



**Bringing empathy
to the digital
space through
app-based
tutoring**



YUP STUDENT SUCCESS TEAM

Bringing empathy to the digital space through app-based tutoring

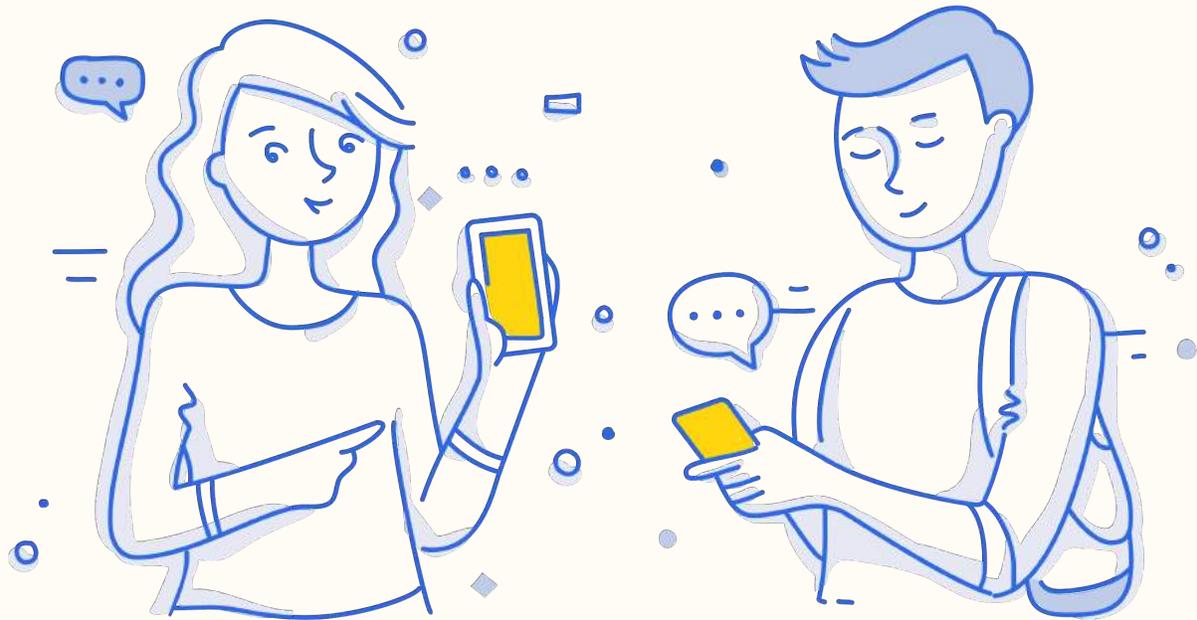


TABLE OF CONTENTS

| | |
|--------------------------------|---|
| Executive Summary | 3 |
| Intro | 3 |
| Empathy Development | 5 |
| App-Based Tutoring Companies | 5 |
| Why Yup? | 6 |
| Growth Mindset Language | 6 |
| Student-Centric Features | 7 |
| Tutor Professional Development | 8 |
| Conclusion | 8 |
| Citations and References | 9 |

EXECUTIVE SUMMARY

Key Takeaways:

- In-person tutoring provides opportunities for empathy development in children
- App-based tutoring is convenient and compatible with digital lifestyles
- Yup provides unique on-demand tutoring that is both convenient and personalized
- Yup encourages empathy development while empowering students to push through difficult concepts

This white paper will outline the relation between empathy and in-person tutoring, the advantages of app-based tutoring in addressing the needs of technologically-savvy 21st century students, and the ways in which Yup's math tutoring app uniquely bridges the gap between the two. This paper will also explore how Yup encourages the development of valuable empathy skills, while also offering students access to expert tutors who prioritize teaching concepts over giving answers.

We will dive deep into the positive effects of Yup in facilitating a child's empathy development in the digital age. We will explore the ways in which in-person tutoring has positively influenced empathy development, how current educational standards have influenced children's lifestyles, and how Yup can preserve these valuable

contributions. Specifically, we will highlight Yup's pedagogical approach, student-centered features, and tutor professional development.

