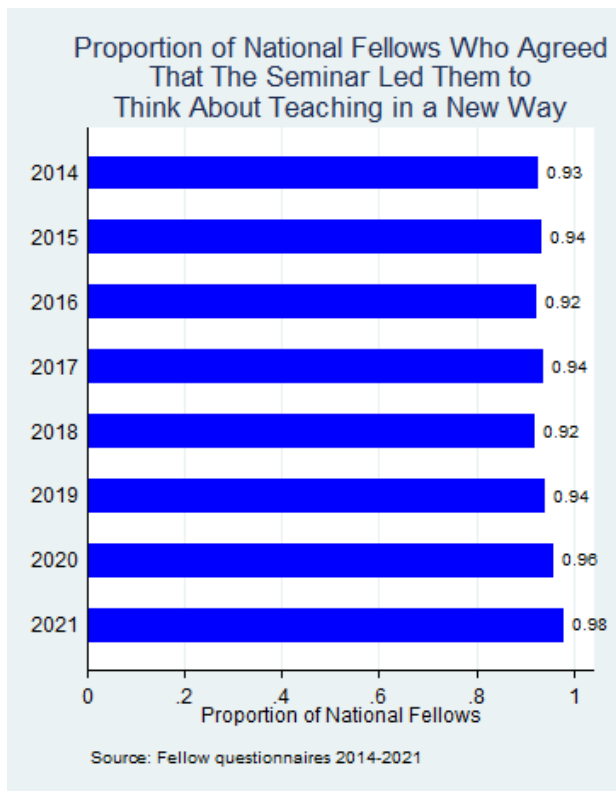
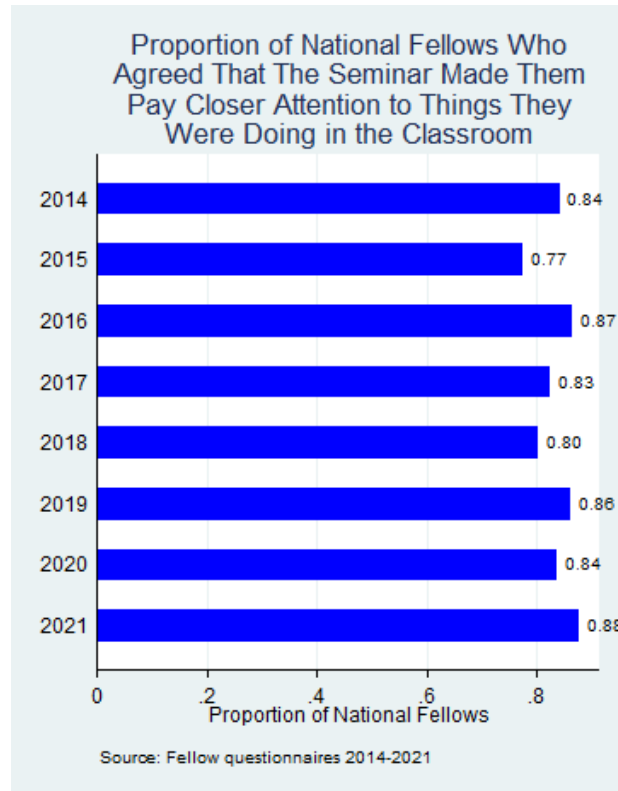
Extent of agreement with the following statements	Number	Percent
Led me to seek information from others	435	
Strongly disagree (%)	11	2.53
Disagree (%)	6	1.38
Neither agree nor disagree (%)	27	6.21
Agree (%)	182	41.84
Strongly agree (%)	209	48.05
Led me to think about teaching in a new way	434	
Strongly disagree (%)	11	2.53
Disagree (%)	5	1.15
Neither agree nor disagree (%)	10	2.30
Agree (%)	141	32.49
Strongly agree (%)	267	61.52

