Teachers Know Best

Teachers' Views on Professional Development

ABOUT THIS STUDY

The Boston Consulting Group (BCG) was engaged by the Bill & Melinda Gates Foundation to conduct a research study on professional development for teachers to help identify needs and opportunities for improvement.

To inform this research, between January and March 2014, BCG engaged more than 1,300 stakeholders—including teachers, professional development leaders in district and state education agencies, principals, professional development providers, and thought leaders—through a combination of interviews and surveys. Subsequent research included a survey of 1,600 additional teachers. BCG also analyzed existing reports and market data to identify the size and composition of the overall professional development market. Interviews, surveys, and research focused on a few major topics:

• Current state professional development participation, needs, and satisfaction

• Professional development decision-making and system-level barriers and enablers

• Professional development market size and supplier landscape (key providers, products, and services offered)

• Professional development needs in the future and emerging offerings

• Areas and causes of supply and demand mismatches

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Introduction

Teachers want and need support to develop their practice so that their students can succeed. In most places, that support falls under the auspices of professional development, a broad umbrella that includes everything from one-time workshops to online research, coaching, and collaborative time teachers spend with each other in professional learning communities.

All told, $18 billion is spent annually on professional development, and a typical teacher spends 68 hours each year—more than a week—on professional learning activities typically directed by districts. When self-guided professional learning and courses are included, the annual total comes to 89 hours.

Yet by many measures, including the views of teachers themselves, much of this effort and investment is simply not working. In interviews, teachers say that too many current professional development offerings are not relevant, not effective, and most important of all, not connected to their core work of helping students learn.

To gain insights into the roadblocks to implementing effective professional development, the Bill & Melinda Gates Foundation contracted with the Boston Consulting Group in 2014 to reach more than 1,300 teachers, professional development leaders in district and state education agencies, principals, professional development providers, and thought leaders through surveys and interviews. What we heard from this broad range of stakeholders was consistent: The way in which schools and districts deliver professional learning is highly fragmented and characterized by key disconnects between what decision-makers intend and the professional learning teachers actually experience.

More specifically:

- Few teachers (29 percent) are highly satisfied with current professional development offerings.

- Few teachers (34 percent) think professional development has improved.

- Large majorities of teachers do not believe that professional development is helping them prepare for the changing nature of their jobs, including using technology and digital learning tools, analyzing student data to differentiate instruction, and implementing the Common Core State Standards and other standards.

- Professional development formats strongly supported by district leadership and principals, such as professional learning communities and coaching, are currently not meeting teachers' needs.

- Principals largely share teachers' concerns about the efficacy of professional learning.

At the same time, teachers and administrators largely agree on what good professional learning looks like. That consensus, coupled with teachers' increasing use of self-guided online resources and their desire to work together to focus on planning, designing, and delivering instruction, provide directions for the future.

What Teachers Want

Teachers and administrators share similar perspectives about the ideal professional learning experience. When asked what effective professional development looks like, teachers describe learning that is relevant, hands-on, and sustained over time.

WHAT TEACHERS SAY: THE IDEAL PROFESSIONAL DEVELOPMENT EXPERIENCE

Despite their dissatisfaction with much current professional development (PD), teachers value its potential as a tool to help them plan and improve instruction. They describe the ideal professional learning experience as:

RELEVANT

"It looks different in every context. It has to be personalized."

INTERACTIVE

"The best ... usually involve hands-on strategies for the teacher to actually participate in."

DELIVERED BY SOMEONE WHO UNDERSTANDS MY EXPERIENCE

"The best PD has been when a teacher shows me what has revolutionized their classroom ... anything that a fellow teacher who is still in the classroom [presents] beats out anything else."

"All teacher driven, with administration only there to support teacher needs. Top down would be gone."

SUSTAINED OVER TIME

"PD needs to be something that you keep working on for a semester or a year."

TREATS TEACHERS LIKE PROFESSIONALS

"PD should treat us as adults, rather than children."

Teachers also suggest that the ideal professional learning experience should focus less on presentations and lectures and more on opportunities to apply learning through demonstrations or modeling and practice.
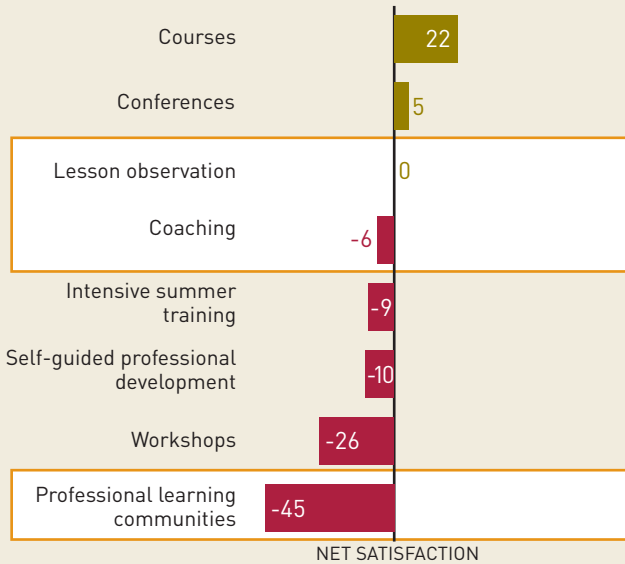
A Problem of Execution

District and school administrators have a similar view of what good professional development looks like. But there is a real disconnect between teachers' satisfaction with the professional development they are now offered by their school or district and the areas where district leaders think they should focus more professional learning time.

