When Ed Ames was a boy in Maine, he grew up in a fishing village with a passion to be a fisherman. His family had fished the Maine waters since before the Revolutionary War. Despite his passion, his father told Ed he was too small and too frail to become a professional fisherman, so Ed went off to school. He received a degree in marine biology and merged his love of fishing and science by conducting detailed scientific studies of spawning, habitat, and fishing patterns that are guided in part by the anecdotal experiences of aging fishermen. Ed’s insightful research, grounded in his deep interests as a young boy, earned him a McArthur award.

Every learner is an Ed Ames, with interests that can be used to create relevant and powerful learning opportunities. Unfortunately, these interests are seldom recognized and rarely exploited by schools. Despite the recent attention to increasing relevance, what it is and how to best use it in the service of rigorous student learning are in need of more careful thought. This is particularly so in thinking about relevant student learning experiences and their relationship to student agency, engagement, and self-efficacy.

We believe that most attempts by schools to increase relevance fail because they are not thinking deeply about what constitutes authentic relevance. Three core requirements for relevance are particularly overlooked. The first is that relevance is in the eye – and mind – of the student, not the teacher. Second, relevance redefines the student-teacher relationship, requiring the teacher to establish a relationship with the student through his interests. Finally, relevance requires a balanced attention to student interests and the curriculum. In this article, we elaborate a bit on each of these core requirements and discuss their implications for redesigning student learning opportunities and environments.

**Relevance begins with the individual learner.** It is the learner who decides what and from whom he will learn. Relevance is about deep connections between the student, his emerging interest in a given area, and the complex learning challenges that define that area. Relevance starts and ends with what the student really wants to learn and broadens out as the student makes connections and wants to learn more. Within this conceptualization of relevance, determining what is relevant is itself an essential part of each student’s learning.

**Relevance requires a balanced attention to student interests and academics.** Traditionally, schools and colleges have featured learning that employs an approach that could be characterized as ‘text to life.’ They emphasize in their teaching the world of words in all manner of texts – textbooks most prominently, if not exclusively – in order to prepare students for the world of action. Blending ‘life to text’ and ‘text to life’ or relevance to academics and academics to relevance is
extremely important. Ed’s story, for example, is the classic merging of life and text; neither alone would have prepared him for success in his work. It was the world of action, and his interest in that world of action, that led him to the textual knowledge he needed to deal successfully with the challenges he chose as his life’s work.

**Addressing what is relevant requires a special student-teacher relationship.**
While learning need not require a teacher, it typically does, and most often in school, where students spend a majority of the day, that teacher is the school teacher. This contrasts with ‘teachers’ outside of school – peers, parents or expert practitioners who share the same interests. That situation begs the question of how the school teacher can take advantage of all those teachers outside of school to make learning more relevant inside of school.

As the level and quality of motivation increase through this relationship, both the student and the teacher can more successfully understand and pursue strategies for ensuring rigorous learning. This association underscores the power of motivation, particularly intrinsic motivation, in moving a learner to embrace rigorous learning. Importantly, through this relevant and rigorous learning built upon a firm student-teacher relationship, the student will more readily recognize the inherent value of 21st-century skills such as literacy, numeracy, innovative problem solving and self-development. Because these skills will be deliberately grounded in the student’s own areas of interests, he will more readily recognize them as essential tools to master in order to think, learn and perform at high levels. In an ongoing cycle, life’s experiences lead the student to the text and the text leads the student back to life.

Establishing a successful student-teacher partnership opens the door to a unique and powerful opportunity to employ and build upon relevance and relationships in the quest for rigorous student learning. The essential element of this opportunity is the symbiotic and cyclical link that emerges between relationships and relevance. As the teacher begins to engage the student, she comes to know him well as a person and a learner, and understand his interests and what and how he learns most productively and comfortably.

The teacher works from knowledge gained through the developing relationship to finetune her support and facilitate a more personal and inherently productive learning experience. Simultaneously, the process of knowing the student well as a person and as a learner imposes an obligation on the teacher to respond further to the student’s interests.

This cycle is the key. As the student discovers and expresses his interests, he will have these questions: How can I learn to do this work? What about it is attractive to me? Why does it interest me and fulfill me as a person?

The attentive teacher will enter the dialogue by introducing additional questions for the student to contemplate: Does society (and significant adults) regard what I am learning as valuable? Do I understand the connection between what I am learning, what I need to learn, and its value to me and society? What more do I need to learn in order to achieve mastery?

