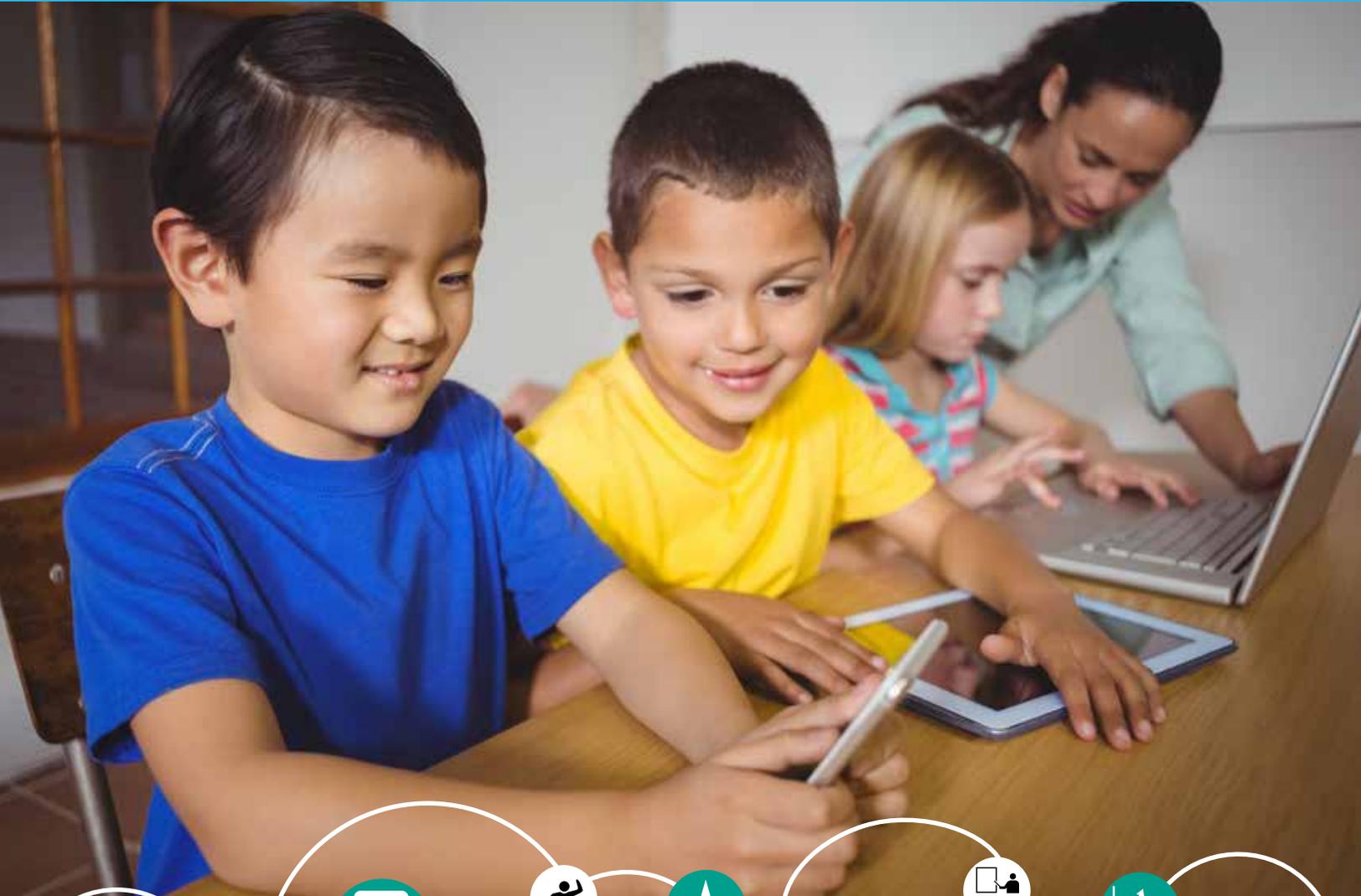


BEYOND the FEAR FACTOR



PARENTAL SUPPORT FOR
Technology and Data Use in Schools



ABOUT THIS STUDY

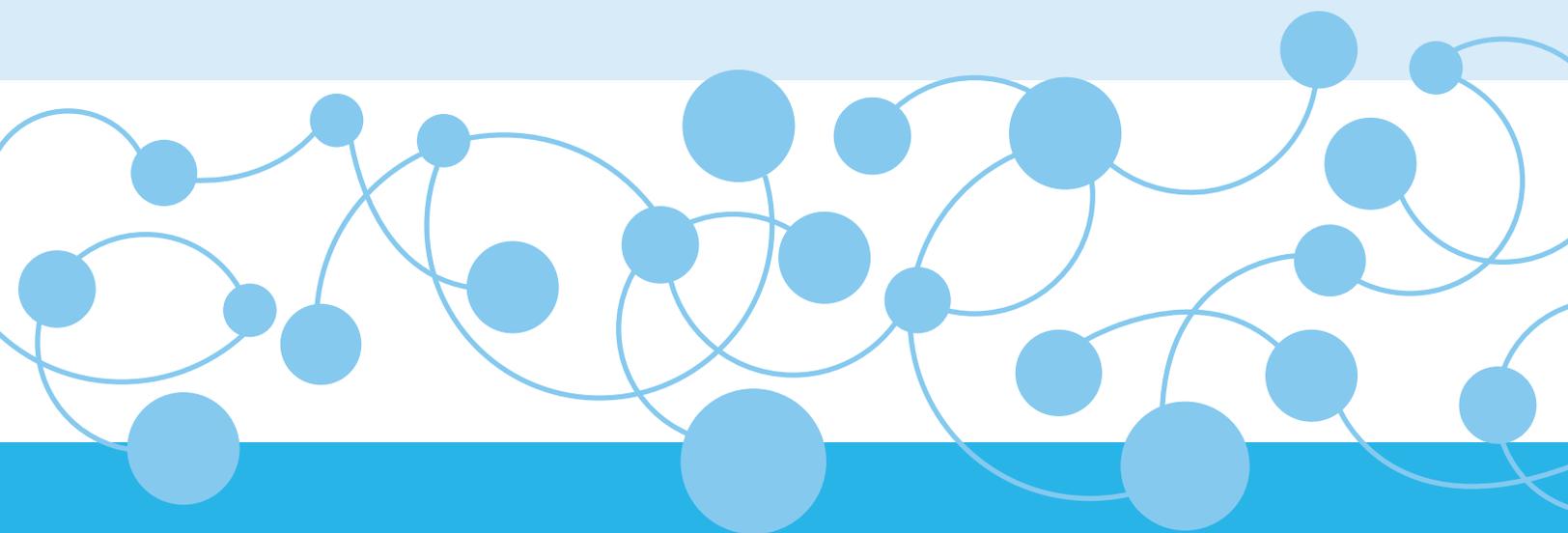
The Future of Privacy Forum set out to gain a better understanding of what public school parents actually know and want concerning the use of technology and collection of data in their child's school, as well as their perspectives on the benefits and risks of student data use within the educational system. Media reports routinely quote parents who are afraid or reluctant to support the use of technology, electronic education records, and student data within their own schools or throughout the educational process. This survey sought to understand the views of parents, the critical stakeholders in the education policy discussion.