SIGNIFICANT DISCONNECTS

While districts focus on coaching, lesson observation, and professional learning communities, teachers are not satisfied with their implementation to date
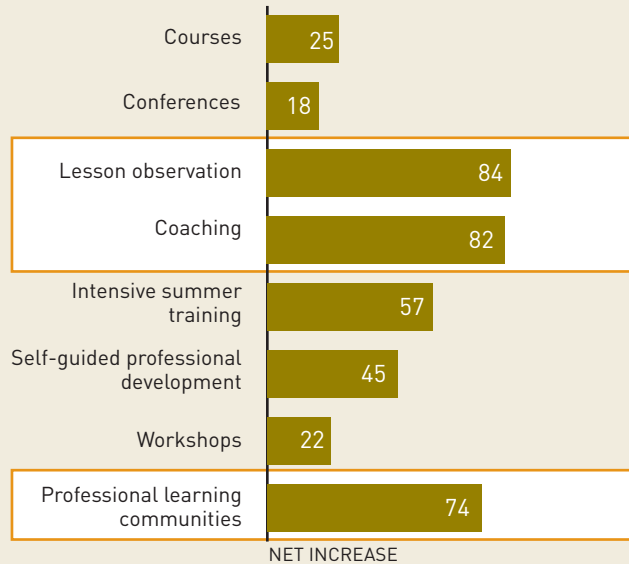
Current state: Teachers are not satisfied with professional development (PD) formats ...

Question: Overall, how would you rate your satisfaction with the PD offered to teachers in your school district/school?[1]

Format	Net Satisfaction
Courses	22
Conferences	5
Lesson observation	0
Coaching	-6
Intensive summer training	-9
Self-guided professional development	-10
Workshops	-26
Professional learning communities	-45

NET SATISFACTION

... that local education agency leaders overwhelmingly want to spend more time on.

Question (for local education agency-level professional development leaders): If it were totally up to you, do you believe your district should deliver more or less PD to teachers relative to the current amount?[2]

Format	Net Increase
Courses	25
Conferences	18
Lesson observation	84
Coaching	82
Intensive summer training	57
Self-guided professional development	45
Workshops	22
Professional learning communities	74

NET INCREASE

[1]*Net scores determined using 10-point scale ratings; calculated using Net Promoter Score methodology: Defined as "promoters" (the percentage of respondents rating agreement/satisfaction as 9 or 10 on a 10-point scale) minus "detractors" (the percentage of respondents rating agreement/satisfaction as 6 or below on a 10-point scale).*
Question text: *"Overall, how satisfied are you with the last [format] you participated in for professional development?" and "Overall, how would you rate your satisfaction with the PD offered to teachers in your school district/school?"*
Ns: *Teachers: conferences, 132; intensive summer training, 128; workshops, 113; coaching, 118; personalized learning communities, 125; courses, 121; self-guided professional development, 123; lesson observation, 112; Principals, 48; Local education agencies, 157*
[2]*Net preferred change calculated by subtracting Less and Much less responses from More and Much more responses.*
Question text: *"If it were totally up to you, do you believe your district should deliver more or less PD to teachers relative to the current amount?"*
Responses: *1, Much less; 2, Less; 3, About the same; 4, More; 5, Much more.*
Ns: *Local education agency, 157*
Sources: *Teacher survey, February 2014; Administrator survey, March 2014*

What can explain this disconnect? When executed well, the value of professional development formats like coaching and collaboration can be substantial. And teachers in strong collaborative environments see significant benefits in their day-to-day work. But the way these formats are currently delivered in many places falls well short of the ideal and leaves many teachers unsatisfied.
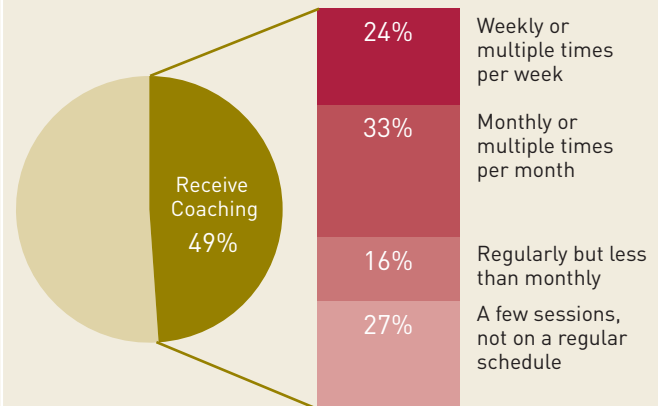
For example, survey data suggest that intensive coaching for teachers is relatively rare and that most coaching is focused on new and struggling teachers. Only about half of teachers report receiving coaching in the last year, and less than a quarter receive it on an intensive basis (weekly or more).

INTENSIVE COACHING IS RELATIVELY RARE

Principals report that the majority of in-school coaching is focused on new and struggling teachers

New Teachers
35%

Struggling Teachers
25%

All Other Teachers
40%
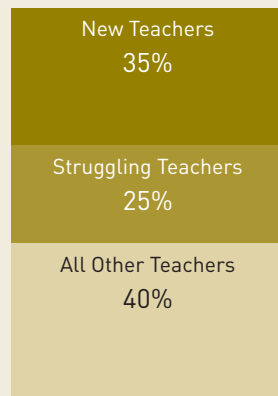
Only half of teachers report receiving coaching in the past 12 months, with high variance in frequency

Receive Coaching 49%

24% — Weekly or multiple times per week

33% — Monthly or multiple times per month

16% — Regularly but less than monthly

27% — A few sessions, not on a regular schedule

Question text: *"What percentage of total coaching time at your school is dedicated to: New teachers, Struggling teachers, All other teachers? During the past 12 months, how frequently did you participate in formal coaching/mentoring-related activities?"*
Ns: *Principals, 40; Teachers, 119*
Sources: *Teacher survey, February 2014; Teacher focus groups, March 2014*

And while the advent of new teacher evaluation systems means that teachers are getting observed more than they were in the past, many teachers say observations rarely lead to true coaching about what they could do differently. As one teacher put it, "We all get observed by the administration. There's written feedback that comes with it. But not mentoring, coaching, pairing."

