When face-to-face schooling isn't possible

By Marion Brady

There's no getting around it. Firsthand experience is the best teacher. If what's attempting to be taught is worth knowing, it's going to be complicated. And if it's complicated, firsthand experience isn't just the *best* teacher, it's the *only teacher*.

That's the main reason most adults remember so little of what they were once "taught." Information delivered by teacher talk, textbooks and computer screens is dumped on kids' mental "front porch"—short-term memory—but gets no farther. To be useful, information has to be interesting enough to be picked up, taken inside, and a place in memory found for it that allows logic to access it weeks, months, or years later.

That rarely happens. Most classrooms are purpose-built for delivering information, making it hard to create firsthand experience. It's even harder to do it via laptops, which goes far toward explaining the usual failure of virtual, remote, and distance instruction.

Alfred North Whitehead, in his 1916 Presidential Address to the Mathematical Association of England, identified a fundamental problem with traditional schooling:

"The second-handedness of the learned world is the secret of its mediocrity."

Schooling's bottom-line aim is societal survival in an unknowable future. Survival requires new knowledge—continuous evolution of citizens' mental models of reality. An honest look at the world today says time is growing short for creating schooling that teaches kids the most important of all survival skills—how to turn information into knowledge and knowledge into wisdom.

That's doable, but it requires changing the primary aim of middle school-level instruction from covering the content of the core curriculum to improving the ability to think—to hypothesize, generalize, synthesize, imagine, relate, integrate, predict, extrapolate, and so on.

There are dozens of thought processes and countless combinations of thought processes that make humanness possible, but they're not being taught because they're too complex to be evaluated by machine-scored standardized tests.

Make maximizing adolescents' ability to think the aim, and the resulting efficiency from the sharpened focus will be revolutionary. Reducing the hours each day devoted to the soon-forgotten conceptual chaos of the core curriculum will make available a big chunk of time for programs keyed to individual learner interests and abilities.

Dealing with Covid-19

Nothing really substitutes for face-to-face schooling, but when that's unwise or impossible, learning's fundamentals still need to be respected.

- Real-world experiences
- Teachers or mentors who ask thought-stimulating questions
- Keeping a journal
- Instruction paced by learner understanding rather than the calendar
- Learning teams small and intimate enough for dialogue—"thinking out loud" about matters of significance.

Textbooks, teacher talk and laptop screens give kids a steady stream of information, but it's been "processed." The interesting, creative, intellectually challenging work has already been done, leaving nothing to do but try to remember it.

Would newspapers publish completed crossword puzzles? What the young need that they're not getting is "raw" reality to chew on—reality in a form that lends itself to description, analysis and interpretation.

Primary data—the "residue" of reality—provides it. However, for kids to engage, data has to come in the form of puzzles, problems and projects, with lesson aims they consider important enough for attention to be paid, and content interesting enough to be self-propelling.

But guidance is necessary. Teams of teachers with varied expertise need to monitor the teams and sometimes comment or pose questions.

Below is an illustrative activity consistent with the above that meshes with existing middle-level curricula and bureaucratic requirements.

Use the present crisis to give education back to educators, and make middle-level schooling's aim maximizing the quality of thought, and adolescents will demonstrate abilities only long-experienced teachers knew they had.

A Project: Town Planning, 1583

Big idea: Humans shape habitats that then shape humans.

Age group: Middle school and older learners.

Instructional organization: Small, three-to-five-member work teams.

Technology requirements: Broadband internet access, laptop computer.

App: Zoom or another screen-sharing program

Primary data: Page 2@ https://www.marionbrady.com/documents/AHHandbook.pdf