

Vision Document

# Cyber Schooling That Works: The 5 Critical Commitments

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## Executive Summary

Education has changed drastically in a very short time. Automatically presuming “learning loss” is problematic, but education systems won’t fully know if students have kept pace or fallen behind in their studies until well after schools reopen. Educational leaders will face greater uncertainty about maintaining learning continuity than at any time in their careers. School and district leaders who are unfamiliar with the research base on Cyber Schooling are challenged with reopening schools without reliable guidance about what works. Teachers who

don't have ample experiences as *Cyber Learners* now have to become *Cyber Teachers* seemingly overnight. It's like requiring teachers to serve as lifeguards when they don't yet know how to swim.

Without direction, strategies, and tools provided by the evidence base for online instruction that works, many school leaders and classroom teachers will attempt to translate traditional face-to-face experiences to an online environment. Doing so will fail to move the needle of impact forward, accelerating any learning loss, and leave students struggling to keep from falling even further behind.

However, there is cause for optimism. Breakthrough innovations, synthesized from three decades of research on online learning, offer the direction, guidance, and support structures educational leaders and teachers need to reimagine online schooling based on what works.

In 1995, pioneering educational researcher Dr. Sonny Magana created and served as principal of a symbiotic model for building collective student efficacy that he called Cyber School. Dr. Magana's Cyber School was the subject of a longitudinal research study which first surfaced enduring principles of effective online schooling. Over the course of the last 25 years, these findings were further investigated and codified into the T3 Framework for Innovation. Compounding evidence suggests that implementing the strategies in the T3 Framework with reasonable fidelity will at least double student learning productivity. Dr. Magana's research methods and evidence findings were peer-reviewed and inducted into the University of Oxford's Research Encyclopedia of Education, a clearinghouse of what works in education.

This vision document synthesizes the findings from Dr. Magana's Cyber School research into 5 Critical Commitments that school leaders and classroom teachers must make in order to maintain learning continuity and accelerate learning. In order to get serious about reimagining schooling during this challenging time, educational systems must be prepared to make these critical commitments. Those willing to take these steps will lead schools forward in such a way that minimizes the disruption to learning continuity, builds limitless learning capacity, and reverses any learning loss by generating collective system efficacy now and well into the future.



## About Magana Education



Dr. Sonny Magana is a Cyber Schooling pioneer. He is the author of numerous research studies, scholarly articles, and three best-selling books. His latest book, *Disruptive Classroom Technologies*, introduced the T3 Framework for Innovation to wide international acclaim. The research-driven strategies in the T3 Framework for Innovation were shown to reliably double student learning and achievement. Magana’s learning strategies have been implemented successfully in online, hybrid, and face-to-face learning environments. Dr. Magana’s methods and findings were recently peer-reviewed and inducted into the Oxford University Research Encyclopedia for Education, a prestigious global clearinghouse for breakthrough practices. Magana Education is the leading provider of innovative leadership coaching, professional development, and strategic planning focused on implementing highly reliable educational reform guided by the T3 Framework.

**Mission:** To transform breakthrough educational research evidence into practical, concrete principles, strategies, and activities that reliably accelerate systemic learning performance, well-being, and mastery.

*“The effects of Information & Communications Technology (ICT) remain too low and understanding the “why” it is so low is critical. Sonny Magana has advanced our understanding of the Visible Learning and used this to advance a major step forward. His T3 Framework aligns beautifully with the Visible Learning claims, inviting ICT to move beyond the translational (surface), to also incorporate the transformational (deep), and the transcendent (transfer) learning. The T3 Challenge is a powerful, credible, and exciting challenge that Magana has offered us: Let’s do it!”*

—**John Hattie**, Laureate Professor, University of Melbourne

*“Dr. Sonny Magana is a visionary leader regarding what education can be if we truly embrace the potential of technology. Unfortunately, the bright promise of technology is still in the distance, somewhere on the horizon. If one views schools and schooling through the lens of Magana’s T3 Framework, though, that horizon can become clearer, more attainable, and more inspirational.”*

—**Robert J. Marzano, Ph.D., CEO, Marzano Research**

*“The T3 Framework is a brilliant breakthrough in our understanding and use of technology for learning. Sonny Magana clearly portrays the nature and difference between translational, transformational, and transcendent use of technology. The identification of transcendent use is itself an innovation. On top of all this he shows us how to navigate through the T3 system with guiding questions, prompts, and rubrics. For those of us working on the frontier of deep learning *Disruptive Classroom Technologies*, and the T3 Framework is a much-needed gift”*