In contrast, teachers prefer coaching that is ongoing and delivered by experienced content experts and individuals well trained at providing feedback.

TEACHERS' COACHING PREFERENCES

Teachers express strong preferences for coaching program design

Rank	Attributes of ideal coaching experience
1	My coach knows what it's like to be in my shoes.
2	My coach is an expert in my subject area.
3	Coaching sessions give me specific actions I can try in my classroom immediately.
4	My coach is well trained at providing feedback.
5	My coach is not the same person who does my evaluation.

Teachers express concerns over who serves as a coach and report negative stigma around coaching

Demand for content expertise	"If they could bring retired teachers out to serve as coaches … ."
Preference for ongoing relationships	"I don't want someone coming in on their high horse telling me what to do … they don't know my strengths and weaknesses. I'm a little territorial."
Skepticism of administrators	"Most administrators don't have enough classroom seat time to coach teachers. Many of them went in just to be administrators, did the minimum time in the classroom." "Coaching shouldn't be done by the person who evaluates you; it's a conflict of interest."
Negative stigma; coaching is perceived as a "last resort" for low performers	"I got told I was going to be meeting with the district reading coach. I thought, 'Oh no, they're talking about me at the district … .'"

Note: Ranking reflects prevalence in top three attributes of effective coaching, selected by focus group participants from list of 21 total attributes
N: 26
Source: Teacher focus groups, March 2014

Similarly, teachers recognize the value of collaboration, but they say that their current experience of collaborative professional development falls far short of the ideal.

COLLABORATION: CURRENT VS. IDEAL

Focus group question: Which images represent your current experience and the ideal state of collaborative professional development?

	Lack of engagement	**Poor use of time**	**Poorly planned/executed**
CURRENT EXPERIENCE	• "Feels like I'm being held hostage" • "I would rather be somewhere else"	• "Not another meeting" • "Not one more thing I have to do" • "Don't read PowerPoint presentations to me"	• "People might have good knowledge but the pieces don't fit together" • "Need an agenda and rules … otherwise it's a social hour"
	Energizing	**Supportive**	**Hands-on/scenario-based**
IDEAL STATE	• "Makes me feel fired up" • "Energized to go back to my classroom"	• "Makes me feel supported" • "Feel accountable to show up to help each other" • "Bounce ideas off of each other"	• "Specific activities to do" • "Brainstorm solutions for a specific teacher" • "Gives me what I need in bite-sized pieces"

Source: Teacher focus groups, March 2014

Teachers in focus groups offered principles for ways to improve in-school collaboration. These include a structured agenda and objectives, mutual accountability for those who participate so that everyone is invested in the work, and protocols for giving and receiving feedback. Of the teachers surveyed, those who found collaboration most helpful saw strong benefits to their day-to-day work in key areas, such as planning specific lessons, developing teaching skills and content, and aligning curriculum and expectations.

TEACHERS WANT WELL-STRUCTURED COLLABORATION AND ARE MOST SATISFIED WHEN BENEFITS TO DAY-TO-DAY WORK ARE CLEAR

Average collaboration builds collegiality, but most-satisfied teachers see benefit in day-to-day work

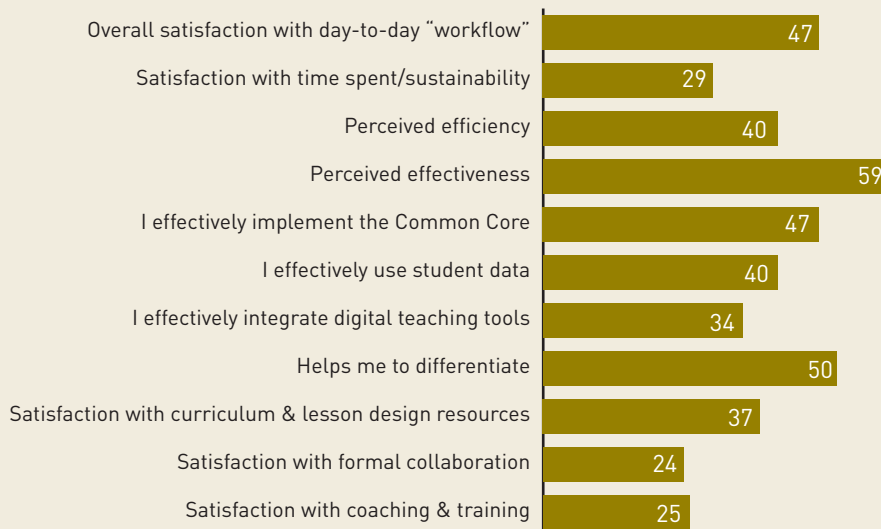| Helpfulness of collaboration	Average teacher responses	Teachers highly satisfied with collaboration
Discussing each other's experiences, frustrations, ideas	19%	59%
Aligning on curriculum standards/expectations	10%	57%
Reviewing student data	3%	48%
Planning specific lesson	-4%	59%
Identifying daily and weekly learning objectives	-13%	52%
Developing teaching skills, content knowledge	-17%	57%
Debriefing student behavior issues	-20%	25%
Communicating rules, procedures, compliance	-30%	14%

Question text: *"Overall, how helpful was your collaborative small group in supporting each of the following activities?"*
Ns: *Overall, 302; Highly satisfied with collaboration, 76*
Source: *Teacher workflow survey, June 2014*

However, only 7 percent of teachers surveyed report that their schools have strong collaboration models.