This survey was conducted online within the United States from March 26 through April 2, 2015 among 1,002 parents ages 18 and older who have children ages 0–17 in their household (of which 672 have children in public school grades K–12) by Harris Poll on behalf of Future of Privacy Forum via its Parent Query omnibus product. Figures for age, sex, race/ethnicity, education, region, household income, and number of children in the household were weighted where necessary to bring them into line with their actual proportions in the population. Propensity score weighting was used to adjust for respondents' propensity to be online. For the remainder of this summary, the term "parents" is used in reference to the 672 answering parents with children under age 18 who attend public schools.

The intent of this survey was to help educators, school leaders, product developers, and policymakers to better understand the expectations and preferences parents hold when making policy decisions or considering legislative and regulatory choices about the responsible collection and use of student data. This survey asked parents to comprehensively outline their goals and fears about the use of technology and student data. Their answers, and the conclusions that can reasonably be drawn from them, should be considered as this debate moves forward at the local, state, and national levels.

This report is available at: www.futureofprivacy.org/issues/studentprivacy.

SEPTEMBER 2015



BEYOND the FEAR FACTOR

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Executive Summary

Few topics in education have generated as much discussion as the potential for data and technology to transform teaching and learning. While the public discourse has been dominated by advocates and critics alike, we've learned little about how most parents of school-aged children view the risks and opportunities of using data and technology in the classroom.

To help answer this question — and to better inform decisions made by educators, school leaders, product developers, and policymakers — the Future of Privacy Forum and Harris Poll conducted a national survey of parents with

children in public school grades K–12. The survey asked parents to identify their goals and fears about the use of technology and student data. The findings are summarized below.

WHAT DO PARENTS KNOW ABOUT THE USE OF TECHNOLOGY IN SCHOOLS?

According to the survey, parents believe they are very aware of the kinds of technology being used in their child's school. Most parents feel that they understand what data are being collected and

how they are used. The results here demonstrate a strong baseline of knowledge and communication between schools and parents.

WHEN DO PARENTS SUPPORT ACCESS TO AND USE OF STUDENT DATA WITHIN SCHOOLS OR THE EDUCATIONAL SYSTEM?

The vast majority of parents express comfort with using student data to improve teaching and learning. But they want a strong justification of administrative need or educational benefit. For example, parents oppose schools giving student

data away to private companies or using it for commercial purposes. They do, however, support companies using student data to improve the effectiveness of their products in the classroom.

WHAT DO PARENTS SEE AS BENEFITS FROM ADDITIONAL USES OF STUDENT DATA?

Parents support many uses of individual and aggregate-level student data to improve education. According to the survey, parents strongly favor using individual student data to both identify struggling students in need of additional support

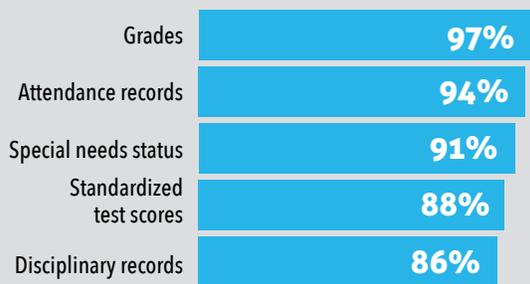
and to personalize the learning process. By wide margins, parents support using aggregate-level student data to improve teacher instruction and hold both teachers and schools accountable for effectiveness in the classroom.

WHERE DO PARENTS STAND ON THE CREATION OF ELECTRONIC EDUCATION RECORDS AMID SECURITY CONCERNS?

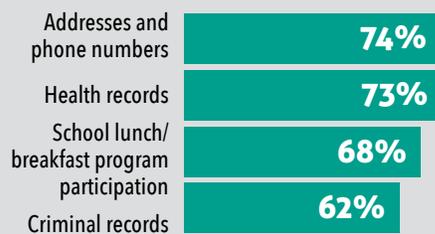
While most parents worry about student data being hacked or misused, a majority support the creation of electronic education records for their child as long as those records are properly protected.

Support increases when parents know that schools are required to ensure student data security and when parents are told that student data can only be used for educational purposes.

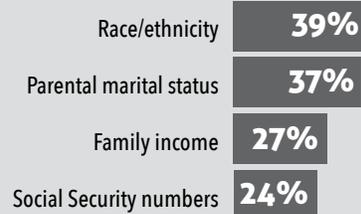
Super-majority of parents think educational data collection and use are appropriate for ...



Majorities support educational data collection and use for ...



... but many fewer parents support collecting sensitive data



WHAT PROTECTIONS DO PARENTS WANT? WHAT DO THEY KNOW ABOUT EXISTING LAWS AND POLICIES?

A majority of parents say they know nothing about existing federal and state laws regulating the use of student data. This finding may explain why parents' top recommendation for ensuring student data privacy is the adoption of new laws. Parents also want companies to adopt better

contracting practices and enforceable privacy policies. Most parents appear to be unaware of the benefits of alternative strategies to ensure the responsible use of student data like industry codes and best practices.

CONCLUSIONS

Parents are very aware of, engaged with, and concerned about technology and student data use in schools. While they are eager for the individual learning benefits that educational data can provide, parents are also concerned about the security of their child's personal information. Educators, education service providers, advocates, and policymakers should embrace the opportunity to work with parents as partners in addressing these issues.

More work must be done to explain to parents how their child benefits from improving the effectiveness of educational products based on lessons learned in the classroom. And educators and vendors must make an effective commitment to parents that student data will never be exploited.



Introduction

Parents want student data used in schools when they directly benefits students and their own child.

In the past two years, there has been a growing, public conversation about the use of technology in schools via the participation of external education service providers and about the collection, appropriate use, and protection of the data on individual students from a broad array of technology and data services. Hardware used to collect data might include devices that are purchased and provided by the school or brought from home by students, while software covers apps, programs, games, and websites used by students with or without an account. Data may also be collected by teachers and administrators using tools like Learning Management Systems to manage grades, attendance, class assignments, bus routes, school lunch programs, special education services, counseling, standardized testing, and the myriad other functions they provide on a continuous basis.

Much of the student privacy conversation has been driven by fear. What uses of all these data might

harm students, either in their current educational environment or in the future? What uses of data might take advantage of students by exploiting their youth and inexperience? Will children be labeled, profiled, or somehow limited in their opportunities and choices as they move through the school system and beyond it? Will the data be properly secured?