—**Michael Fullan, Professor Emeritus, University of Toronto**



## How Will This Vision Document Help Me?

Reading this document is the first step for educational leaders, teachers, and stakeholders to make the 5 Critical Commitments necessary to ensure learning continuity. The second step is to share this vision document with colleagues and stimulate discussion. The third step is to galvanize action. Taking these steps will help learning systems develop online or hybrid schooling that works by assessing the current status on the 5 critical commitments, establishing meaningful growth goals, tracking and monitoring systemic progress towards these goals, and evaluating yearly growth and impact on student learning, achievement, and agency. These 5 critical commitments will further help learning systems sustain high-impact learning continuity in any future Cyber School learning environment.

## The 5 Critical Commitments for Online Schooling That Works

**Critical Commitment 1:** Providing universal and equitable access to digital production devices, broadband connectivity, and Cyber Security for all students and faculty.

**Critical Commitment 2:** Building and sustaining capacity for high-impact online teaching guided by research-driven principles and strategies designed to generate collective teacher efficacy.

**Critical Commitment 3:** Building and sustaining capacity for limitless online learning guided by research-driven strategies and habits designed to generate collective student efficacy.

**Critical Commitment 4:** Developing personalized curriculum pathways for all students that are driven by students' needs, interests, and passions.

**Critical Commitment 5:** Establishing flexible scheduling that is culturally responsive, inclusive, and provides students with multiple opportunities to demonstrate mastery.

## Pioneering Online Schooling

In the Spring of 1995, while I was serving as the science, math, and music teacher at ACES Alternative High School in Washington State, I identified a wicked problem: an unusually large number of students were dropping out of the traditional high school during the second semester of their senior year. Alarmed and intrigued, I interviewed the students and what they told me was

shocking. The traditional high school system was rigidly adhered to a seat time-based approach to learning—180 hours of seat time per credit, with no exceptions. If students failed one or two elective courses during their freshman and sophomore years, then they could not meet the seat-based requirements to graduate during their senior year. Moreover, they could not re-matriculate and complete coursework over the summer, or during the following academic year. As a result, these students felt they had no option but to drop out and quit the system. These were good, hard-working kids, but the institutional inflexibility and insensitivity they faced made this impossible.

### **What Is Cyber School?**

My mind was made up: This was a wicked problem that mattered to me, and so I endeavored to come up with a solution. I imaged a future learning system that leveraged the capacity of digital tools in such a way that enabled high impact teaching, personalized learning pathways, flexible scheduling, and empowered students to experience meaningful and contributive learning from any location. I posed an essential “What if” question:

*What if education shifted from a place-based, seat time-based, final examination driven system to a distributed, mastery-based, student-directed system?*

Such a system, I reasoned, would place students squarely at the core, would be supportive rather than unyielding, and would allow students to direct their own learning by meeting or exceeding their academic needs authentically, purposefully, and contributively. I imagined an experiential learning environment that was based on student mastery, not on the amount of time a learner sits passively in a seat listening to a lecture. I imaged a system flexible and agile enough to allow students ample opportunities to establish their own mastery learning goals, express and represent their learning in their own ways, and fail and learn from their failures until they achieved mastery. I called the new concept The Cyber School.



**Critical Commitment 1:** Providing universal and equitable access to digital production devices, broadband connectivity, and Cyber Security for all students.

Every Cyber School student was provided with a desktop computer, a modem, and secure access to dial-up Internet connectivity in their homes. This put every student in an equitable position to build a sense of community, contribute to each other’s learning, and make significant gains in their learning attainment. In 1995, this commitment was a novelty; today it is imperative.

**Critical Commitment 2:** Building and sustaining capacity for high-impact online teaching guided by research-driven principles and strategies designed to generate collective teacher efficacy.

Cyber School was staffed by three outstanding teachers who were trained by the author to shift their focus from delivering content and information towards becoming high-impact learning coaches. This shift in focus directly helped students identify and master high-impact learning strategies at each phase of their learning: surface, deeper, and knowledge transfer. In 1995, this commitment first emerged; today it is imperative.

**Critical Commitment 3:** Building and sustaining capacity for limitless online learning guided by research-driven strategies and habits designed to generate collective student efficacy.