WHERE STRONG COLLABORATION DOES EXIST, THE BENEFITS ARE SUBSTANTIAL

	Net score
Overall satisfaction with day-to-day "workflow"	47
Satisfaction with time spent/sustainability	29
Perceived efficiency	40
Perceived effectiveness	59
I effectively implement the Common Core	47
I effectively use student data	40
I effectively integrate digital teaching tools	34
Helps me to differentiate	50
Satisfaction with curriculum & lesson design resources	37
Satisfaction with formal collaboration	24
Satisfaction with coaching & training	25

"Strong collaboration" environments defined by:

- Formal collaboration time built into master schedule

- Shared instructional planning responsibilities (lessons planned in groups or on rotating basis)

- Positive culture around collaboration (i.e., grade-level/subject-area teams trust and support each other)

Teachers whose schools have strong collaboration report dramatically higher satisfaction with day-to-day work.

Strong collaboration prepares teachers to face key challenges (e.g., Common Core, use of data, technology, differentiation).

**Ns:** *Teachers reporting strong collaboration, 110*
Net score: *Defined as "promoters" (the percent of respondents rating agreement/satisfaction as 9 or 10 on a 10-point scale) minus "detractors" (the percent of respondents rating agreement/satisfaction as 6 or below on a 10-point scale).*
Source: *Teacher workflow survey, June 2014*

In fact, workshops remain the most common form of professional development, with more than 80 percent of teachers surveyed participating in workshops in the past year. More than half of teachers also participate in conferences, lesson observations, and self-guided professional learning.

Teachers, on average, spent around 20 hours per year on workshops—more time than on all other common forms of professional development except professional learning communities, a format in which fewer teachers participated.

WORKSHOPS ARE THE MOST COMMON DELIVERY FORMAT, BUT OTHER FORMATS CONSUME MORE TIME OF THOSE WHO PARTICIPATE

Professional development format incidence versus time spent
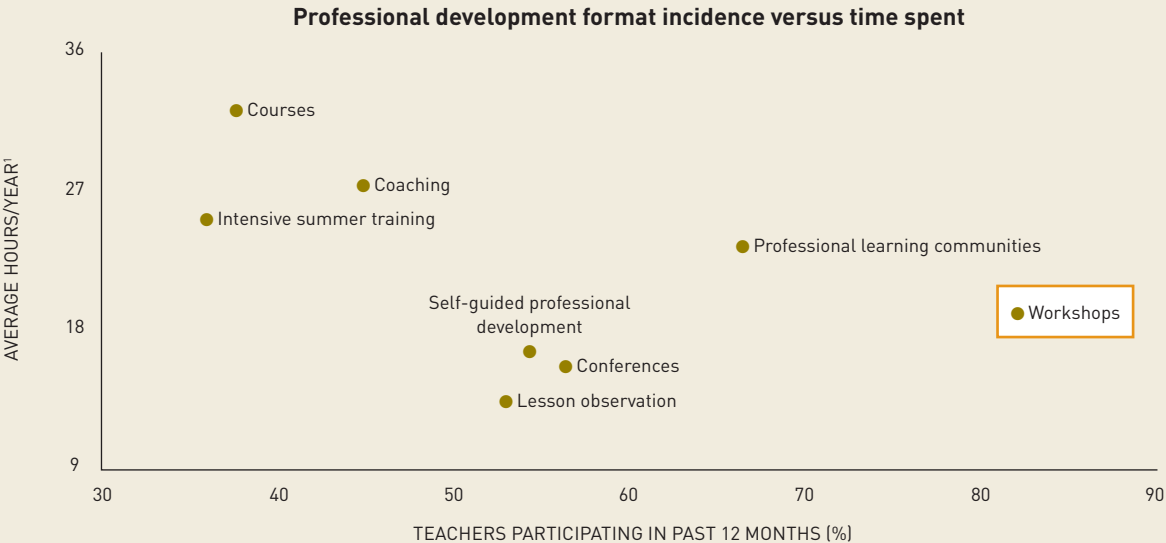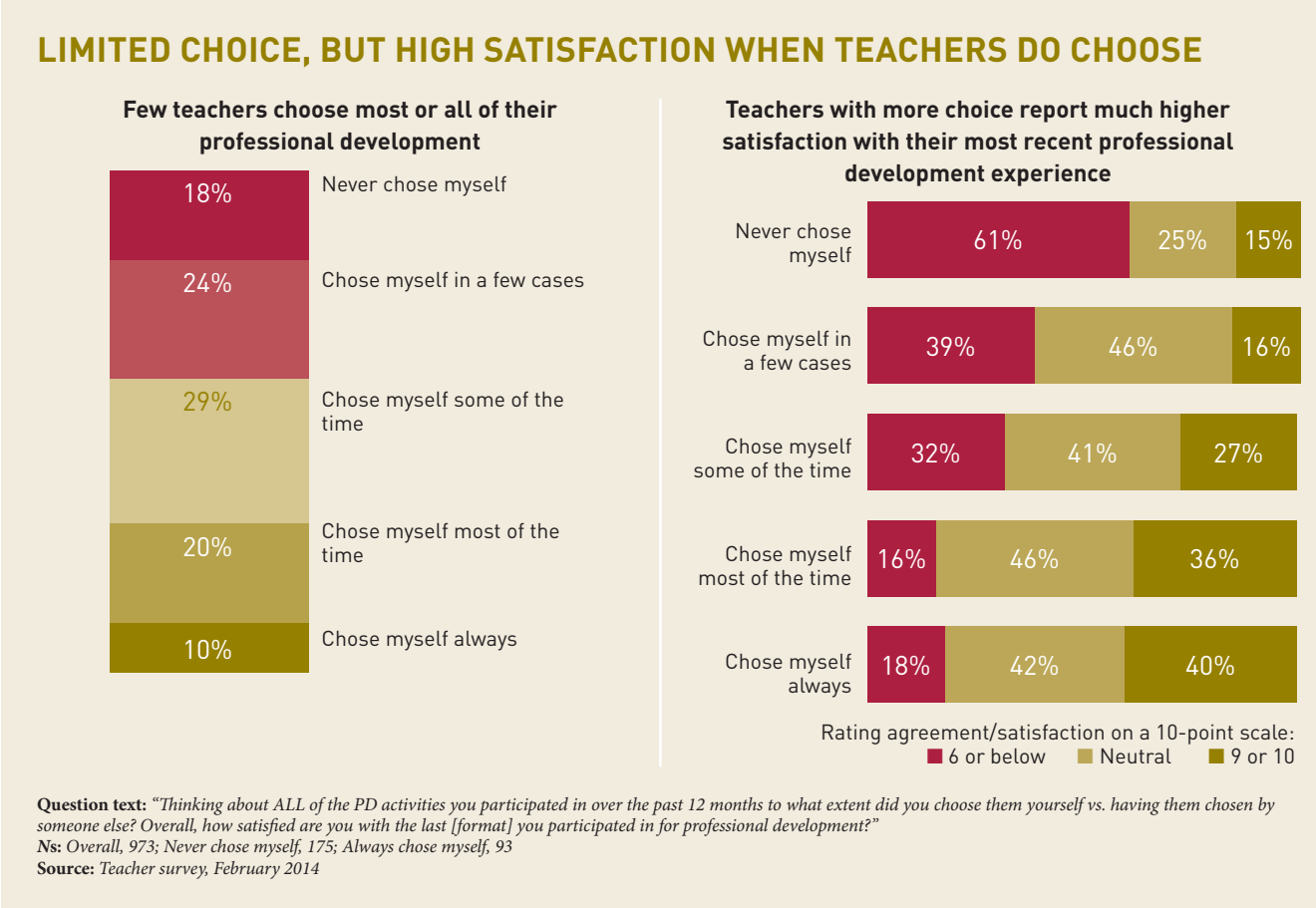