Other questions focus on policy discussions about the appropriate balance of authority and responsibility between the schools and the vendors they use to collect and manage these data. What data are being collected, and who can see them? What is the scope of responsibility for the school to control and protect the data, even if it is using outside services? What legal obligations can or should education service providers incur when they accept or collect student data?

This survey shows that parents are aware of and understand the technology used in their child's



Much of the student privacy conversation has been driven by fear.



What Do Parents Know About the USE OF TECHNOLOGY IN SCHOOLS?

Technology is playing a key role in education for both parents and students.

By 2015, technology has become commonplace in classrooms and schools across the country. Although there is a wide diversity of connectivity, devices, and applications available in different states and districts, it is safe to assume that all schools are integrating technology to at least some

degree in the administration of their schools and education of their students.

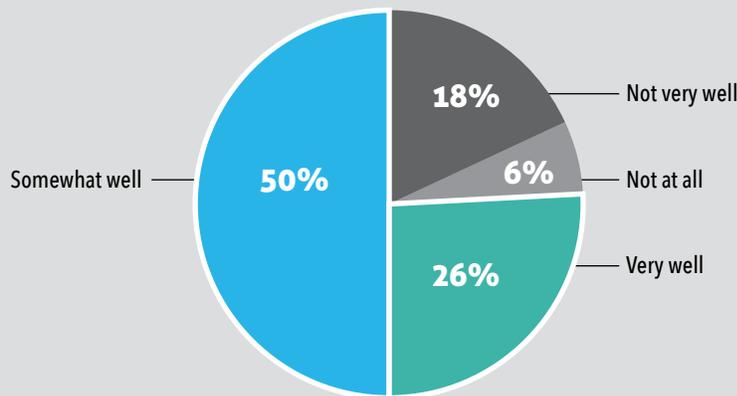
Parents are aware of the technology schools are using. Most parents are using it themselves, and most feel that they understand the data that are being collected and how those data are being used.

KEY FINDINGS

- ▶ **About seven in 10 parents (71%) say their child uses technology provided by their schools — or technology required or recommended by teachers or school officers — for educational purposes.**
- ▶ **The majority of parents (58%) say their child’s school has communicated with them about how it uses technology for teaching in the classroom, homework assignments, or for other educational purposes.**
- ▶ **A strong majority of parents (76%) feel they understand “somewhat” or “very well” how their child’s school collects or uses information about students (such as interactive assignments, online homework submissions, and online testing).**
- ▶ **Most parents (58%) have used school-related technology to keep up with their child’s assignments or check grades/schedules (e.g., online bulletin boards for assignments, access to instructional materials, or teacher-provided information on grades or due dates).**

Parents know about school technology

A strong majority of parents (76%) say they understand “somewhat” or “very well” how their child’s school collect or use information about students.



DISCUSSION

When media stories describe parents’ reaction to the technology in their local schools, the attention is frequently on those who are opposed or focused only on the concerns individual parents may have. Likewise, advocacy groups seeking to speak on behalf of parents, or selected parent participants in legislative discussions, may be primarily interested in advancing a particular policy position. These sources are often assumed to represent the most common position or understanding of parents generally, leading to an overemphasis on fears, without a balanced review of the full range of parent perspectives.

In this survey, however, parents demonstrate a more nuanced understanding of technology and its uses. They are very aware of the technology being used in their local schools, they use this technology to supervise their child’s education, and they receive communication about the educational purposes the technology supports. Given that not all schools even have parent-portal-style access to student information yet, the fact that a majority of parents already are using these tools strongly suggests that such technology is the way of the future — needing only expanded implementation in schools and matching outreach to parents.

While there is certainly room to improve — by helping all parents become as confident as the majority already are — the survey results demonstrate a strong baseline of knowledge and communication between schools and parents. The challenge, then, is maximizing the schools’ ability to select and implement appropriate technologies, train teachers and administrators, and communicate effectively with parents about the expanded use of technology throughout the educational process.

While there is certainly room to improve – by helping all parents become as confident as the majority already are – the survey results demonstrate a strong baseline of knowledge and communication between schools and parents.



When Do Parents Support ACCESS TO AND USE OF STUDENT DATA Within Schools or the Educational System?

Parents are comfortable with education-related data being used to improve learning, but their support significantly drops for using data for less direct purposes.

The vast majority of parents express comfort with student information being used to improve teaching and learning. However, perhaps unsurprisingly, with every step the data move away from being clearly school-related, parents' comfort level drops. Schools have an administrative duty to manage education agencies and programs, as well as provide direct educational programs, and most parents understand the need for collecting information about a child for this full spectrum of purposes that directly support students under their control.

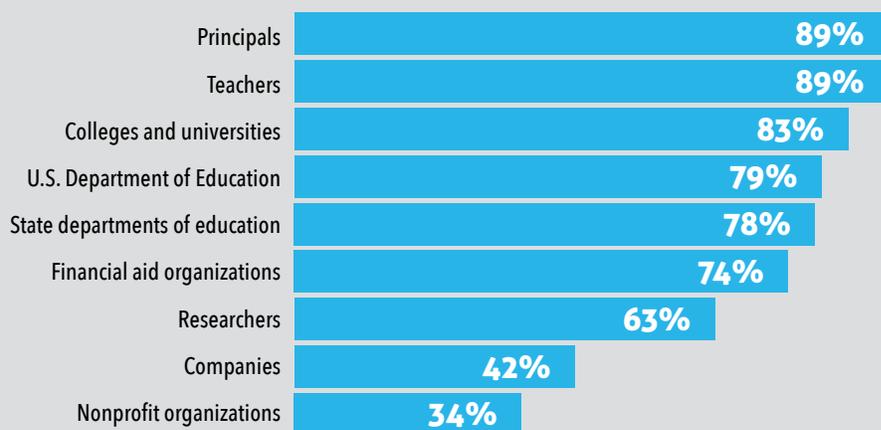
Parents' comfort level with others having access to their child's education record varies, with the strongest support for those functionally closest to their child and then dropping steadily as the connection to the student recedes.