The teacher creates environments – psychological as well as physical – to support learning. These environments can and should extend beyond the school, and should support the student’s learning when he is not with the teacher but with others from whom he can learn.

Working with the relevance-relationship partnership as we have described it is extremely challenging in a traditional school, but much less so in small schools offering personalized programs. In Big Picture Schools (www.bigpicture.org), for example, each teacher works with a group of 15-17 students for all
four years of their high school experience. Powerful relationships emerge during this extended time and allow the teacher to develop and work from deep understandings of the learner formed over time. The teacher is able to respond expertly to the student's needs, interests and uniqueness in ways that positively impact on learning and development. In such an environment, it is impossible for a student to be left unknown, much less left behind. The challenge is to fully use this relationship – to nudge the student, gently but firmly, to the edge of his competence.

Of course, the nature of teacher-student engagement in the typical school rarely approximates this critical level – although it often does with those out-of-school teachers. And recent attempts to institute high school advisory systems are with few exceptions tepid instruments poorly implemented, aimed at helping the student fit herself to the school rather than vice versa, failing to exploit the potential for learning of and acting on students' interests. Even most career academy systems do not bring relevance to the level of each student, opting for half measures that require only slightly more accommodation to each student's interests (Quartz & Washor, 2006). The curriculum is still firmly in control, rather than at the service of the student's interests. And few of those teachers from the students' out-of-school interests are allowed into the mix.

What signs should we look for? Our observations have revealed these.

- There is sophisticated and nuanced language used between the student and teacher as well as other students.
- There are issues, projects, and other objects that both the student and teacher find interesting. Both work to understand more about themselves through these issues, projects, and objects.
- There is a sense of trust and respect as well as give and take between the student and teacher.
- Parents, teachers, mentors, and the student all know one another through the student's work and interests.

The path from relevance to relationships leads quickly to motivation and engagement, of course, but it also leads the learner to be open to discovering what the world regards as relevant with respect to his interests. The aesthetics of the student-teacher relationship founded upon intimate knowledge of the student's interests that helps the teacher prepare the student to embrace and engage in rigorous learning. Consider one student's learning pathway:

For his senior thesis project, Corey, a student at the Met School in Providence, Rhode Island, exhibited in the school's bookstore café a portfolio of his photographs of the Old Royal Mill that he worked on with his mentor, a professional photographer. Over a period of 10 months, from August through April, Cory photographed the mill, perfecting his photography and, with his teacher, Charly Adler, he studied the physics of light and lighting and the lenses and chips that capture and process it. He studied the chemistry of producing the photographs from old fashioned cameras and film processing, and the nature of composition in art and in writing to better communicate his work process and how he felt about his photographs. He consulted with other photographers, read and researched, and spent long hours at various times of the day taking scores of photographs and analyzing their technical and aesthetic quality.

Without establishing a strong foundation in relationships and relevance, it will be difficult for the teacher to prepare the student to engage in rigorous learning and work. Without establishing a strong foundation in relationships and relevance, motivating the student will be extremely difficult and be based primarily on external incentives. Conversely, with a strong foundation in place built on relationships and relevance, a teacher, and in the bigger picture, a school, can better accommodate itself to each student, rather than demanding that each student accommodate himself to the school.
A disregard for these understandings leads to dysfunctional instructional decisions – requiring, for example, that a student master core curriculum standards before being allowed to learn within his interests, or that a student demonstrate mastery of all standards regardless of relevance to his interests and career pathway. Such dispositions are nearly pathological in their lack of insight and imagination regarding how to move from interests to addressing essential learning standards. Moreover, none of this attention to self, agency, and engagement around what is relevant to the student needs to be interpreted as coddling or pandering to ephemeral interests. Rather to beginning where the student is but refusing to leave him there. Such an approach, as Quartz and Washor (2007) point out, employs not only affective support but critical engagement of each student around his interests. Such a culture encourages each student to discover who they are and what they like to do and to learn how to use the skills and knowledge learned they acquire in school to problem solve and broaden their opportunities.

What does this perspective on relevance look like in the world outside of schools? The images are as varied as they are abundant.

A recent story on 60 Minutes reported on a 14-year-old boy who is arguably the greatest composer in the last 200 years. When he was three years old his parents found him drawing cellos on musical notation paper. Neither of his parents plays a string instrument. They bought a cello and the boy began playing it immediately.