The goal of this white paper is to communicate the benefits of app-based tutoring and how it meets the needs of students in the digital age, especially when it comes to instilling empathy values within our pedagogy. We are certainly not advocating for the elimination of in-person tutoring options, but rather championing the unique resources that many app-based tutoring programs can contribute to a student's busy lifestyle and individual learning needs.

INTRO

Now more than ever, students are busy. They participate in more extracurricular activities, have less time to do homework, and have little time in their schedule to accommodate an in-person tutor. Additionally, students are receiving more homework (American Journal of Family Therapy study) and are held to much higher standards thanks to new educational requirements like Common Core.

Common Core offers an approach to education that encourages



deeper subject matter comprehension. It was designed to improve learning outcomes for students and to prepare them for college and a career (Business Insider Article). Many teachers find that the Common Core gives them the autonomy and creativity to craft lesson plans that engage the classroom, a stark contrast to the rote memorization tactics that have dominated education spaces (New York Times Article).

However, these standards can be quite stressful for learners who require more personalized learning. Regardless of if you advocate for or oppose Common Core, it encourages a rigorous and fairly inflexible approach to learning.

While students are incredibly busy, their parents are busy too. Effective and high quality tutors are difficult to find, and when parents do find a good one, it's not a guarantee that the tutor's schedule will align with their family's.

Effective tutors sometimes teach in small groups rather than in one-on-one sessions. Private tutors and brick-and-mortar tutoring centers have structured hours. Tutoring centers often have set lesson plans devoted to teaching more remedial math and language arts. While many of their lesson plans address deep learning gaps, they are often lacking in accommodating individual student needs.

With all of these factors in mind, why do parents still choose in-person tutors over online or app-based tutors? While family needs and lifestyles vary, there are a few reasons why this may be the case. Firstly, studies suggest that people hold tight to the status quo¹. Parents have been hiring in-person tutors for years. Online and app-based tutors are part of a new shift in education and, until parents feel comfortable with the quality and impact of these tutors, the shift may take time.

Certainly, in-person tutoring has been a help for many students. It drives grade improvements, deepens understanding of a student's strengths and growth areas, and fosters high quality social relationships. But students who grow up in an ever-evolving digital world need new options that align with their lifestyles, especially as educational standards like the Common Core dominate the educational space.

With all of this considered, there is a growing need for a pedagogical shift that requires integrating with new technologies. Tutoring must also meet the needs of students who grow up in an increasingly technological society².

How can we leverage technology to meet the needs of students without completely eliminating the important lessons that in-person tutors provide? After all, students need access

to opportunities that build empathy, challenge their thinking, and provide valuable relationship-building strategies to carry into their adult lives.

EMPATHY DEVELOPMENT

Before we dive in, it's important to understand what we mean when we say empathy. Empathy is defined as the ability to share the feelings of others. Prominent empathy researchers agree that empathy includes both cognitive and affective empathy. Cognitive empathy is the ability to understand how another person feels³, while affective empathy describes the ability to share another's feelings. Those who are able to do both are highly empathic—they can recognize when someone is feeling a certain way and are intuitive enough to know how to respond.

Empathy is drastically important as children develop. Researchers have found that empathy encourages prosocial behavior within children. That is, there is a significant positive relationship between high degrees of empathy and behaviors like helping and sharing⁴.

Teachers who have high degrees of empathy tend to create welcoming environments and consequently have positive impacts on student performance⁵. Researchers have found an upward trend in student achievements when

their teacher displays empathic behavior⁶. It is perhaps one of the reasons that parents consistently choose in-person tutoring.

Not only that, but children develop empathy skills when they are given opportunities to observe them in others. Students who are exposed to teachers who provide consistent positive empathy attributes are more likely to display those empathy traits themselves⁷. They rely on situational cues—visual, verbal, and body language—to determine whether the behavior is empathetic. They then choose to enact these same behaviors. In-person tutoring can offer valuable opportunities to share students' empathy development in this context.