KEY FINDINGS

- ▶ **Parents strongly support schools' collection and use of information they feel appropriately contributes directly to educational purposes.**
 - ▶ Grades (97%), attendance records (94%), special needs status (91%), standardized test scores (88%), and disciplinary records (86%) all receive high support as "appropriate" data for school districts to use for educational purposes.
 - ▶ Support for the use of addresses and phone numbers (74%) is slightly lower, but still fits with health records (73%), participation in school lunch/breakfast programs (68%), and criminal records (62%), which strong majorities likewise view as appropriate data for school use.
- ▶ **Parents demonstrate varying levels of comfort with *who* may have access to their child's record.**
 - ▶ The child's principal (89%) and teachers (89%) top the list.
 - ▶ Parents are comfortable (83%) with colleges and universities having access to their child's information.
 - ▶ Slightly more remote but still directly related to the educational process are state departments of education (78%) and the U.S. Department of Education (79%), along with organizations that offer financial aid (74%).
 - ▶ More sensitive information (parental marital status — 37%, family income — 27%, and Social Security numbers — 24%) or information less obviously related to educational purposes (race/ethnicity — 39%) is seen as less appropriate for schools to use, even when that use is tied to educational purposes.
 - ▶ Almost two-thirds (63%) of parents are comfortable giving access to researchers who analyze the data and use the findings to make recommendations for school improvement.
 - ▶ Fewer parents are comfortable with companies that create educational software, websites, and apps (42%) or nonprofit organizations (34%) having access to students' education records.³

³ Note much higher levels of support (57%) for similar ed tech product development in the next section when it concerns ed tech vendors that hold data from a direct connection with schools.

Parents have varying levels of comfort with who may have access to their child's education record



Note that 11 percent of parents are uncomfortable even with teacher and principal access to data. When drawing conclusions from any survey, media, advocates, and policymakers should recognize that some percentage of parents have concerns about even the most basic educational purposes.

DISCUSSION

Schools have always gathered personal data specific to individual children, such as names, attendance records, home addresses, grades, and disciplinary records. The differences in how these data are collected and used by schools today raise two new issues.

First, schools may have the ability to collect a more detailed, personalized record on each student than at any time in the past. Many people, including parents and other stakeholders, have raised the question of exactly what information is appropriate for the school to collect and store, even when it is collected for educational purposes.

Second, when these data are collected and stored electronically, they are much easier to share than when they were on paper in a file cabinet or in teachers' individual record books. Thus, parents may be more concerned about who has access to the data than in the past — perhaps wondering whether the data are always being shared for the benefit of the students.

Parents want a strong justification based on administrative need or educational benefit when schools collect or use information beyond the baseline. For example, a school may need to know family income to support enrollment in lunch/breakfast programs or to qualify for other available assistance and benefits. In that case, the school should be clear about that need, demonstrate an understanding that this information may be perceived as more sensitive, and provide assurance that it will be protected and shared more narrowly.

Similarly, when considering "who" deserves access to the child's data, parents are more comfortable with individuals and organizations that have a clear link to education generally (and their child's education specifically). Parents

do not see a need for schools to provide data beyond the school's context to other third party companies creating educational software, websites, and apps. However, if companies are providing a service that parents perceive to directly benefit students, the results are more favorable, as a majority do support educational companies using their data to improve their products and services.⁴

As schools continue to integrate outside companies into their operations, whether for products, services, or other support to the educational process, all parties must find ways to overcome parents' discomfort. One key component is communication among schools, vendors, and parents. Schools and companies must communicate clearly how data use improves students' learning experience.

It is also interesting to note that a strong majority of parents are comfortable giving state or federal education departments access to student data, despite concerns that have been expressed in some policy circles. A percentage of the population may have strong concerns, but for the majority, these concerns appear to be outweighed by the perception that there is an administrative or educational need or benefit from these agencies holding these data.

Schools cannot possibly provide on their own even a portion of the learning resources and applications now available via the ed tech marketplace. But as schools expand their partnerships to provide these valuable resources to students, school leaders owe parents clear explanations and reassurance about how student information will be used to benefit their child. Parents deserve to be as comfortable with every party who has access to their child's information as they are with the teacher and principal.

4 Ibid.



What Do Parents See As **BENEFITS FROM ADDITIONAL USES OF STUDENT DATA?**

Parents strongly support school systems using student information to improve educational outcomes but are far less supportive of companies with potentially similar goals.

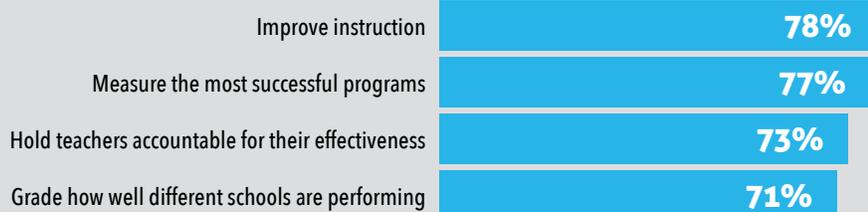
In addition to the types of personal information already discussed, there is information generated within the learning process via the technology used (specific sites, programs, apps, or games), which can be valuably used to customize the individual student's educational experience — and to cater instruction, support and future endeavors to a student's unique needs. To fully achieve the personalized benefit of those data also requires aggregating the information with matching data from other similar students.

Most parents believe that using student data, both in the aggregate and individually, is an appropriate (and perhaps constructive) way to evaluate and improve education. Most parents (at least seven in 10) see aggregated student data as a tool to both measure and improve the effectiveness of teachers and schools. A majority of parents also believe that individualized student data can help customize the educational experience.

KEY FINDINGS

- ▶ According to most parents, the most convincing reasons to use *individual student information* are to:
 - ▶ Identify students who are struggling so that schools can provide appropriate support earlier (84%);
 - ▶ Personalize the learning process by identifying the strengths and weaknesses of individual students (79%); and
 - ▶ Help schools build profiles on individual students, such as those used to predict best fits for future vocations or professions (57%).
- ▶ According to parents, convincing reasons to use *aggregated student information* are to:
 - ▶ Help teachers improve the effectiveness of their instruction (78%);
 - ▶ Help schools measure and hold teachers accountable for their effectiveness in the classroom (73%); and
 - ▶ Help schools improve education by measuring the most successful programs (77%);
 - ▶ Help states and districts grade how well different schools are performing (71%).
- ▶ Parents offer varied levels of support for using student information *in other ways*, including to:
 - ▶ Help teachers tailor instruction to individual students (90%);
 - ▶ Help companies develop more effective educational products and services (57%);
 - ▶ Customize curricula to individual students (86%);
 - ▶ Help companies market educational products and services to students (34%);
 - ▶ Measure students' progress through the course of their education (85%);
 - ▶ Help companies offer more targeted ads (21%);
 - ▶ Evaluate the effectiveness of education programs (83%);
 - ▶ Help colleges send information to students they wish to recruit (66%);

Parents say aggregated student information can help:



DISCUSSION

Aggregating data provides several opportunities. First, it can yield analyses and deeper understanding that further contribute directly to each individual student's learning experience. Then, it can be used to evaluate valuable aspects of the educational process beyond a particular child's experience, such as measuring teacher effectiveness, school or district progress, or even state or nationwide trends. Aggregated data are also an important foundation for the development of new educational products and services.

