An Ethnographic Study of Teaching in a High-Tech, High-Touch World
Houghton Mifflin Harcourt (HMH) is committed to developing innovative educational programs and professional services that are grounded in evidence and efficacy. We collaborate with school districts and third-party research organizations to conduct research that provides information to help improve educational outcomes for students, teachers, and leaders at the classroom, school, and district levels. We believe strongly in a mixed-methods approach to our research, an approach that provides meaningful and contextualized information and results.
TABLE OF CONTENTS

I Introduction 2
   A compelling case for studying the rise of technology within the context of teacher emotions

II Methodology 5
   A holistic qualitative approach designed to draw out rich, nuanced insights

III A Day in the Life of a Teacher 6
   Riding the emotional rollercoaster that teachers experience every day

IV Technology in Action in the Classroom 7
   Four ways teachers are using technology today

V The High-Tech, High-Touch Future of Teaching and Learning 11
   Opportunities and barriers for technology to become a true extension of the teacher

VI Conclusions 12
   Looking ahead to the new age of technology, teaching, and learning

VII References 13
INTRODUCTION

The profession of teaching has evolved throughout the decades. Rigorous curricular standards, systemic evaluation through online high-stakes assessments, an increased emphasis on social-emotional learning, and the rising integration of technology in the classroom have transformed the educational landscape. As teachers welcome the incoming class of 2031 and educate students for thirteen years within the school system, they are being asked to equip all students with necessary postsecondary, career preparation, and citizenship development competencies so students can achieve their full potential.

In an era of increasing technology in the classrooms and high demands from various stakeholders, oftentimes the well-being of the teacher is neglected. The dynamics of the teacher-student relationship, the art and science of teaching the skills and content knowledge to a class of students with a wide range of abilities, and the demands from parents and administrators can often create a high-stress environment. In order to put teachers back in the center of the conversation and honor their voice about how to improve student outcomes, Houghton Mifflin Harcourt (HMH) partnered with Kelton Global, an independent research firm, to conduct an ethnographic study designed to closely examine the daily social-emotional experiences of the teacher. By conducting in-depth qualitative research, we can gain insight on teachers’ challenges and pain points in the real world of classrooms particularly when it comes to technology use, as well as learning more about the effect those challenges have on teachers’ emotional states.

As a Learning Company, HMH is committed to raising student outcomes, and teachers are integral to student success. When technology is seamlessly integrated into teachers’ lives both in and out of the classroom, it can save time and energy that teachers can then reinvest in their students and themselves to avoid burnout.

Rather than technology being a barrier, technology usage becomes an extension of the teacher. Conducting observations and interviews with the teachers helps us identify ways we can better support teachers in meeting their students’ needs. The purpose of this study is to gain insights gathered from “dawn to dusk” conversations and observations so that education professionals and policy makers can better understand the teaching profession and make informed decisions that impact the lives of our children, youth, and the nearest adults that serve them.

“ I truly love seeing the ‘light bulb’ go off. I feel most rewarded when I see a student achieve, things click, and there’s progress.”

“ Our work days are now full of meetings and professional development. I miss the days when I could come in and work in my classroom all day with no interruptions.”

“ There’s this stigma where people just assume that we teachers are all babysitters. That’s really unfortunate, because we’re professionals.”
Why is examining a teacher’s emotional state important?

Despite the changes fostered by the growing advances of technology, the core of teaching remains fairly consistent. Teachers strive to raise the next generation of learners grade by grade with the necessary skills to prepare them for the future. David Rose, a professor from Harvard Graduate School of Education, stated that “Teaching, at its core, is emotional work.” A survey conducted by the American Federation of Teachers examined 33,000 educators and found that teachers reported high stress levels and are more stressed than the average person (AFT, 2017). Sixty-one percent of educators found work to be stressful as opposed to the general population reporting that work was stressful 30 percent of the time. Furthermore, a 2015 survey found that stress levels have grown and mental health has declined in educators over the past couple of years (AFT, 2015).