At 15, McArthur Award winner Bill Strickland happened by ceramicist Frank Ross’s classroom as he was working a piece of clay on the wheel. ‘Hey, can I learn how to do that?’ asked Bill, and the rest is history. Ceramics focused Bill’s attention to learning, he went on to college, and became a leader for community development in Pittsburgh that focuses on developing children and adults through the arts.

In the 1970’s Sylvia Fein, an artist and psychologist, wrote Heidi’s Horse, a book about the growth of her daughter. It featured a portfolio of the horses her daughter drew starting at a very early age up through her teenage years. Her daughter’s interest in horses and Sylvia’s wonderful narration is evidence of how parents and teachers can longitudinally take an interest and develop all sorts of academics and text-based learning from the arts.

How, then, to replicate these stories for every learner? We suggest that adults who would be teachers – parents, mentors, school teachers – need to pay close attention to learners’ engagement with the world outside of schools and to the objects (tangible, of course, but also intangible) of interest they value and want to learn about.

A simple desire to learn something (often expressed in the question, ‘Can I learn how to do that?’) can lead a learner to his discovery of himself and to his full expression of himself as a person and a learner. We find strong evidence in our Big Picture schools of the power of this engagement in teacher and student narratives and student performance exhibitions, and in our longitudinal study data. Our findings are supported by research done by Bloom (1985) and Erikson (1994).

Neurologist Frank Wilson, author of The Hand: How its Use Shapes the Brain, Language, and Human Culture (1998), points out that, when our youth are not connected to the work they are doing, not only is it not their work but it is not them. Wilson illustrates his observation about the importance of the emotional connection with examples from his practice. For over 30 years, Wilson treated musicians with hand problems. Sometimes they would tell him stories about how a conductor wanted them to play a
feel Many competence Such the many References engage the syndrome learning. Coming Relevance, need our schools and The create them work. For these pieces, coming increasingly well complex and divergent, increasing in teachers and schools, and where learning can happen. The conductor is the person who makes the music happen, but the students are the ones who create it, blend it, and make it their own. Such behavior is similar to that of people with Capgras syndrome, a brain condition (most often brought about by head injury) that results in a severely damaged emotional disconnect. A person with the syndrome will recognize someone as looking and acting like, for example, his mother but believe that the person is an impostor. With the emotional attachment inoperative, the motivation and skill to engage is much diminished. Analogously, when students in schools are emotionally disconnected from their work, they see the work as neither their nor their own.

Given these understandings, the challenge is to create learning environments as places where students feel like what they are doing is authentic. This means validating who they are and who they wish to become. The dissonance between students and the curriculum is substantial and a significant barrier to learning. Teachers try to convince students that this dissonance is part of what learning is all about. Many students, some of them dropouts, discover the fraud while still in school. Others do not discover it until well into or even after college.

Schools that carefully balance life to text and text to life learning create an environment that appeals to many more students, who are exposed early on in their lives to new forms of visual, graphic, audio, and textual information and to the tactile, hands-on experience that is often part of the world outside of school. These experiences form the foundation early on and in later years of our students' worth and work. For Wilson (1998), this foundation includes an emotional connection to the objects, processes, and people about and from which the child wants to learn.

The designer and critic Ralph Caplan claims that students are not the school's products. The only thing a school can claim as a product, says Caplan, is the learning environment. It follows then, that schools need to become places that let the outside in and the inside out. The best vocational and alternative schools accomplish this, as have exemplary arts and design and science and math schools. These learning environments hold the most promise for nurturing the creativity and innovation that has made our country the envy of the world.

Relevance, as we use it in Big Picture Schools, is influenced by these understandings. They help us to create learning opportunities and learning environments that deeply engage learners and challenge them both intellectually and personally within their areas of interest and beyond. Such engagement through relevance engenders the intrinsic motivation that drives the student to the edge of his or her comfort zone and to the rigorous yet satisfying learning that eludes so many students.

This increasingly complex and diverse world continually creates new opportunities for success, opportunities that allow each individual student, like Ed Ames, to use his interests to guide his learning and development into adulthood. Schools need become much more relevant to the world we are coming to and to the students who will live, work, and learn there.

References


Elliot Washor is co-founder of the Big Picture Company and of the Met School in Providence, Rhode Island. He is coordinating an effort to help districts throughout the country adapt the Big Picture School design. Charles Mojkowski, a Senior Associate at Big Picture, is assisting Washor with the project. Their work is supported by a grant from the Bill and Melinda Gates Foundation.