These parents reflect a belief in the power of data for research and analysis to understand what is working, what isn't, and what might be done differently or better.

Most parents support the school system using student information to bolster the curriculum, evaluate educational programs, or measure student progress. However, they are less supportive of companies that may want to use student information to develop or market educational products and services. These views underscore the challenge facing schools and their ed tech partners: to explain the value of data for new products and services while assuring parents that this use doesn't put them or their child at risk for inappropriate marketing. Marketing directly to students is unlikely to be generally seen as an appropriate use of data, but taking what is learned from student use in one product and applying that knowledge to other existing, or future, products is an essential component to building the best educational services for all.

Most parents believe that using student data, both in the aggregate and individually, is an appropriate (and perhaps constructive) way to evaluate and improve education.

It is also important to note that, despite low levels of support for such use of these data, there are still significant groups of parents (21–34%) who want the option of allowing this use of their child's data. Some laws have sought to completely ban any further use or explicitly limit third-party sharing only to colleges and future employers. However, additional uses such as tutoring or extracurricular activities are important. It would be a disenfranchisement of those parents who desire greater flexibility to not allow an express "opt-in" level of control at the school's discretion, allowing schools to enable additional uses of student data with the parents' explicit permission.



Where Do Parents Stand on the Creation of **ELECTRONIC EDUCATION RECORDS** Amid Security Concerns?

Parents see desirable benefits but simultaneously have concerns about electronic education records.

A majority of parents recognize the value of a properly protected electronic education record being created for their child. However, while desiring the benefits that data can provide, most also express some concerns, both for security (the record being hacked or stolen) and privacy (the record being used against their child).

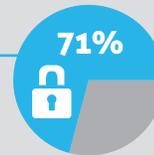
There is a nearly identical level of comfort with either schools or private companies maintaining the servers housing this electronic educational information. About one-fifth of parents believe that there is no way to secure the data, either on school servers or via outside companies.

KEY FINDINGS

- ▶ **Parents want electronic records, but they also want them properly protected, controlled, and used for the educational purposes for which they are created.**
 - ▶ More than seven in 10 parents are comfortable with a properly protected electronic education record being created for their child (71%) and believe that this kind of record would be a valuable tool for improving their child's educational opportunities (78%).
 - ▶ Furthermore, almost nine in 10 parents are more likely to support collecting and using data in an electronic record if:
 - They know a school and/or educational service provider is required to ensure security (85%);
 - A school and/or educational service provider is required to use the electronic education record only for education purposes (87%).
 - ▶ The majority of parents have security and privacy concerns, primarily that:
 - Their child's electronic education record could be hacked or stolen (87%);
 - An electronic education record could be used against their child by a college or an employer (68%).
 - ▶ When thinking about trusting servers maintained either at schools or private companies, more than half (52%) of parents believe one or both locations would be secure.
 - 18 percent would put more trust in servers located at schools and maintained by school employees.
 - 17 percent would put more trust in central servers run by private data storage companies.
 - 20 percent believe that neither location would be secure.

Parents see benefits of electronic education records ...

More than  **7 in 10** parents are comfortable with a properly protected electronic education record being created for their child — and believe this kind of record would be a valuable tool for improving their child’s educational opportunities.



... but they want assurances

Almost  **9 in 10** parents are more likely to support collecting and using data in an electronic record if:



— They know a school and/or educational service provider is required to ensure security

— A school and/or educational service provider must use the electronic education record only for educational purposes



DISCUSSION

Very few schools or districts are likely to have the personnel, skills, resources, or facilities to maintain student data completely in-house. The frequency of software patches and upgrades alone requires dedicated, experienced personnel to manage and maintain independent servers. In the face of experienced hackers and other threats, individual schools or small districts will rarely be able to provide the same level of security as professional data storage companies.

Some parents express very low confidence in any host’s ability to secure data, either on school servers or with outside companies. This matches general population surveys about confidence in the ability of various entities to secure personal or sensitive online data of any kind — credit card companies, government agencies, retailers, and other users of personally identifiable information.⁵ People want the benefits and convenience of electronic storage and access but are concerned about the vulnerability of their information.

This survey reflects the same reaction concerning student data — parents clearly see the benefits of creating and maintaining electronic records, but they want to ensure those records are properly protected.

In either situation, parents overwhelmingly want the entity collecting or using the electronic data to both ensure security and use the data solely for educational purposes. While parents should maintain the option to use data in additional ways as they see fit, they clearly want schools and vendors to respect the boundaries of the educational system for privacy controls — for determining who can access data and for what purpose.

The definition of “educational purposes” becomes pivotal. Previous questions indicated that most parents support using data to develop new educational products, so schools and vendors should continue to reinforce the understanding that improved services and new products are both part of the educational process. This means proactively making and keeping a commitment: student data will not be exploited for sale or shared for unwanted advertising.

5 Pew Survey, Graphic: “Few Expect Confidence That Their Records Will Remain Private and Secure.”



WHAT PROTECTIONS DO PARENTS WANT?

What Do They Know About Existing Laws and Policies?

Parents see laws as part of the solution, but most are unaware of current federal policies about the use of student information.

Overall, most parents say they feel at least somewhat informed about the use of student information by their child's schools. However, drilling down below the surface of general awareness reveals clear gaps in parent knowledge about both federal policies and actual school action on how student information is, can be, and should be used.

Only about one-quarter of parents are aware of the details of these laws, and a majority acknowledge that they know absolutely nothing. Moreover, only about one in four parents claims a strong level of understanding about how information is actually used/collected by his or her child's school, and more than seven in 10 do not recall receiving any information about their rights to "opt out."

KEY FINDINGS

- ▶ **Only about one parent in five (23%) knows there are federal laws and understands how they restrict what *public schools* can do with students' information.**
 - ▶ One parent in five (21%) says that he or she thinks that there are laws but does not know what they allow or restrict.
 - ▶ More than half (54%) do not know anything about federal laws that restrict what public schools can do with their child's information.
- ▶ **Approximately one parent in five (22%) knows there are federal laws that restrict what *companies* can do with information collected from children online.**
 - ▶ One-quarter (26%) of parents think there are laws but do not know what they allow or restrict.
 - ▶ Nearly half (47%) do not know anything about federal laws that restrict what companies can do with information collected from children online.
- ▶ **43 percent of parents say they received information from their child's school regarding *directory information*, but only 29 percent remember receiving information about the right to opt out of having their child's information included.**
- ▶ **To address concerns about the responsible handling of student data by schools and companies, parents prioritize:**
 - ▶ New/additional laws (57%), including federal laws (48%) or state laws (46%);
 - ▶ Stronger company privacy policies available on websites that are legally enforceable to restrict data use (43%);
 - ▶ Contractual agreements by schools and companies, shared with parents (47%);
 - ▶ Public commitments by companies to standards for use of student information (20%).