APP-BASED TUTORING COMPANIES

With in-person tutoring, tutors and students have the benefit of seeing body language and hearing tone shifts and emotional undertones. Any digital learning platform will be hard-pressed to simulate these cues. Of course, video tutoring can help break down these barriers, but often experience the same limitations of an in-person tutor: limited shift offerings, cost of materials, expense, etc.

Some online and app-based tutoring companies offer a supplemental resource for students to get

help on their homework. Many apps and online resources just give answers or offer passive learning tools like videos of concept breakdowns or flashcards. These are helpful when students need a quick solution, but they do not encourage mastery learning or empower the student to own their learning experience. Perhaps most importantly, they don't offer the individualized support and empathy that only a one-on-one tutor can provide.

In the last decade, technological developments have made it possible for empathy-based tutoring to emerge. One of these companies, Yup, is focused on putting students' empathy development at the forefront of app-based tutoring. By integrating valuable interpersonal skills into a modern platform, Yup encourages empathy development in students during a sensitive time period in their lives. Yup brings together empathy-based skills and a compatible medium for students growing up in the digital age.

WHY YUP?

Yup is an on-demand math tutoring app designed to support students in a personalized one-on-one session. Yup is uniquely positioned to offer a tutoring option that aligns with the technological and busy lifestyles of many

students. Yup facilitates empathy development in several ways:

- **Achievements** that students can earn for asking good questions, learning from mistakes, solving problems, trying their best, and sharing what they know
- **Growth mindset language** that encourages students' best effort
- **Student-centric features** that accommodate individual learning needs and bridge communication gaps
- **Rigorous tutor professional development** that enhances teaching quality and subject expertise

GROWTH MINDSET LANGUAGE

Our tutors are trained to use growth mindset language, which emphasizes student effort over innate ability. *Growth mindset* is a term coined by Carol Dweck, PhD, Stanford Psychology researcher and professor. Essentially, a person practicing a growth mindset believes that their abilities can be developed through practice⁸. Instead of viewing their abilities as innate (i.e. "I am good at math"), they are able to see their own potential and understand that they can learn new skills (i.e. "I am learning how to understand fractions").

Yup’s students are of all ability levels—some are straight A students looking for supplemental resources to check their homework and frontload learning standards, while others need more individualized tutoring to help them understand concepts. Yup’s goal is to provide students with experts who can address both of these needs. To support students of all ability levels, tutors are encouraged to respond to students with growth mindset language. This pedagogical approach prioritizes empathy development as it encourages the understanding that the student is still learning and may not pick up a concept right away. Tutors who can respond in a way that encourages rather than discourages are better able to understand the nuances of a student’s emotions.

STUDENT-CENTRIC FEATURES

Achievements



Our tutors ask guiding questions to help students arrive at the answer, provide visuals and definitions for better conceptual understanding, and reward students with in-app achievements when they demonstrate engagement during a tutoring session.

Students can earn five different achievements for their engagement in a session: Cool Curiosity for asking good questions, Great Grit for learning from mistakes, All Star Answer for solving a problem, Epic Effort for trying their best, and Super Sharing for sharing what they know.

Emotive Reactions



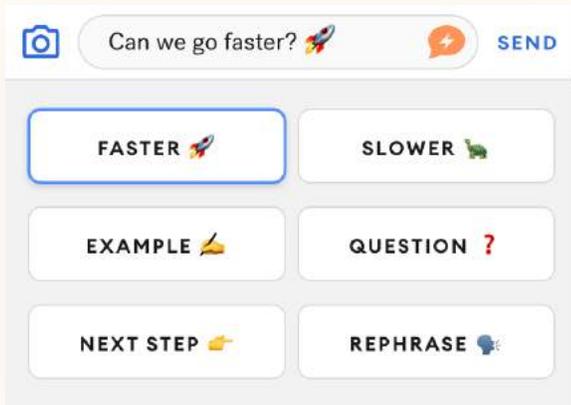
Let Mr. Welch know if he’s being clear
Press & hold any message to add a reaction

In addition, students can use emotive reactions to signify whether they understand something that a tutor has said. This way, tutors are better able to understand when a student is confused. Of course, if tutors are intuitive enough to understand when a student is confused, they are able to properly address it. As empathy research suggests, those who are highly empathic are able to read someone’s emotions and respond appropriately.