1 Average hours per year values reflect average time spent in format among only teachers who have participated in format at all in the past 12 months.
Question text: *"Approximately how many hours of professional development activities did you participate in within each of the following formats in the past 12 months?"*
N: *1,228*
Source: *Teacher survey, February 2014*

Compliance Versus Learning

Unfortunately, for many teachers today, professional development is viewed more as a compliance exercise than a learning activity—and one over which they have limited, if any, choice.

Fewer than one in three teachers (30 percent) choose most or all of their professional learning opportunities. Nearly one in five (18 percent) never have a say in their professional development.

However, teachers with more choice report much higher levels of satisfaction with professional development—those who choose all or most of their professional learning opportunities are more than twice as satisfied with professional development as those with fewer options.

LIMITED CHOICE, BUT HIGH SATISFACTION WHEN TEACHERS DO CHOOSE

Few teachers choose most or all of their professional development

18%	Never chose myself
24%	Chose myself in a few cases
29%	Chose myself some of the time
20%	Chose myself most of the time
10%	Chose myself always

Teachers with more choice report much higher satisfaction with their most recent professional development experience

	6 or below	Neutral	9 or 10
Never chose myself	61%	25%	15%
Chose myself in a few cases	39%	46%	16%
Chose myself some of the time	32%	41%	27%
Chose myself most of the time	16%	46%	36%
Chose myself always	18%	42%	40%

Rating agreement/satisfaction on a 10-point scale:
■ 6 or below   ■ Neutral   ■ 9 or 10

Question text: *"Thinking about ALL of the PD activities you participated in over the past 12 months to what extent did you choose them yourself vs. having them chosen by someone else? Overall, how satisfied are you with the last [format] you participated in for professional development?"*
Ns: *Overall, 973; Never chose myself, 175; Always chose myself, 93*
Source: *Teacher survey, February 2014*

The correlation between teachers' ability to choose professional development and their levels of satisfaction speaks volumes about the impact of limited choice on the perceived effectiveness of professional learning.

Indeed, when teachers consider how they spend their "learning time" in school, many consider it falling into two categories: one highly satisfying and one not.

MANY TEACHERS CONSIDER THEIR TIME FALLING INTO TWO CATEGORIES

For many (but not all) teachers, professional development (PD) is viewed as a compliance activity ...

... but time spent planning, designing, and delivering instruction is viewed much more positively.

"Can do better at home in my living room"

"Have to sign in and out"

"Most of the time I find myself watching the clock"

"Treated like a second grader"

Professional development

Evaluations

Testing

FOLLOWING THE RULES

Meetings

Forms

"Not relevant"

"Dull and long-winded"

"Waste of time"

"It's not PD if they don't count it as PD"

"Don't read a PowerPoint to me"

"Teachers don't have to [plan instruction] all by themselves anymore"

"Another teacher shows me what revolutionized their classroom"

"Want something I can use in the classroom tomorrow"

Teaching

Reflecting on teaching

FOCUSING ON STUDENTS

Preparing to teach

"[Online] resources are great"

Planning instruction takes a lot of time, but *"this is not PD. It's just [doing] my job"*

Source: *Boston Consulting Group interviews and focus groups, January through March 2014*