Cyber School students developed high levels of self-regulation by maintaining the discipline of establishing their own personal mastery goals, implementing high-impact learning strategies, and monitoring and tracking their progress towards these goals. Using digital tools we developed, students shifted their focus from memorizing content towards learning how to optimize their learning and making meaningful contributions to others’ learning. In 1995 these digital learning tools were futuristic; today they are imperative.

**Critical Commitment 4:** Developing personalized curriculum pathways for all students that are driven by students’ needs, interests, and passions.

Cyber School teachers developed Personal Growth Plans (PGPs) for every student based upon their academic needs. These plans were also informed by students’ interests, passions, and purposes. Rather than asking students what job they aspired to get, students were asked, “What



wicked problem matters to you, and what are you going to do to solve it?” This helped students realize that their educational attainment was less an end than a means to improving their world. In 1995, the use of personalized learning management systems were groundbreaking; today they are imperative.

**Critical Commitment 5:** Establishing flexible scheduling that is responsive and provides students with multiple opportunities to demonstrate mastery.

Cyber School students and teachers collaborated on creating flexible schedules in such a way that students’ learning needs would be met, and that ample academic progress would be achieved. Students responded enthusiastically to this highly responsive approach and redoubled their commitment to realizing their academic goals. Students reacted to the high level of expectation by demonstrating heightened responsibility, independence, and interdependence. In 1995, flexible scheduling for online mastery learning was revolutionary; today it is imperative.

### **What Was Cyber School’s Impact?**

Cyber School opened its doors in the Fall of 1995 and was the focus of a longitudinal study conducted at Seattle University. The results of this research study are noteworthy: in the first year 92% of the students successfully completed their graduation requirements; in the second year 95% of the students successfully graduated; during the third year the graduation rate rose to 99%. Students were surveyed each year in order to surface patterns and determine the attributes of the model which made it so successful. The patterns that emerged from these survey results formed the basis of the 5 Critical Commitments. It is important to note that this symbiotic Cyber School model has been successfully replicated in developing countries to ensure equitable learning access for marginalized learners, particularly girls (Javid, 1998; 2020; Magana, 1995; 2016; 2017).



## What Is The T3 Framework for Innovation?

Cyber School is still serving the needs of at-risk students today. The “What if...?” question I posed 25 years ago is now just as relevant, perhaps more so. The Cyber School findings from the original research study were a springboard for further exploration into finding the most reliable ways technology improves teaching and learning. These research findings were synthesized into the T3 Framework for Innovation in Education, first introduced in the book, *Disruptive Classroom Technologies: A Framework for Innovation in Education*.

The T3 Framework organizes learning into three hierarchal domains: T1) Translational, T2) Transformational, and T3) Transcendent. Each domain is further organized into elements and strategies which are concrete, observable, and measurable. These three domains, Translational, Transformational, and Transcendent learning are worth further exploration.

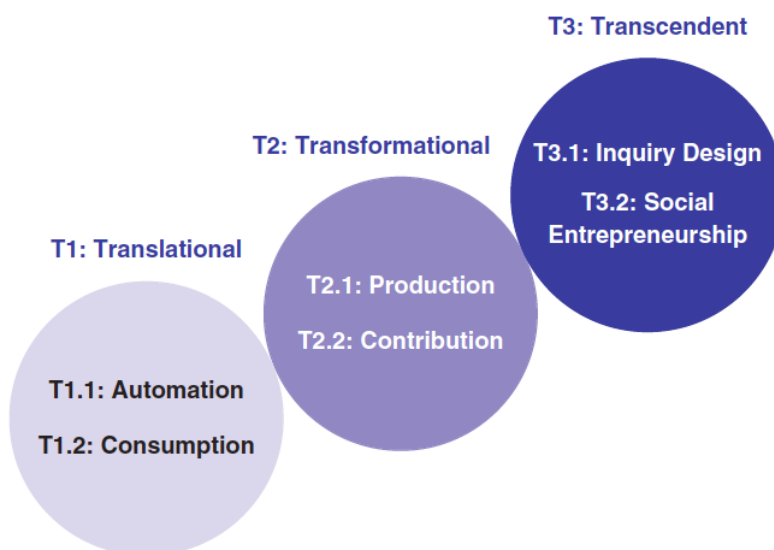


Figure 1: *The T3 Framework for Innovation in Education*

### T1: Translational or Surface Learning

The most common ways that digital tools are used in schools are translational in nature. By that I mean the most popular uses of technology in schools reflect the translation of teaching,





learning, and administrative tasks from an analog form into a digital one. Automation, the first element in the Translational domain of learning, is the process of automating or digitizing presentations, spreadsheets, or electronic mail or web searching. The second element, Consumption, is the process by which students and teachers consume content knowledge from a digital device or source, like a streaming website, rather than an analogue source such as a book.