## Benefits to National Fellows' Teaching



Source: 2014-2021 Yale National Initiative Fellow questionnaires





**Improvements in Morale/Retention**

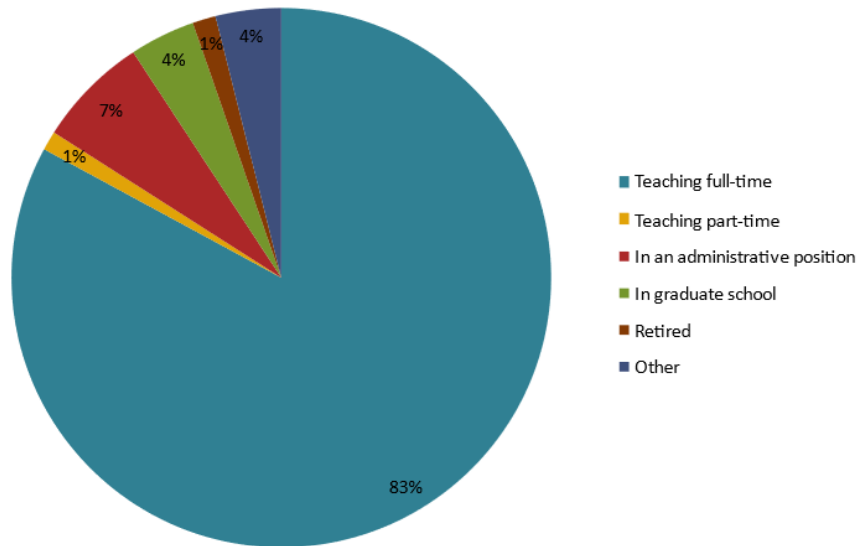
On average, the 2014-2021 Fellows of the Yale National Initiative expected to be a teacher in their school district for 12 more years.

How many more years do you expect to be a teacher in your school district?	Number	Mean	SD	Min	Max
Years expect to be a teacher in district	435	12.37	7.62	0.00	50.00

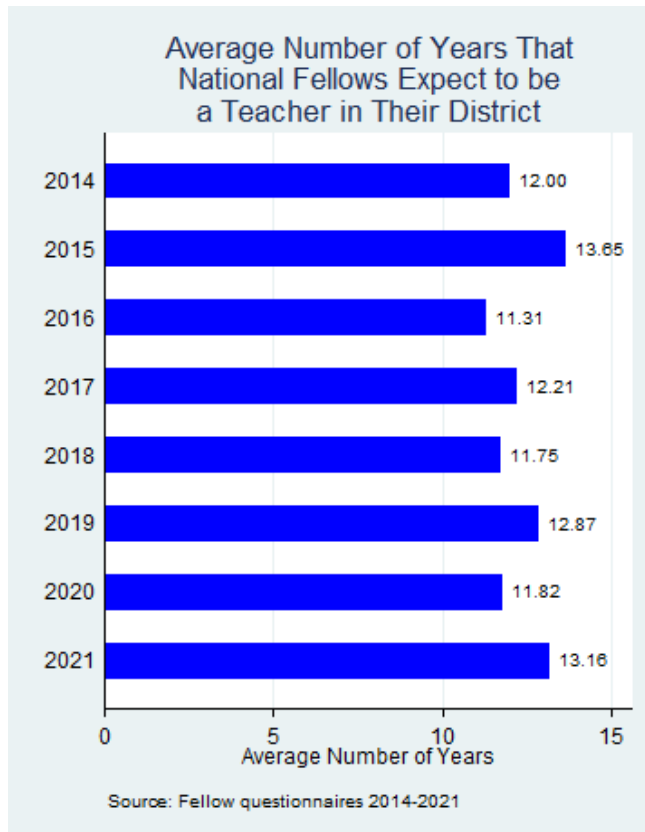
83% of the 2014-2021 National Fellows expect to remain teaching full-time in 5 years. 11% expect to be doing something else in the education field (working in administration or in graduate studies).

In 5 years, I expect to be:	Number	Percent
What teacher expects to be doing in 5 years	433	
Teaching full-time (%)	359	82.91
Working in administration (%)	29	6.70
In graduate studies (%)	17	3.93
Retired (%)	6	1.39
Other (%)	17	3.93
Teaching part-time (%)	5	1.15

## What National Fellows Expect to Be Doing in 5 Years



Source: 2014-2021 Yale National Initiative Fellow questionnaires



Source: Fellow questionnaires 2014-2021

Among those who expect to be teaching in 5 years, most expected to be teaching in the same school (86%) or another school in the district (9%).

Where do you expect to be teaching in 5 years?	Number	Percent
Where expect to be teaching in 5 years	364	
In my school (%)	312	85.71
In another school in district (%)	34	9.34
In another public school district (%)	15	4.12
In private or charter school (%)	3	0.82

Similarly, most National Fellows who expected to be in an administrative position in 5 years expected to be an administrator in his/her current school district (90%) or another public school district (7%).