DISCUSSION

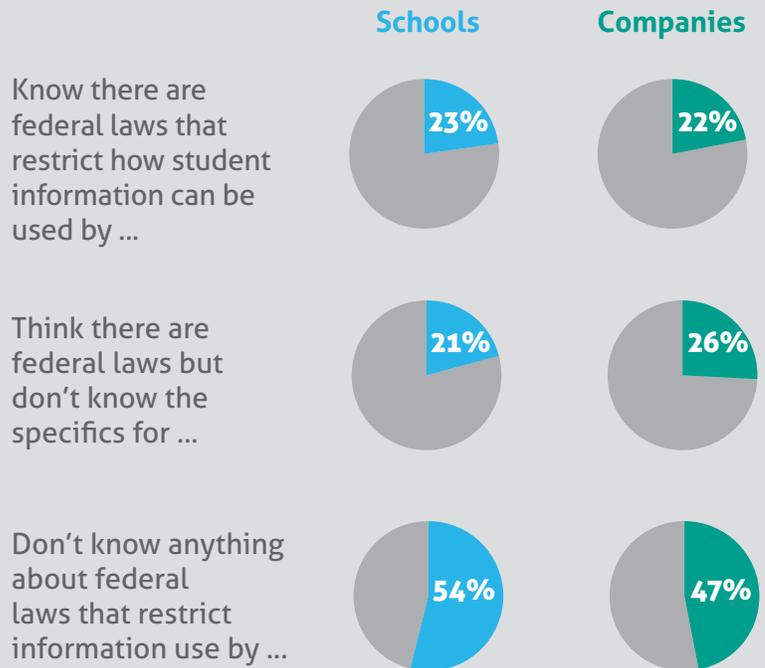
Because of the anomalies created by current technology and a changing education model, as well as the impact of disclosure of student information in a digital marketing age, parents and other stakeholders have expressed concerns about the sufficiency of the current laws and the continued appropriateness of designating and sharing directory information.

The primary current federal law governing student privacy is the Family Educational Rights and Privacy Act (FERPA), which controls disclosure of a student's education record. Disclosure is limited primarily by parental consent or a "need to know" by those within the educational system, as well as a number of enumerated exceptions, such as safety or law enforcement procedures. This law was written before digitally stored and electronically transmitted information became the standard and has had to be interpreted to apply to the current technological environment. One particular area of concern is how FERPA's restrictions on disclosure apply to situations where schools may use third-party education service providers for core educational functions.

One of FERPA's exceptions to requiring parental consent is student information that a school has designated as "directory information." While a school does not have to designate directory information that can be disclosed, most do include at least name, address, enrollment status, grade level, email, sports teams, extracurricular activities, honors and awards, and similar information. While the school can then release "directory information" to requesting parties, it must first ensure that every parent has a chance to "opt out" so that his or her child's information is not included in the release. This notice may be given in multiple ways, including letter, email, or enclosure in the student handbook.

Perhaps because parents do not know about these current protections, parents' top recommendation for ensuring student privacy is the adoption of new laws at both the federal and state levels. They also want individual

Few parents know about existing protections



companies to adopt better contracting practices and enforceable privacy policies. Many parents appear to be unaware of the benefits of other strategies, such as industry codes or best practices, which can provide standards and mandate compliance to practices that ensure the responsible use of student information.

The obvious opportunity here is to make parents aware of the protections that already exist. Parents who view legislation as the most desirable response may do so without being aware of what rights and controls are already in place. Furthermore, good contracting practices — which parents strongly supported as the best choice after legislation — are available. In the past, schools would use generic contracts, those from construction or basic facility services, as a format for new agreements with educational service providers. But now, many school systems are beginning to develop detailed templates specific to managing contracts with vendors who handle student data.

Only a minority of parents see the value of stronger company privacy policies, and even fewer understand the value of shared or industry-wide standards in upholding student privacy practices. Because parents' general awareness and understanding of existing laws and available tools is low, educating parents presents the first and best opportunity to begin addressing their concerns.



Conclusions and Recommendations

While there is certainly room to improve – by helping all parents become as confident as the majority already are – the survey results demonstrate a strong baseline of knowledge and constructive communication between schools and parents. The priorities now are to help schools select and implement appropriate technologies, train teachers and administrators, and communicate effectively with parents about the expanded use of technology throughout the educational process.

RECOMMENDATIONS TO CREATE AND FOSTER A TRUSTED LEARNING ENVIRONMENT

Expanded Use of Technology in Schools

1. Seek resources to adequately train and support teachers and administrators.
2. Communicate with parents throughout various stages of implementing new technologies.

Use of and Access to Data

1. Understand and address parent concerns about which companies receive access to data for product development (e.g., those in partnerships with schools).
2. Work with schools to create and establish clear policies governing disclosure of student data, using existing laws as the baseline.
3. Include parents in the discussion, and communicate regularly to address concerns and build trust among parents, schools, and other partner organizations.

Additional Uses of Data

1. Reinforce the value of data for developing new products and services for educational purposes.
2. Implement policies and practices that keep the educational benefit of the student as the focus, and include privacy and security priorities in all phases of acquiring and implementing new programs or resources.
3. Communicate with parents to explain the benefits and risks of new technology or data use, and describe the relevant restrictions on marketing.
4. Demonstrate that taking what is learned from one product or service and applying that knowledge to other existing or future products or services is an essential component for building the best educational services for all.
5. Maintain a school's discretion to allow parents to authorize additional use of their child's data, with the additional use subject to clear and affirmatively expressed "opt-in" conditions.

Electronic Records and Security

1. Understand and address parental concerns about security in the context of broader data use and security.
2. Educate parents on the distinctions between privacy (policies that determine authorized access and use of collected information) and

COMMUNICATE.

Include parents in the discussion, and communicate regularly to address concerns and build trust among parents, schools, and other partner organizations.



LEARN.

Demonstrate that taking what is learned from one product or service and applying that knowledge to other existing or future products or services is an essential component for building the best educational services for all.



PROTECT.

Make and keep a commitment that student data will not be exploited for sale or shared for unwanted advertising.



security (protection against unauthorized access and abuse of data) concerns, and discuss the practices in place to address each.

3. Clearly outline the benefits from the use of an electronic record, and describe privacy and security policies needed to support and reach those goals.
4. Communicate the risks of the data use practices at the school and the policies needed to protect and prevent abuse of the data.
5. Respect the boundaries of the “educational purposes” that parents support, and clearly identify and communicate uses beyond that, when parents have rights to limit or opt out.
6. Ensure that new services and products clearly enhance the educational process.
7. Make and keep a commitment that student data will not be exploited for sale or shared for unwanted advertising.