Digitizing Automation and Consumption tasks certainly adds value in terms of saving time, increasing efficiency, and accuracy, but the impact of translational learning on student learning and achievement has been negligible for too long. Far too many educational systems limit student uses of technology to this entry level domain which, in no small way, has contributed to the low impact digital tools have had on student achievement. While there is some alignment between translational learning with technology and the temporary acquisition of surface level knowledge by students, this stage should be considered an entry point.

## **T2: Transformational Learning**

The Transformational domain of learning reflects the intentional application of digital technologies to develop students' Meta-Learning habits. The strategies in this domain catalyze a metamorphosis in students from rote learners who simply memorize and recite content knowledge to active, contributive knowledge architects. The first element of Transformational learning is Production. The Production strategies help students become more independent, self-directed learners by developing and committing to their own mastery goals, monitoring and regulating their emotions, effort, and progress, drawing upon their experiential knowledge base, and becoming the sources of their own learning feedback loops.

The strategies in the second element, Contribution, show students how to produce archivable and accessible digital knowledge and thought artifacts that make their thinking and learning visible to themselves, their classmates, and teachers. The Contribution strategies help



students to become more interdependent contributive learners. These strategies guide students to mindfully contextualize their learning, generate expanding connections to knowledge and one another, and become fully committed to developing the well-being and mastery of themselves and their fellow learners.

### **T3 Transcendent Learning**

The third segment of the T3 Framework is the Transcendent domain of learning. Transcendent learning begins with student passion and concludes with students engaging in designing original lines of inquiry, transferring newly acquired and consolidated knowledge, and applying social entrepreneurship strategies to solve wicked problems that matter to them.

The first element in this domain is Inquiry Design. The Inquiry Design strategies scaffold students' uses of digital tools to leverage their learning to identify, investigate, hypothesize, and design resolutions to wicked problems that matter to them. These strategies are designed to prepare students to apply their learning in order to make the world a better place. The strategies in the second element, Social Entrepreneurship, guide students to intentionally and contextually wield new and emerging software coding environments, developmental tools, and communications platforms to iteratively generate and scale ever-more robust solutions to the wicked problems that matter to them.

### **What Is T3 Framework's Impact on Learning?**

The strategies in the T3 Framework have observed effect sizes of 1.6 and even higher, which is equivalent to a *quadrupling* of student learning productivity and performance (Haystead & Magana, 2013; Magana & Marzano, 2014; 2015; Magana, 2016; 2017; 2018; 2019). The methods and findings underpinning the T3 Framework were recently peer-reviewed and inducted into the [Oxford University Research Encyclopedia of Education](#). It is the only modern conceptual framework for innovation in education to be so recognized.



In order to help scale the awareness of and capacity for masterfully implementing the T3 Framework strategies, I developed the online T3 Academy. The T3 Academy was designed to build leaders' and teachers' capacity as effective *Cyber Learners* so they can become masterful *Cyber Leaders* and *Cyber Teachers*. The T3 Academy offers an innovative, self-paced online learning experience with concrete strategies, methods, and tools that leverage the power of educational technology resources to achieve explosive student learning in an online, hybrid, or face-to-face classroom environment.

### **What Should I Do Now?**

You have taken the first step towards creating online schools that work by reading this vision document. Please share this with your colleagues to build a common definition of online schooling that works, foster productive discussion, and galvanize action steps. The next step is to contact Magana Education to take the free introductory readiness survey to determine your system's current status on the 5 Critical Commitments. This will clarify your needs and the resources at your service from Magana Education.

### **Expert Guidance Available**

Online schooling is the new challenge, now, and for the foreseeable future. Developing and sustaining online schooling that works will require learning systems to meet this new challenge head on with the guidance provided by the highest quality research available. Magana Education offers the expert knowledge, guidance and research-driven professional learning needed to effectively implement the 5 Critical Commitments in your school or district. For more information, contact us at [info@maganaeducation.com](mailto:info@maganaeducation.com).



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