### *Teacher Performance (2014-2021)*

Most 2014-2021 National Fellows (82%) had received a written performance evaluation within the last year.

	Number	Percent
When last received written performance evaluation	434	
Within the last year (%)	356	82.03
More than a year ago (%)	76	17.51
Never (%)	2	0.46

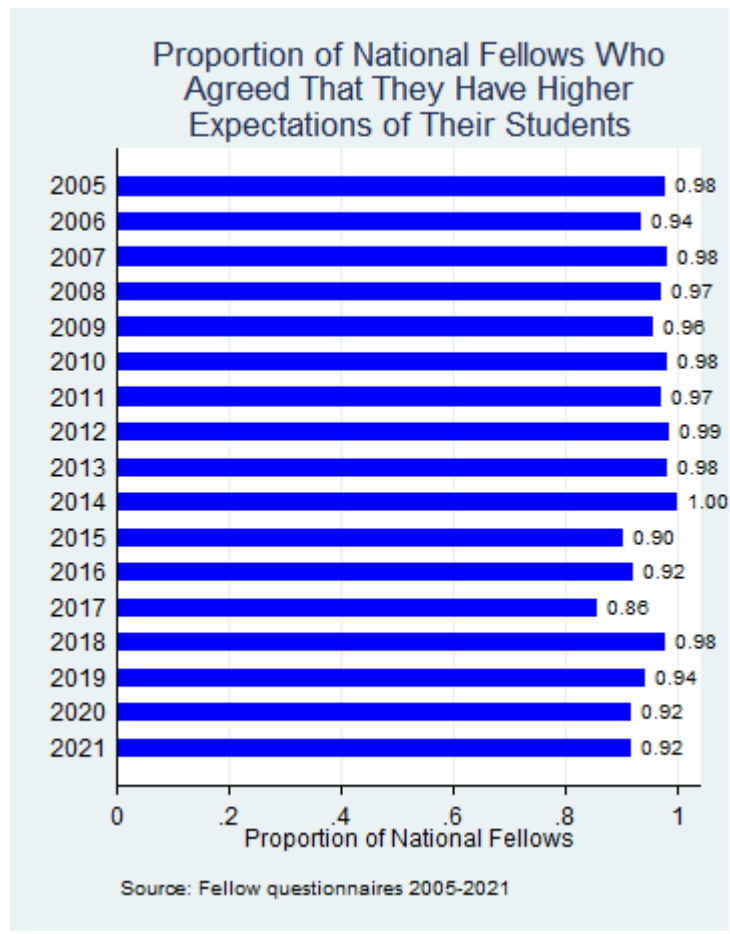
More than three quarters of the 2014-2021 Fellows of the Yale National Initiative (78%) reported that they expect their participation in the Initiative to contribute at least to a moderate extent to receiving a rating as an effective or exemplary teacher in their next performance evaluation.

	Number	Percent
Extent to which the Yale National Initiative will contribute to performance evaluation	434	
Great extent (%)	173	39.86
Moderate extent (%)	166	38.25
Small extent (%)	52	11.98
Not at all (%)	43	9.91

**Results for Students (2005-2021)**

Most of the 2005-2021 National Fellows agreed that they have higher expectations of students’ ability to learn about the subject of their seminar (70% strongly agreed). Fellows’ higher expectations of their students may be important, because higher teacher expectations have been associated with higher student achievement.<sup>16</sup>

Agreement with the following statements	Number	Percent
Have higher expectation of students	982	
Strongly disagree (%)	6	0.61
Disagree (%)	17	1.73
Neither agree nor disagree (%)	23	2.34
Agree (%)	244	24.85
Strongly agree (%)	692	70.47



<sup>16</sup> Hester de Boer, Anneke C. Timmermans & Margaretha P. C. van der Werf (2018) The effects of teacher expectation interventions on teachers’ expectations and student achievement: narrative review and meta-analysis, Educational Research and Evaluation, 24:3-5, 180-200, DOI: 10.1080/13803611.2018.1550834

**Future Plans (2005-2021)**

More than three quarters of 2014-2021 National Fellows (83%) indicated that they intended to participate in the Yale National Initiative in future years if they are invited, and most of the remaining National Fellows (14%) reported that they might participate in the future.