Tutors encourage empathy by welcoming students’ confusion and directly addressing it. By empowering students to communicate when they are confused or stuck, tutors make it okay for them to do the same outside of tutoring sessions. If students observe understanding and appropriate tutor response during a session,

they may be more likely to behave in similar ways with others.

Student Quick Response



Often, students can feel less empowered to ask important questions when using a tutoring app. In-person tutoring provides the space for more nuanced conversation, giving the space for students to ask important questions. Yup is sensitive to this and empowers students to ask questions using response prompts. Our student response prompts include “*Can we go faster?*”, “*I have a question*”, and “*Can you explain this differently?*” With student response prompts, students are better able to advocate for their own learning. They simply tap on the prompt they need and the message is sent to the tutor.

TUTOR PROFESSIONAL DEVELOPMENT

In the same vein that Yup offers support to empower students, Yup offer supports for tutors

to expand their own learning. Yup’s professional development offerings for tutors focus on digital competence and emotional skills⁹. While most of us might understand the importance of emotional skills in in-person learning, it’s important to recognize that emotional skills are a key element in virtual learning¹⁰.

Yup provides professional development to tutors centered specifically on growth mindset and using encouraging language. Growth mindset is inherently positive language - offering students radical encouragement in the face of frustration.

Tutors are required to attend a webinar on the importance of growth mindset, with tangible strategies to adapt to a student’s learning needs. Yup provides tutors with resources to respond empathetically when a student is incorrect, taking a while to respond, or communicating any fixed mindset language.

CONCLUSION

In conclusion, we must be cognizant of the empathy development of children. Students are stressed now more than ever before, but they have access to more tools than ever before too. We should not eliminate in-person tutoring and solely provide learning through apps. After all, in-person learning is incredibly impactful as it

teaches students skills like critical thinking, encourages empathy development, and gives students examples of positive role models in the real world.

Rather, app-based tutoring should be used more frequently to support a student's education and bridge the widening gaps between what is taught in the classroom and what students absorb. With an app-based tutoring platform like Yup, students have a say in how and when they get help.

Yup provides a convenient, on-demand tutoring platform that encourages the development of valuable empathy skills so crucial to students' lives. As the world becomes increasingly more digital, families should consider an option that suits their children's lifestyles but also prioritizes empathy development.

CITATIONS

¹ William Samuelson & Richard Zeckhauser, "Empathy for the Digital Age" *Journal of Risk and Uncertainty*, 1 (1988): 7-59.

² Rafael García-Pérez, Juan Santos-Delgado, & Olga Buzón-García, "Virtual empathy as digital competence in education 3.0", *International Journal of Educational Technology in Higher Education*, 1 (2016): [insert page number]

³ Citation Needed

⁴ Sara Konrath & Delphine Grynberg, "The Positive (and Negative) Psychology of Empathy", In D. F. Watt & J. Panksepp (Eds.), *Psychology of emotions, motivations and actions. Psychology and neurobiology of empathy* (pp. 63-107). Hauppauge, NY, US: Nova Biomedical Books.

⁵ García-Pérez

⁶ David Aspy & Flora Roebuck, "An Investigation of the Relationship between Student Levels of Cognitive Functioning and the Teacher's Classroom Behavior", *The Journal of Educational Research*, 8(1972): 365-368.

⁷ Anna Ratka, "Empathy and the Development of Affective Skills", *American Journal of Pharmaceutical Education*, 10(2018): [page number]

⁸ Dweck, Carol S.. *Mindset: The New Psychology Of Success*. (New York : Ballantine Books, 2008).

⁹ Yoram Eshet-Alkalai, "Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era", *Journal of Educational Multimedia and Hypermedia* (2004) 13(1),93-106.

¹⁰ García-Pérez [finish citation]