## The 4 Shifts Protocol

**A. Deeper Thinking and Learning.** Deeper learning schools are moving from an overwhelming emphasis on students mostly doing lower-level thinking tasks—factual recall and procedural regurgitation—to students more often engaging in tasks of greater cognitive complexity—creativity, critical thinking, problem solving, and effective communication and collaboration. In other words, students are living more often on the upper levels of Bloom's taxonomy (or Webb's Depth of Knowledge) than the lower ones.

**Domain Knowledge.** Is student work deeply rooted in discipline-specific and -relevant knowledge, skills, and dispositions?

Yes No Somewhat

**Deeper Learning.** If yes, is student work focused around big, important themes and concepts<sup>1</sup> that are central to the discipline rather than isolated topics, trivia, or minutiae?

Yes No Somewhat

<sup>1</sup> Do student learning activities and assessments go beyond low-level facts and procedures? Are students just regurgitating syntheses and analyses provided by an information source or the teacher?

**Critical Thinking.** Do learning activities and assessments allow students to engage in deep critical thinking and analysis?

Yes No Somewhat

**Problem Solving.** Do learning activities and assessments allow students to engage in complex and messy (not simple) problem solving?

Yes No Somewhat

**Creativity.** Do students have the opportunity to design, create, make, or otherwise add value that is unique to them?

Yes No Somewhat

**Metacognition.** Do students have the opportunity to reflect on their planning, thinking, work, and progress?

Yes No Somewhat

If yes, can students identify what they're learning, not just what they're doing?

Yes No Somewhat

**Assessment Alignment.** Are all assessments aligned cognitively<sup>2</sup> with standards, learning goals, instruction, and learning activities?

Yes No Somewhat

<sup>&</sup>lt;sup>2</sup> Standards and learning goals drive everything, including depth of student thinking and the necessary accompanying assessments. Assessments should be aligned to the cognitive complexity asked of students.

## **BEPRODUCIBLE**

**B. Authentic Work.** Deeper learning schools are moving from isolated, siloed academic work to environments that provide students more opportunities to engage with and contribute to relevant local, national, and international interdisciplinary communities. Students begin fostering active networks with individuals and organizations for mutual benefit.

Real or Fake. Is student work authentic and reflective of that done by experts outside of school?

Yes No Somewhat

Authentic Role. Are students asked to take on an authentic societal role as part of their learning?

Yes No Somewhat

Domain Practices. Are students utilizing authentic, discipline-specific practices and processes?3

Yes No Somewhat

Domain Technologies. Are students utilizing authentic, discipline-specific tools and technologies?<sup>4</sup>

Yes No Somewhat

**Research and Information Literacy Strategies.** Are students utilizing authentic, discipline-specific research, inquiry, and information literacy strategies?

Yes No Somewhat

**Authentic Assessment.** Are students creating real-world products or performances for authentic audiences?

Yes No Somewhat

**Contribution.** If yes, does student work make a contribution to an audience beyond the class-room walls to the outside world?

Yes No Somewhat

**Assessment Technology.** Are digital technologies being used in authentic ways to facilitate the assessment process?

Yes No Somewhat

<sup>&</sup>lt;sup>3</sup> Engaging in the actual practices and processes that people in that discipline use; for example, doing what historians, scientists, writers, artists, business professionals, and others do, not some artificial or classroom version of that work

<sup>&</sup>lt;sup>4</sup> Using the actual tools and technologies that people in that discipline use; for example, using the real tools that historians, scientists, writers, artists, business professionals, and others use, not some artificial or classroom versions of those tools

## REPRODUCIBLE

**C. Student Agency and Personalization.** Deeper learning schools are moving from classrooms that are overwhelmingly teacher controlled to learning environments that enable greater student agency—ownership and control of what, how, when, where, who with, and why they learn. Student agency allows for greater personalization, individualization, and differentiation of the learning process.

**Learning Goals.** Who selected what is being learned?

Students Teachers Both

**Learning Activity.** Who selected how it is being learned?

Students Teachers Both

**Assessment of Learning.** Who selected how students demonstrate their knowledge and skills and how that will be assessed?

Students Teachers Both

Talk Time. During the lesson or unit, who is the primary driver of the talk time?<sup>5</sup>

Students Teachers Both

<sup>5</sup> Who's doing most of the talking, determining who can talk and when they can talk?

Work Time. During the lesson or unit, who is the primary driver of the work time?<sup>6</sup>

Students Teachers Both

<sup>6</sup> Who's making the decisions about the work time and ensuring progress?

**Interest-Based.** Is student work reflective of their interests or passions?

Yes No Somewhat

**Initiative.** Do students have the opportunity to initiate, be entrepreneurial, be self-directed, and go beyond the given parameters of the learning task or environment?

Yes No Somewhat

**Technology Selection.** Who selected which technologies are being used?

Students Teachers Both

**Technology Usage.** Who is the primary user of the technology?

Students Teachers Both

## **BEPRODUCIBLE**

**D. Technology Infusion.** Deeper learning schools are moving from local classrooms that are largely based on pens and pencils, notebook paper, ring binders, and printed textbooks to globally connected learning spaces that are deeply and richly infused with technology. The new affordances of mobile computing devices and online environments allow the first three shifts mentioned here to move into high gear.

**Communication.** How are students communicating?

Alone<sup>7</sup> In pairs In triads In groups larger than three

If with others, with whom? (circle all that apply)

Students in this school Students in another school Adults in this school Adults outside of this school

**Communication Technologies.** Are digital technologies being used to facilitate the communication processes?

Yes No

If yes, in which ways? (circle all that apply)

Writing Photos and images Charts and graphs Infographics Audio Video Multimedia Transmedia

Collaboration. How are students working?

Alone<sup>8</sup> In pairs In triads In groups larger than three

If with others, with whom? (circle all that apply)

Students in this school Students in another school Adults in this school Adults outside of this school

If with others, who is managing collaborative processes (planning, management, and monitoring)?

Students Teachers Both

Collaboration Technologies. Are digital technologies being used to facilitate collaborative processes?

Yes No Somewhat

If yes, in which ways? (circle all that apply)

Online office suites Email Texting Wikis Blogs Videoconferencing Mind mapping Curation tools Project planning tools Other

**Technology Adds Value.** Does technology add value so that students can do their work in better or different ways than are possible without the technology?

Yes No Somewhat

**Technology as Means, Not End.** When digital technologies are utilized, do the tools overshadow, mask, or otherwise draw the focus away from important learning?

Yes No Somewhat

**Digital Citizenship.** Are digital technologies utilized by students in both appropriate and empowering ways?<sup>9</sup>

Yes No Somewhat

Working in isolation (no communication with others) or perhaps just communicating with the teacher (for example, call and response)

<sup>&</sup>lt;sup>8</sup> Working in isolation (no communication with others) or perhaps just communicating with the teacher (for example, call and response)

<sup>&</sup>lt;sup>9</sup> Effective digital citizenship conversations focus on both safe, responsible use *and* empowering, participating use. Digital citizenship discussions ideally are natural extensions of and accompaniments to students' ongoing, technology-enabled work rather than separate conversations or curricula.