Much of what systems consider professional development, teachers perceive as wasted time. But learning activities that directly support teacher practice, such as planning and reflecting on instruction, are valued much more positively by teachers, as they tap into their motivation to help students learn.
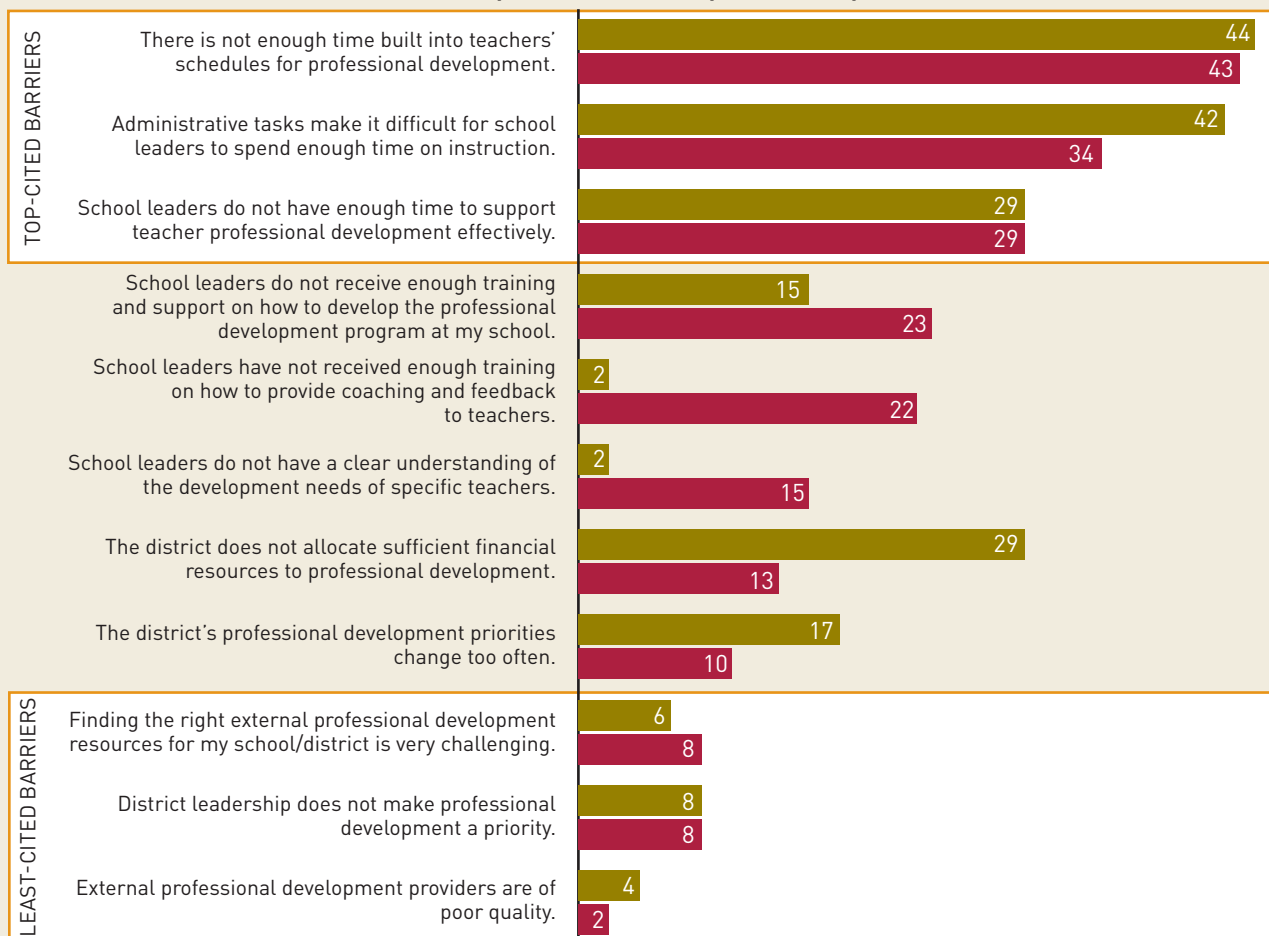
What Are the Barriers?

Both teachers and administrators identify a number of barriers to moving closer to their ideal professional learning experience. For teachers, the most often-cited barriers are insufficient time, lack of financial resources to pay for the professional development they want, learning that is not customized enough to the content they teach and the skills they need to develop, and a lack of continuity between professional development sessions.

Administrators also cite a lack of time, training, and resources as key barriers.

LACK OF TIME, SCHOOL LEADER TRAINING, AND FINANCIAL RESOURCES ARE LEADING BARRIERS

Barriers to effective professional development in the past 12 months

TOP-CITED BARRIERS	Principal	Local education agency
There is not enough time built into teachers' schedules for professional development.	44	43
Administrative tasks make it difficult for school leaders to spend enough time on instruction.	42	34
School leaders do not have enough time to support teacher professional development effectively.	29	29
School leaders do not receive enough training and support on how to develop the professional development program at my school.	15	23
School leaders have not received enough training on how to provide coaching and feedback to teachers.	2	22
School leaders do not have a clear understanding of the development needs of specific teachers.	2	15
The district does not allocate sufficient financial resources to professional development.	29	13
The district's professional development priorities change too often.	17	10

LEAST-CITED BARRIERS

	Principal	Local education agency
Finding the right external professional development resources for my school/district is very challenging.	6	8
District leadership does not make professional development a priority.	8	8
External professional development providers are of poor quality.	4	2

