

## COURSES AND PATHWAYS IN THE NEW GE: ISSUES AND QUESTIONS

### LEVELS

According to the CO, there are three levels of readiness for baccalaureate quantitative reasoning. These levels apply to both algebraic and non-algebraic pathways. Each level is keyed to a range of placement scores derived from multiple criteria.

The definition of baccalaureate-level quantitative reasoning in the new GE is too vague to act as a control on the quality of any pathway. The definition only describes disciplines that might offer such a pathway. Without a detailed definition, with examples, there is little to analogize from, in order create content that is baccalaureate. True, the multiple criteria places students at a level in a pathway. But placement is not the same as making the content and pedagogy right.

### PATHWAY

The alternative to algebra is a “pathway,” not simply a course in non-algebraic quantitative reasoning. A pathway includes a terminus that is baccalaureate-level, levels of student readiness, placement criteria, and etc.

The authors of a pathway must demonstrate that their department/college has the personnel, training competency, and administrative sponsorship that is sustainable. When one decentralizes curriculum, one loses economy of scale. When one loses scale, expenses go up. In other words, the more pathways, the greater will be the overall cost.

It is relatively easy to underestimate the cost of curriculum development and training. These costs will escalate if CSU proliferates pathways beyond statistics, business, and computer science. These disciplines can plug into “user groups” nationally; others cannot since there are so few examples.

### COMPRESSING AND STRETCHING

To compress curriculum into a pathway that reduces seat time requires deep understanding of aims and audiences. A pathway must service several departments; each department will have a different take on what the pathway must cover. These differences must be reconciled. The reduction in seat time usually depends on

supplemental instruction that targets individual student's needs. Other students are spared the detour. Such targeting benefits from time for testing effectiveness. Without effective targeting, students will fail. They will not be able to bridge what has been removed from the general curriculum.

## FORMAT

What does the CO expect the format of a pathway to be? It seems that the CO wants baccalaureate credit to outweigh non-baccalaureate (supplemental) credit in the pathways after 2019. There seems to be three levels of skills for each pathway: 1) mandatory placement into a summer "experience" for students with the lowest scores; 2) placement of a middle tier into courses for the conditionally ready; 3) and placement of a top tier into a completely baccalaureate-level course.

1) and 2) receive only some baccalaureate credits; the content is not wholly baccalaureate level. Perhaps 1) and 2) are to be assigned proportionally more non-baccalaureate credits than 3)? If 1) runs during the summer, it will have to be in a shortened format. Yet this format must fit the needs of the level of students who are most challenged.

Presumably, if a student passes the baccalaureate component in 1) or 2), s/he meets the baccalaureate standard. Experience elsewhere suggest, however, that only 50-60% of students will do so. (Indeed, both Statway and Quantway assume that a three-level pathway generally requires two full courses for most students to pass.). So, what about the rest of the students?

Courses 1) and 2) can "stretch" into another term to help these students. Or the remaining students can slide into the next "level" course. Which pattern will the CO allow? Experts in student learning recommend that students enroll in a "stretch" from the get-go. Thus, if they do not place out mid-way, they do not have to re-enroll. Many students disappear in the gap between sequential courses in basic skills. They simply do not re-enroll. To preserve affordable class sizes, the university still will have to combine the remaining students into fewer sections. Will the CO mandate such an arrangement, or will it leave the matter to the campuses?

If students do not pass the baccalaureate parts of 1) and 2), do the baccalaureate credits melt away? Do they convert to non-baccalaureate credits to keep up a credit count for financial aid? Can students somehow accumulate more than three baccalaureate credits in a pathway?

I hesitate to ask these questions. The CO might answer them unilaterally! If we are to have consistency, parity, and transferability, however, the campuses and the CO need to be on the same page. Curriculum committees are likely to trip over these questions. A lot of work needs to be done before the CO starts the clock on the campuses. Right now, the directions in the Executive Orders are not clear enough for the campuses to know what to do.

## K-12

The Executive Orders imply a relationship with K-12. Common Core grades and Better Balanced scores will be in the mix of multiple measures for placement. It would make sense to layer the specifications for baccalaureate-level quantitative reasoning (and Composition) on top of the K-12 standards. We should not pretend, though, that when we stake out these borders, student performance will adhere to them. Student learning drifts. To minimize the drift, teams of K-12 teacher and university faculty regularly must measure—and try to close—gaps between high school students' skills and the skills that college writing and quantitative reasoning require.