	Number	Percent
Intend to participate in Initiative in the future	435	
No (%)	7	1.61
Yes (%)	366	82.64
Maybe (%)	62	14.25

Among the 2014-2021 National Fellows who said “Maybe” they will participate again or said “No” they won’t participate again, the most common reasons given were that the time and effort required was too much, the stipend was not large enough, and they expected to pursue other professional development opportunities.

Reason don’t intend to participate as a Fellow in the Initiative again	Number	Percent
	69	
Teaching assignment changed	2	2.90
Promoted to non-teaching position	2	2.90
Expect to retire from teaching	1	1.45
Expect to move to different district	1	1.45
Participating requires too much time & effort	12	17.39
Stipend is not large enough	7	10.14
Expect to pursue other PD opportunities	18	26.09
Other reason	48	69.57

Other reasons related to the National Initiative include feeling that the local Institute, if established, would help best with curriculum, it depends on the seminar topic or seminar offered, taking turns with other teachers locally, will allow or encourage others to apply, participating required too much time, and difficulties with local district leadership. Other career-related reasons include conflict with other school obligations, moving on to a coaching role, going back to grad school, other commitments, and date conflicts. Other personal reasons include anticipated travel abroad, travel plans, time away from family, family conflicts during the Intensive Session, family reasons, and pregnancy.

Many of those who did not report that they plan to participate again said there were changes the Initiative could make that would lead them to consider participating again.

Are there changes in the Yale National Initiative that would lead you to consider participating again	Number	Percent
	63	
Yes	30	47.62



## Appendix

The aggregated findings across all years of the Yale National Initiative include repeating Fellows each time they participated in a seminar. In 2020, we investigated alternative approaches that include each Fellow only once in the aggregated analyses. The two approaches we looked at are (1) including the average response of repeating Fellows across the years they participated, and (2) including only the most recent year of participation for repeating Fellows. Because the latter alternative had the most potential to affect the aggregated analyses, this appendix focuses on the second alternate approach.

The two alternate approaches both weight the findings toward the present, the second alternate approach more than the first. Comparison of the distribution of Fellows by year in the main approach with the distribution of Fellows by year when they are included only in the most recent year in which they participated shows that using the alternate approach does not result in a very different distribution of data over time.

year	Freq.	Percent	Cum.
2005	45	4.80	4.80
2006	48	5.12	9.91
2007	61	6.50	16.42
2008	70	7.46	23.88
2009	69	7.36	31.24
2010	58	6.18	37.42
2011	74	7.89	45.31
2012	68	7.25	52.56
2013	59	6.29	58.85
2014	57	6.08	64.93
2015	62	6.61	71.54
2016	52	5.54	77.08
2017	63	6.72	83.80
2018	51	5.44	89.23
2019	52	5.54	94.78
2020	49	5.22	100.00
Total	938	100.00	

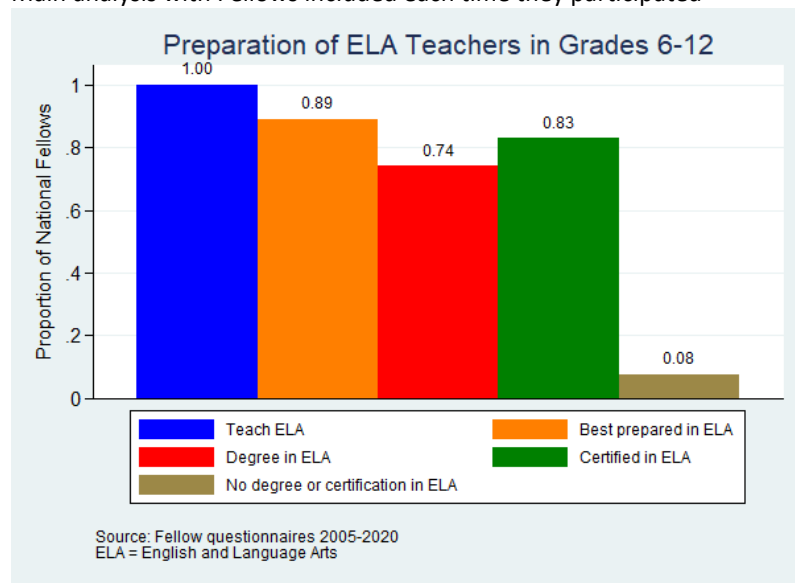
(last) year	Freq.	Percent	Cum.
2005	26	4.71	4.71
2006	22	3.99	8.70
2007	26	4.71	13.41
2008	32	5.80	19.20
2009	47	8.51	27.72
2010	35	6.34	34.06
2011	42	7.61	41.67
2012	44	7.97	49.64
2013	32	5.80	55.43
2014	31	5.62	61.05
2015	41	7.43	68.48
2016	24	4.35	72.83
2017	43	7.79	80.62
2018	30	5.43	86.05
2019	28	5.07	91.12
2020	49	8.88	100.00
Total	552	100.00	

Because few Fellows moved between states between years they participated and similar proportions of Fellows across states are repeat Fellows, the main and alternate approaches result in very similar distributions of Fellows across states.