PERCENTAGE OF RESPONDENTS INDICATING BARRIER IS EXTREMELY LIMITING

■ Principal ■ Local education agency

Note: *Responses based on a 10-point scale, with 1 being not at all limiting and 10 being extremely limiting. Percentages above are for respondents who chose 9 or 10.*
Question text: *To what extent do you believe the following factors have limited the ability of school leadership teams to provide effective PD in their schools?"*
Ns: *Principal, 48; Local education agency, 157*
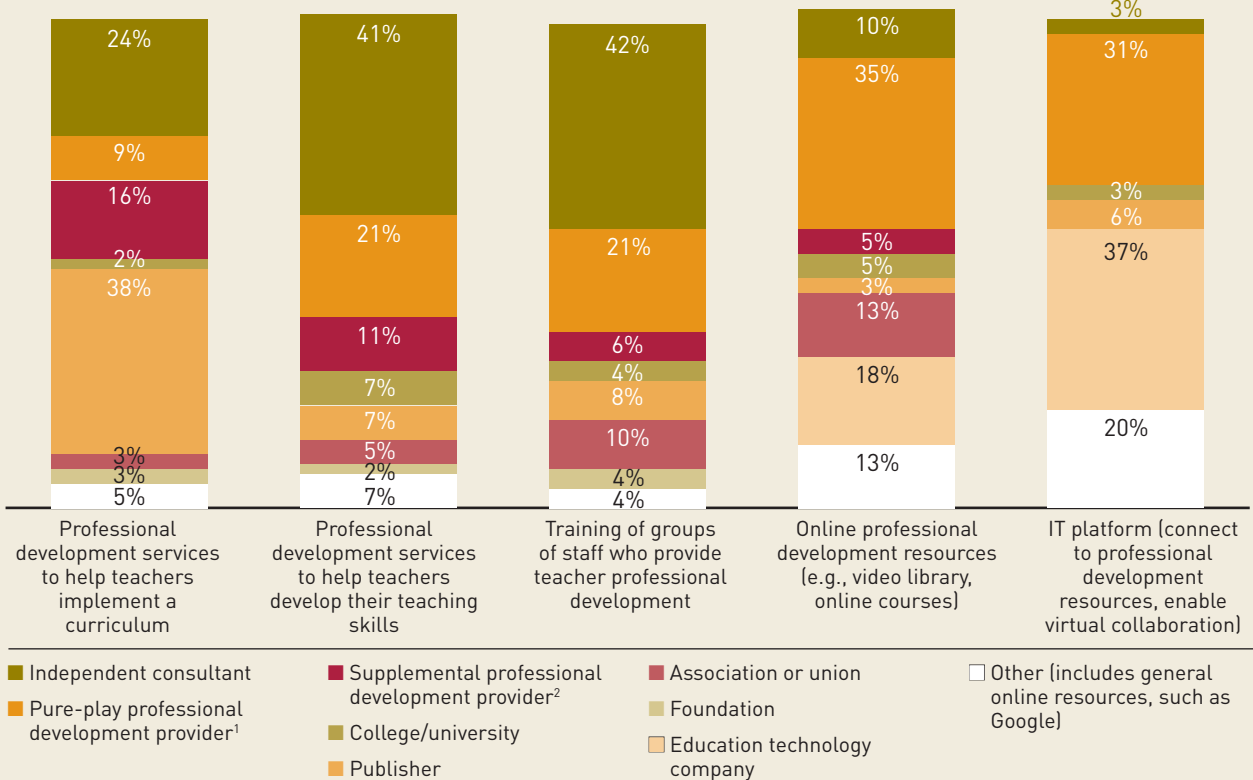**Source:** *Administrator survey, March 2014*

Supply and the Market

The highly localized, fragmented nature of the professional development market also is a potential barrier. Of the $18 billion spent annually on professional development, only $3 billion is delivered by external providers. The vast majority of professional development spending represents internal investments by local school districts. In this way, professional development does not work like a typical market in which the best products and services are well known by users and gain an increasing share over time. Much professional development is not subject to market forces at all, as the purchasers (local school districts) are also the suppliers. Most external professional development suppliers are known only within a small number of districts, regardless of their quality. And even when professional development options are known, end users (teachers) often have little say in selecting providers.

The preponderance of local decision-making and the large number of districts also have resulted in a highly fragmented market of service providers. Independent consultants are by far the most common external providers. With the exception of online professional development resources and IT platforms, independent consultants play an outsized role in providing professional development services to districts.

AMONG EXTERNAL PROFESSIONAL DEVELOPMENT PROVIDERS, INDEPENDENT CONSULTANTS ARE MOST COMMON RESOURCE

Consumption by provider type, reported by local education agencies

Legend:
- Independent consultant
- Pure-play professional development provider[1]
- Supplemental professional development provider[2]
- College/university
- Publisher
- Association or union
- Foundation
- Education technology company
- Other (includes general online resources, such as Google)

1 "Pure-play professional development provider" refers to providers focused specifically on teacher professional development delivery across a variety of formats (can be either for-profit or nonprofit); this segment may include external consultants (e.g., Danielson Group) and/or organizations primarily delivering services through online platforms (e.g., School Improvement Network's PD 360 Platform).
2 "Supplemental professional development provider" refers to education content and services providers that offer professional development to complement (and often assist with sales of) another primary product or service (can be either for-profit or non-profit).
Question text: "Please write in the name of the external provider you've worked with most recently beside each [PD related service/PD related product] you have [purchased in the past 3 years]."
Ns: Professional development services to develop teachers, 58; Professional development services to implement curriculum, 61; Training trainers, 48; Online professional development resources, 40; IT platform, 35 **Source:** Administrator survey, March 2014

Moreover, the majority (70 percent) of services provided by external providers are focused on service-oriented activities as opposed to content and the platforms to deliver it—one significant reason why independent consultants and small companies play an outsized role in external professional development services.