“Technology has benefited me because it has allowed me to differentiate for my students and make it easier to plan instruction. Teaching can be stressful and overwhelming, but technology makes it a little easier.”

In addition, building positive relationships between teachers and students has shown to have positive outcomes. An ethnographic study conducted with 23 youths found that the presence of caring relationships between teachers and students had a positive influence on students and served as a protective factor for at-risk youth (Laursen & Birmingham, 2003). Others have conducted ethnographic studies to further examine the importance of exploring teacher emotion in understanding teaching (Zembylas, 2005). In addition, researchers have demonstrated that teachers’ well-being promoted better teacher-student relationships, effective classroom management skills, and positive social-emotional learning in their students (Jennings, 2015). For educators who face numerous predictable and unpredictable challenges each day, developing and exercising emotional resilience, the ability to bounce back after a setback and thrive in the midst of challenges, is essential (Aguilar, 2018).

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“We focus so much on preparing students to take a test at the end of the year that we have forgotten to get to know students so they feel warm and happy in the school environment.”
How does technology affect teachers’ work life and well-being?

A new contributor to teachers’ work life and well-being is the rapid rate at which technology is being integrated at every level within the school system and the pace at which teachers are expected to master and implement these newer technologies. In a survey conducted on over 30,000 teachers, a majority of teachers expressed discomfort with newer teaching practices that rely on technology and stated that they needed additional professional development and collaborative planning time with their peers (Project Tomorrow, 2018). Fifty-nine percent of teachers who responded to a survey noted that data gathering was a stressor (AFT, 2015). In another survey of over 4,000 teachers, researchers found that persistent challenges with technology wastes valuable instructional time within the day (MDR, 2018).

Research funded by the Gates Foundation examined how teachers currently use digital instructional tools, teachers’ attitudes toward digital technology, and teachers’ perceived effectiveness of digital tools (Gates & Gates, 2015). They found that barriers to access keep more teachers from using digital tools despite the myriad of options available.

Teachers have a wide range of comfort levels when it comes to emerging technology. While 15% of teachers stated that they could not live without technology, a smaller percentage noted that they were overwhelmed with the new technology (MDR, 2018). Elementary school teachers scored the highest out of the middle and high school teachers in noting that technology was overwhelming. Although the majority of teachers found technology to be useful, taking into consideration teachers’ comfort levels with technology is crucial to make technology integration into a classroom a success.

When it comes to knowing how to effectively integrate technology in the classroom, teachers know best as they put it to use every day. Through this ethnographic study, we observed four leading areas of technology use and how tech use affects the emotions teachers experience throughout the day:

- **WORKFLOW**: We found that technology in the classroom - along with student and teacher needs for technology - is rapidly changing. Not only is there a wide variety of options from which teachers and school administrators can choose, but the rate at which particular forms of technology become outdated and obsolete makes it difficult for educators to keep up with the changes. To make matters more challenging, teachers’ lack the time, training, and support needed to fully integrate existing technology into the classroom. However, teachers are hopeful that with time and continued efforts, technology in these four areas can ease teaching and facilitate deeper learning.

- **COMMUNICATION**: “I love to learn and better myself, and I want to make sure that my students are getting the best of all worlds: technology, pencil and paper, and hands-on activities.”

- **INSTRUCTION**: “When technology works, it’s the best thing in the world. But when it has a glitch, you feel like your whole world has been put on hold.”

- **DATA**
METHODOLOGY

This ethnographic study consisted of three phases. We began with an online smart community of 41 teachers. Over the course of three days, we explored a range of topics from their motivation for becoming a teacher to a detailed timeline of their tech use throughout the day.

Then, we selected 17 of those teachers for hour-long video interviews. This process allowed us to gather more detailed information on each of them as an individual in order to select a group of eight teachers that were representative of a wide range of educators.