Laws and Solutions

1. Make parents aware of the protections that already exist, and support proposed policies that strengthen protections where needed.
2. Communicate with parents about existing contracting practices.
3. Provide transparency in the relationship between schools and vendors for both contracting terms and privacy policies of individual partner companies.
4. Seek out the increased options for shared standards or endorsements, seals, or certifications, and communicate with parents about the strengths of those programs.
5. Support legislation that focuses on providing resources and capacity for training and communication and that addresses gaps in current laws.

This survey shows that parents of K–12 children in American public schools are very aware of, engaged with, and concerned about technology and student data use in schools. They hold a range of strong beliefs — more nuanced than is commonly reported — about the appropriate collection and use of information to benefit their child’s educational experience. Eager for the benefits that research and analysis of educational data can provide, they are also concerned for the security of personal information about their child, on par with concerns about personal data privacy in general. All in all, parents are actively aware and engaged, and educators, education service providers, advocates, and policymakers should embrace the opportunity to communicate and work with parents as partners in addressing these issues.

Appendix: Survey Questions

Note: The initial questions address demographics: whether respondents had school-aged children, what kind of school those children attend (if at all), and grade level.

If you have more than one child currently attending public school, please answer the following questions thinking about your oldest child currently attending public school. Which of the following, if any, apply to you or your child? Please select *all* that apply.

- My child uses technology provided by their school, or technology required or recommended by teachers or school officers, for educational purposes.
- My child's school has communicated with me about how it uses technology for teaching in the classroom, for homework assignments, or other educational purposes.
- I have used school-related technology to keep up with my child's assignments or to check grades/schedules (e.g., on-line bulletin boards for assignments, access to instructional materials, teacher provided information on grades or due dates).
- None of these

How well, if at all, do you understand how your child's school collects or uses information about students (such as interactive assignments, online homework submissions, online testing)?

- I do not understand at all.
- I do not understand very well.
- I understand somewhat well.
- I understand very well.

Below is a list of some types of student information that schools might have access to. For each type of student information below, please indicate how appropriate you think it is for school districts to use this information for educational purposes. Select one: Not at all appropriate, Not very appropriate, Somewhat appropriate, Very appropriate.

- Attendance records
- Grades
- Standardized test scores
- Special needs status and evaluations
- Disciplinary records
- Criminal records
- Racial or ethnic background
- Address or phone numbers
- Health records
- Participation in school lunch/breakfast programs
- Social Security numbers
- Parental marital status
- Family income

One type of data that schools may share is "directory information" which includes information such as a child's name, address, and home phone number. Parents have the right to "opt out" of some uses of directory information (e.g., sharing for yearbooks, class rings, school award programs, or athletic teams). Which of the following best describes the communication you have received from your child's school regarding their directory information? Again, please think only about your oldest child currently attending public school.

- I have received no information from my child's school regarding directory information.
- I have received information from my child's school regarding directory information, but was not told I could opt out of some or all of my child's information being shared.
- I have received information from my child's school regarding directory information and my rights to opt out.
- My child's school policy is not to share directory information.
- Not at all sure

The information that schools collect about students can be maintained on computer servers managed by school employees or on central computer servers (sometimes called "cloud" servers) run by private data storage companies. Where do you believe the data will be maintained most securely?

- On servers located at and maintained by school employees
- On central servers run by private data storage companies
- Both locations will be equally secure
- Neither location will be secure
- Not at all sure

Do you know if federal law restricts what *public schools* can do with your child's information?

- ▶ Yes, I know federal law does restrict what public schools can do.
- ▶ Yes, I know federal law does not restrict what public schools can do.
- ▶ Yes, I think there are federal laws, but I do not know what they allow or restrict.
- ▶ No, I do not know about federal laws on this topic.

Do you know if federal law restricts what *companies* can do with personal information collected online from children?

- ▶ Yes, I know federal law does restrict what companies can do with information collected online from children.
- ▶ Yes, I know federal law does not restrict what companies can do with information collected online from children.
- ▶ Yes, I think there are federal laws, but I do not know what they allow or restrict.
- ▶ No, I do not know about federal laws on this topic.

Sometimes *schools or school districts* will share student information with other organizations or people. Below is a list of the types of organizations or people that districts might share student information with. Please indicate how comfortable you would be with each of the following having access to your child's education record (e.g., grades, attendance, performance). Select one: Not at all comfortable, Not very comfortable, Somewhat comfortable, Very comfortable.

- ▶ The student's principal
- ▶ The student's teachers
- ▶ U.S. Department of Education
- ▶ Other school districts
- ▶ Colleges & universities
- ▶ The state department of education
- ▶ The federal government
- ▶ Non-profit organizations
- ▶ Researchers that analyze the data and use their findings to make recommendations about how schools can improve
- ▶ Companies that create educational software, websites, and apps
- ▶ Organizations that offer financial aid

Student information can sometimes be aggregated and summarized and then used for various purposes. Please indicate how convincing, if at all, the following reasons are for using summarized student information to *improve education*. Select one: Not at all convincing, Not very convincing, Somewhat convincing, Very convincing.

- ▶ Student information can measure and hold teachers accountable for their effectiveness in the classroom.
- ▶ Student information can help schools improve education by measuring the most successful programs.
- ▶ Student information is a tool that teachers can use to improve the effectiveness of their instruction.
- ▶ Student information can be used to grade how well different schools are performing.

Student information can sometimes be used for various purposes to respond to student's needs on an individual basis. Please indicate how convincing, if at all, the following reasons are for using personalized student information to improve education. Select one: Not at all convincing, Not very convincing, Somewhat convincing, Very convincing.

- ▶ Student information can help to personalize the learning process by identifying strengths and weaknesses of individual students.
- ▶ Student information can be used to help identify students who are struggling so that schools can provide appropriate support earlier.
- ▶ Student information can be used to build profiles on individual students such as those used to predict best fits for future vocations or professions.

There are many ways student information could potentially be used in addition to direct educational purposes. Please indicate to what degree you would support or oppose using student data or information in each of the following ways. Select one: Strongly oppose, Somewhat oppose, Somewhat support, Strongly support.

- ▶ To evaluate the effectiveness of education programs
- ▶ To measure student progress through the course of their education
- ▶ To customize curriculum to individual students
- ▶ To help companies to develop more effective educational products and services
- ▶ To help companies market educational products and services to students
- ▶ To help companies to offer more targeted ads
- ▶ To help colleges send information to students they wish to recruit
- ▶ To help teachers tailor instruction to individual students

An *electronic education record* is the digital record of your child's school-related information, including items such as grades and attendance, as well as a record of performance and results via school-required technology that is used for the academic mission of the school. Regarding the handling of student electronic education records when maintained and used by schools and their partners, please indicate how much you agree or disagree with each of the following statements, thinking about your *oldest child* currently attending public school. Select one: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree.