Understanding What Works

Although there is a significant body of research establishing characteristics of professional development that are associated with student achievement, more could be done to understand what professional development works under which conditions, suggesting the need for evidence from the field.

A RESEARCH BASE, BUT SPECIFICITY IS LACKING

Studies have identified program design elements thought to be effective …

Characteristics of professional development associated with improving student achievement:

- Sustained and content specific[1]

- Teacher learning goals aligned with standards[2]

- Involving active learning techniques (e.g., observing expert teachers, leading discussions)[3]

- Including established teams to facilitate "collective participation"[4] and teachers using data in making instructional decisions[5]

Two formats that hold promise:

- Coaching has been shown to improve teachers' abilities to adopt and implement new teaching practices[6]

- Collaboration helps to build relational trust in the school building, which enables teachers to more effectively make difficult decisions[7]

… but understanding of which models work under which conditions is limited.

Coaching
There is little evidence to support which model of coaching (e.g., technical coaching, team coaching, peer coaching) is most effective.[8]

Collaboration
Experts assert several common elements that support effective collaboration (e.g., dedicated time, grade level teams, sharing best practices tied to instructional focus, school leadership that communicates commitment), but there is limited research on which factors prove critical.[9]

1. J.L. Brown (2004); Saxe, Gearheart, and Nasir (2001).
2. Cohen and Hill (2001); Garet et al. (2001); Penuel, Fishman, Yamaguchi, and Gallagher (2007).
3. Garet et al. (2001); Loucks-Horsley et al. (1998).
4. Banilower and Shimkus (2004); Borko (2004); Desimone (2003).
5. Wayman (2005); Wayman, Cho, and Johnston (2007); Wohlstetter, Datnow, and Park (2008).
6. Joyce and Showers (1996).
7. Frank, Zhao, and Borman (2004). Source: Educational Researcher, Professional Development Research: Consensus, Crossroads, and Challenges.
8. Joyce and Showers (2002).
9. Frank, Zhao, and Borman (2004); Leana (2011); Goddard et al. (2007); National Center on Time and Learning.

Stakeholders also confirm that few professional development decisions are made based on rigorous evidence of effectiveness. As one district administrator said, to evaluate effectiveness "teachers fill out forms … it asks general questions like, what are some things you feel were helpful?" Or, as a nonprofit provider noted, "Many RFPs ask to 'provide evidence of effectiveness.' Providers typically insert a throwaway response. 'PD is based on a theory that is based on XYZ.'" Given low satisfaction levels among participants and the lack of specificity in the research base, measuring effectiveness remains a challenge.

Limited information about available offerings and their effectiveness often leads decision-makers at the local level to turn to their personal networks for information about providers. The majority of principals (69 percent) and district administrators (82 percent) rank their personal networks as the top source of information on external vendors. As one principal said, "Outside PD is rolling the dice … . I need a personal connection to vet [providers]."

Promising Innovations

Yet while much external professional development to date has been focused on service-oriented activities, suppliers are beginning to leverage technology to address teachers' need for more collaborative and customized learning opportunities. A set of innovative products is emerging that have the potential to personalize learning for teachers and streamline their work flow. These include online platforms that address teachers' need for content sharing, video, and self-reflection.

Online platforms fall under a growing number of categories, including:

- **Content aggregation platforms,** which provide professional learning and content-specific resources

- **Video platforms,** which provide both professional development resources and materials that can be used in the classroom

- **Collaboration tools,** which allow teachers to share lesson plans, classroom materials for use with students, and other resources

- **Platforms that close the loop for teacher evaluation** by providing web-based evaluation and coaching tools and other resources that support teacher effectiveness systems

- **Data analysis tools,** which help educators to identify individual student needs and personalize learning

- **Assessment platforms,** which provide new ways to monitor student progress

WHAT TEACHERS SAY: TAPPING ONLINE RESOURCES

Teachers are heavy users of online resources for planning, designing, and delivering instruction, accessing both mainstream and education-specific websites. They also tend to use both teacher-oriented resources, such as videos of instructional techniques, and student-oriented resources, such as materials that can be used in class.

"I do a lot of Googling."

"If you're trying to develop differentiated instruction, you can use lesson plans from other teachers … . Need to tailor it for yourself … at least you have a skeleton to work from."

"Online provides value because teachers end up communicating with people who they sit next door to but never have time to speak with face to face."

"[Thirty] years ago, I would spend all weekend long doing this myself. You don't have to be so isolated anymore."

Executing on a Common Vision

Throughout the research conducted for this report, a clear consensus of the elements needed for effective, next-generation professional development—*relevant, hands-on, and sustained over time*—has consistently emerged. Key areas of focus, including improving collaborative and personalized models and identifying key use cases for technology that can improve professional development at scale, will help address many of the current barriers to effective professional learning. Despite teachers' overall dissatisfaction with present-day professional development offerings, energy exists around activities and tools that can help them plan and execute on instruction. Some of these activities and tools are called "professional development" today, and some are not. These findings suggest some starting points for teachers and other educators looking to design more effective professional learning experiences.

The Bill & Melinda Gates Foundation remains committed to supporting districts in redesigning their professional learning systems to better support teachers and have a greater impact on student learning.

Ongoing research will investigate how teachers in high-performing environments plan, design, and execute instruction, including the following:

- Time spent by activity

- The role of tools and resources

- How collaborative learning and other professional development activities impact this process

- Needs that remain unmet

- Additional system- and school-level barriers and enablers

For more information and to participate in an online dialogue about this study's findings, please visit RedesignChallenge.org.

BILL & MELINDA GATES *foundation*