Last, we completed “dawn to dusk” ethnographies with these eight teachers in Madison, WI, Cincinnati, OH, Atlanta, GA, and Philadelphia, PA. We spent around seven hours with each teacher – observing them in their classrooms through a fly-on-the-wall approach, probing deeply on what we observed in one-on-one discussions that followed, exploring the life of the teacher both inside and outside of the classroom and the multiple jobs many juggle, and even going home with a few to see where and how they continue working long after the dismissal bell rings.
Regardless of city, district, socio-economic status of school, grade level, subject, and teacher tenure, we observed a wide range of emotions that teachers go through on a daily basis. The factors that influence these emotions may differ from teacher to teacher, but an average day for teachers produce significant variability of emotions throughout their packed day.

These emotions can range from cheerful, confident, and fun to rushed, stressed, and overwhelmed. Not only are there a number of different emotions, but these emotions can cycle within a day. Teachers’ emotions can be a function of students’ emotions and behaviors, often leaving the teacher exhausted by day’s end.

We found that technology can help ease the teaching process or at times exasperate the issues as described in the following sections. The next section will cover how tech is currently used in the classroom, how it influences teachers’ daily responsibilities, and ultimately how we can help provide services to address these challenging areas to meet teachers’ needs.

“When students aren’t paying attention and/or misbehaving, I become frustrated that I care more about their learning than they do.”
1. WORKFLOW
Using technology for tasks such as attendance, grading, and creating lessons

Currently, workflow tech tools are often standardized within a district and used similarly by teachers given that they are largely provided by district administration to teachers, and districts also provide the necessary training.

“Once I started grading assignments online, I got so much time back that I was able to go back to school and get a second degree.”

Workflow technology has already proven helpful in saving teachers time, especially when it comes to monitoring student attendance and lesson planning. Teachers can then put this time back into more important matters such as face-to-face instruction, differentiation, relationship-building, and personal time to avoid burnout. The biggest barrier to using workflow technology is the time investment required to learn and transition to a new system. Additionally, there are pain points associated with multiple workflow platforms that do not seamlessly connect to each other creating more work and complexity for teachers.

“If I had time to turn all my tests into online forms, it would be a huge advantage for grading. I could access the assignments anywhere I have internet, give more comments, and my students could stay up to date by checking their own assignments. But I have no time to set it all up.”
2. COMMUNICATION

Using technology to connect with teachers, administrators, students, and parents

Teachers have enthusiastically embraced communication tools because of the low learning curve – many are using similar tools in their personal lives. Plus, teachers and administrators talk about communication apps and their benefits a lot, which creates a perception of ease and further encourages use.

“...I want my students and their parents to know I’m laid-back and easy to talk to. Online messaging platforms enable an open door policy. Parents are quick to write to me because I tell them ‘feel free to shoot me a message anytime.’ It makes the relationship better and easier for parents....”

Currently, communication technology saves time, breaks down communication barriers with parents, facilitates relationships with harder-to-reach students, and encourages good classroom behavior. Teachers are also using these tools to share information with one another and build collaborative communities with colleagues – through comments in shared Google Docs and even texting one another with questions and suggestions. These tools have also increased professional learning opportunities and mentorships.

Alongside these positives, teachers also express concerns. Receiving texts and emails from parents around the clock can be overwhelming and can lead to a lack of boundaries between working and personal hours, therefore, affecting work-life balance.

“...Spanish-speaking parents will write to me through a platform which translates Spanish messages to English. Parents are thankful to hear about their students’ growth....”
3. INSTRUCTION

Using tech as a teaching technique in the classroom

Teachers are generally using technology for instruction to replace pen and paper activities and to make practicing skills fun. Technology makes students more excited about learning, increases student engagement and collaborative work, gives students access to the most recent and relevant sources of information, and allows teachers to personalize and differentiate instruction. When used to its full potential, technology can help students practice and apply lessons.

Technology tools can save time during instruction by saving and displaying students’ work, quickly distributing lesson materials, and more.