PRIVACY & SECURITY

- I am comfortable with a properly-protected electronic education record being created for my child.
- I have concerns that my child's electronic education record could be hacked or stolen.
- I am more likely to support collecting and using the data in an electronic record if I know a school and/or educational service provider is required to ensure security.

BENEFITS & DISCRIMINATORY USE

- I believe a properly-protected electronic education record would be a valuable tool for improving my child's education opportunities.
- I am concerned that an electronic education record would be used in the future against my child, by a college or an employer.
- I am more likely to support collecting and using the data in an electronic record, if a school and/or educational service provider are required to use the electronic education record only for education purposes.

Which of the following, if any, do you believe are the best ways to ensure *student data* is used responsibly by schools and the companies providing educational products and services to them? Please select *all that apply*.

- New or additional federal laws to govern data use
- New or additional state laws to govern data use
- Stronger company privacy policies available on web sites that are legally enforceable to restrict data use
- Public commitments by companies to standards for use of student information
- Contractual agreements by schools and companies, shared with parents, about data use
- Other
- None — There is no way to ensure student data is used responsibly by schools and companies.

ABOUT THE FUTURE OF PRIVACY FORUM

The Future of Privacy Forum (FPF) is a Washington, DC-based think tank that seeks to advance responsible data practices. The forum is led by Internet privacy experts Jules Polonetsky and Christopher Wolf and includes an advisory board composed of leading figures from industry, academia, law, and advocacy groups. It facilitates discussions with privacy advocates, industry leaders, regulators, legislators (and their staffs), and international representatives.

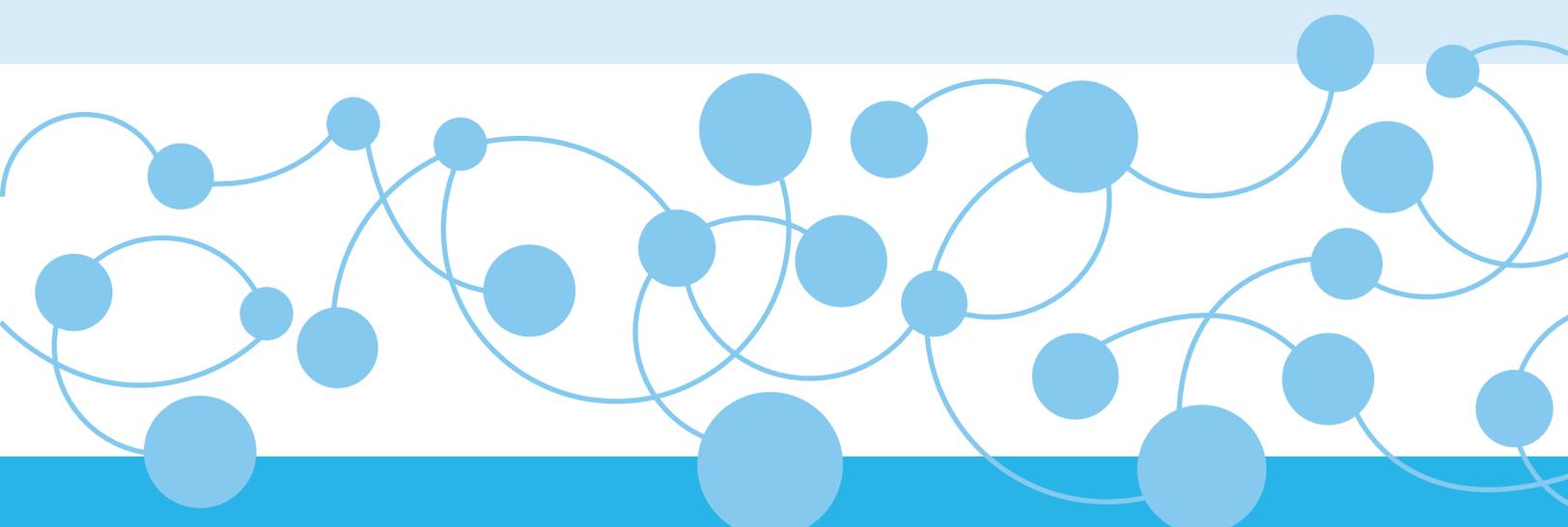
Data-driven innovations and the use of new technologies are bringing advances in teaching and learning but are also generating concerns about how student data are collected and used. FPF conducts a legal and policy analysis of the benefits and risks of technology and data in schools and is working with stakeholders to ensure responsible practices.

FPF began exploring issues related to student privacy with research and publication of white papers and articles in leading journals. "Student Data: Trust, Transparency and the Role of Consent," "Who Is Reading Whom Now: Privacy in Education from Books to MOOCs," and "The Ethics of Student Privacy: Building Trust for Ed Tech" all consider the benefits and risks of the collection and handling of student data in the context of privacy and security concerns.⁶

FPF expanded into the student data policy area in 2014 with the introduction of FERPA|Sherpa (www.ferpasherpa.org), a compilation of education privacy resources and tools with sections aimed at parents/students, schools, service providers, and policymakers. In addition to original tools and resources, this site has aggregated many of the references made available by the Department of Education, as well as other organizations such as Data Quality Campaign, CoSN, Family On-Line Safety Institute, Fordham University School of Law's Center on Law and Information Policy, Harvard University's Berkman Center, and the Software & Information Industry Association (SIIA). FPF continues to create original resources where there are gaps.

FPF continued its work in education with the announcement of the Student Privacy Pledge for K–12 Ed Tech Providers, in partnership with SIIA, to safeguard student privacy. The Pledge is built around a dozen commitments regarding the collection, maintenance, and use of student personal information. Started with 14 market leaders, the Pledge has since expanded to more than 170 signers and has been endorsed by President Obama. FPF has also conducted a series of Student Privacy Boot Camp training events for ed tech vendors and published the Parents Guide to Student Privacy Rights (in partnership with the National PTA and Connect Safely), along with a number of papers, tips, and checklists addressing issues particular to student data privacy.

⁶ Jules Polonetsky & Joseph Jerome, Future of Privacy Forum, Student Data: Trust, Transparency and the Role of Consent (Oct. 2014), available at http://www.futureofprivacy.org/wp-content/uploads/FPF_Education_Consent_StudentData_Oct2014.pdf; Jules Polonetsky & Omer Tene, Who is Reading Whom Now: Privacy in Education from Books to MOOCs, 17 Vand. J. Ent. & Tech. L. 927 (2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2507044; Jules Polonetsky & Omar Tene, The Ethics of Student Privacy: Building Trust for Ed Tech, Int'l Review of Info. Ethics Vol. 21 (07/2014), available at <http://www.i-r-i-e.net/inhalt/021/IRIE-021-Polonetsky-Tene.pdf>.





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