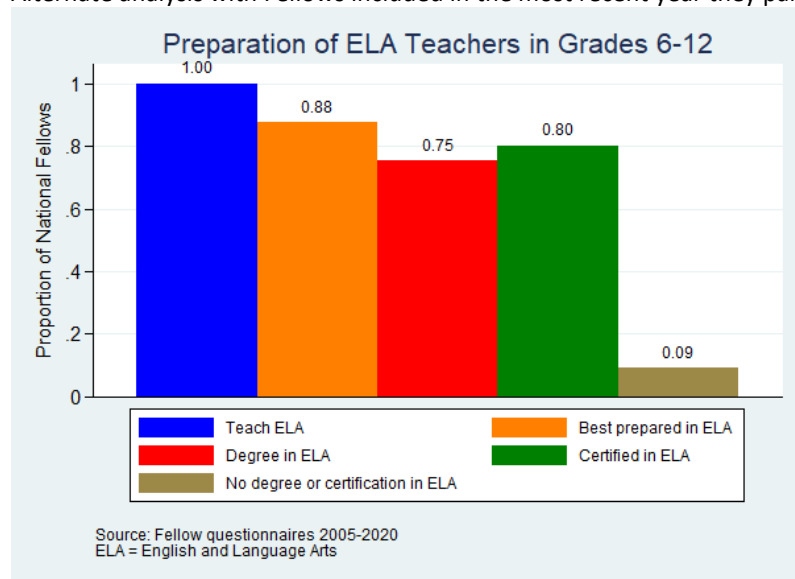
In fact, Fellows’ responses to the Fellow questionnaire tended to remain the same over time, or if they varied, they tended to vary between the highest two categories, which were often combined in the analyses. In the aggregate analyses, the variations in the responses of repeating Fellows tended to balance out and the aggregated findings were quite similar.

One area in which the year-by-year analyses show change that might affect the aggregate analyses is the preparation of Fellows in English and language arts (ELA). The year-by-year analyses show that over time, fewer Fellows teaching ELA in grades 6 through 12 lacked both certification and a degree in their subject area. Despite this trend, analyses based on the last time each Fellow participated in the National initiative tell a nearly identical story.

Main analysis with Fellows included each time they participated



Alternate analysis with Fellows included in the most recent year they participated



Over time, the proportion of Fellows who taught in elementary grades increased, but that trend had little impact on the aggregate analysis when only the most recent year in which each Fellow participated is included:

Highest grade range taught	Number	Percent
	885	
Grades K-5 (%)	248	26.55
Grades 6-8 (%)	239	25.59
Grades 9-12 (%)	447	47.86

Highest grade range taught	Number	Percent
	549	
(last) Grades K-5 (%)	150	27.32
(last) Grades 6-8 (%)	154	28.05
(last) Grades 9-12 (%)	245	44.63

The usefulness of the stipend was another aspect of the Fellow questionnaire finding that changed somewhat over time. Again, however, the main and alternate aggregated findings tell a nearly identical story:

Variable	Number	Percent
The stipend is useful:	930	
To a great extent (%)	479	51.51
To a moderate extent (%)	261	28.06
To a small extent (%)	155	16.67
Not at all (%)	24	2.58
Did not use (%)	11	1.18

Variable	Number	Percent
The stipend is useful:	548	
To a great extent (%)	284	51.82
To a moderate extent (%)	151	27.55
To a small extent (%)	93	16.97
Not at all (%)	13	2.37
Did not use (%)	5	1.28

The sensitivity analyses demonstrate that the characteristics and program assessments of repeating Fellows are generally stable and similar to those of new Fellows. Removing earlier seminar experiences of repeating Fellows has remarkably little effect on the aggregated Fellow questionnaire findings. Thus, although the main aggregated findings describe Fellows’ seminar experiences, discussing them as Fellows’ experiences to streamline the presentation is not misleading.