However, most teachers are forced to use multiple platforms, resources, software, etc., and having to juggle logging in and out of numerous sites and systems is time-consuming, frustrating, and detracts from the lesson. Furthermore, while most teachers know they should aspire to use technology for application and creation, they aren’t quite sure how to get there. They may be overwhelmed with options and lack the time and support needed to figure it out.

“A lot of the things they’re doing online are not so much creating, but answering questions, taking assessments... I would like to get more into where they’re creating something.”

“Anything we do on the laptops they’re more engaged in, they want to do. I’ve converted a lot of my traditional paper assignments to online forms, and they’re definitely more excited to do them than if they were just paper and pencil.”
4. DATA
Collecting, analyzing, and applying student performance results

Performance data are in the spotlight – teachers, administrators, and students are all focused on increasing their use and understanding of data to improve outcomes in real time in the classroom. Data can also help students with goal setting and make lessons more targeted and differentiated to individual needs.

Teachers know they can use data to adjust their instruction but often do not have the time or resources to use it in a meaningful and effective way. Making sense of data can be overwhelming for many teachers, but they know data can be more actionable and better linked to their curriculum materials. Teachers want more training and meaningful professional learning opportunities to develop their data analytics skills and refine instructional best practices.

“There are too many assessments that I don’t use them all. I just know how to use one.”

“I would like to be able to create a performance report that’s easy to understand – no percentiles – that tells [parents] where their kids are and gives suggestions on how the parents can help at home.”
THE HIGH-TECH, HIGH-TOUCH FUTURE OF TEACHING AND LEARNING

Throughout the ups and downs of their days, teachers experience a vast range of challenges and emotions, but technology can assist in making teaching less burdensome, saving teachers time, and making learning more impactful.

“Technology helps my students connect with the world around them and allows them to discover the world in a safe environment. It also makes my life easier and saves me time because I can easily put assignments on the computer and use digital files to grade instead of paper copies.”

Technology’s potential impact on teacher enjoyment and satisfaction

To make technology a true extension of the teacher in the future, there are a number of barriers that need to be addressed:

1. **Access**: Not all schools have technology consistently available in the classroom. Additionally, due to varying SES levels, not all students have technology resources available to them at home.

2. **Infrastructure and tech glitches**: Inconsistent Wifi, underdeveloped products, misplaced passwords are all examples of common issues that compromise learning.

3. **Time**: Teachers lack the time needed to learn how to use and incorporate tech. Prioritizing technology often means investing precious personal time, which not all teachers are willing or able to do.

4. **Lack of support**: A supportive administration can have a major impact on technology use. Teachers currently face inconsistent tech and IT support in and across schools.

5. **Lack of training**: Teachers need more training on effective use of technology that encourages deeper learning and critical thinking as opposed to replacement of paper and pencil type activities.
CONCLUSIONS

Technology will continue to change – and change quickly – having a major impact in and out of the classroom. By easing the processes of adoption and use of technology for educators in these four areas, technology can become a natural extension of the teacher. Knowing teachers’ views, usages, and challenges with technology will help us understand our end user better and provide solutions that best meet their needs.

In doing so, we can help ease the stress of new technology and allow technology to save teachers’ time and reinvest that time to what matters most – students. By addressing not only the instructional and technological needs of teachers but also acknowledging the importance of their well-being, we are supporting the teachers’ social, emotional, and instructional needs as it impacts the students. By closely listening to teachers’ voices and learning through their lens, we hope to revolutionize current methods and usher in a new age of learning and teaching.
REFERENCES


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ABOUT HOUGHTON MIFFLIN HARCOURT (HMH)

At HMH, we want to create the fullest experience of what learning can be. With world-class instruction, data and insight, thought leadership, and professional support, we aim to deliver great outcomes for our students, teachers, and learning communities. Growth is our priority. Together, we are shaping the future.

ABOUT KELTON GLOBAL

Kelton Global is an insights and strategy consultancy that helps global businesses grow and thrive. We combine research with creativity to help companies all over the world answer the question: what comes next? With a heritage in journalism, curiosity about the human experience is at the heart of everything we do.