

**Proposed Changes to the Quantitative/Symbolic Reasoning Requirement
in the Direct Transfer Agreement:
Questions and Answers (Updated November 23, 2009)**

GENERAL QUESTIONS

Why are we dealing with the QSR rather than just the intermediate algebra ICRC requirement?

The intermediate algebra language is part of the QSR requirement; the proposal deals with both elements of the existing QSR language in order to reach an agreement with the baccalaureate institutions, particularly the UW (see below). While the Intermediate Algebra proficiency requirement was the catalyst for the initial discussion, the purpose of this section of the DTA is to meet the undergraduate requirements of the baccalaureate schools, i.e. admission and general graduation standards. The task force found that the baccalaureate schools vary in the emphasis they put on the two parts of the section, leading to a consideration of the full QSR requirement.

QUESTIONS RELATED TO THE BACCALAUREATE INSTITUTIONS & THEIR EXPECTATIONS

What is the UW position on this policy? Will this satisfy their requirement?

That is the current understanding of the task force and was the basis for recommending the proposal under review in the system. We are in discussions with the UW currently to clarify the institution's official position and to confirm our agreement.

Does this change mean that CTCs are being held to a higher standard than UW?

In policy, they probably already are. CTCs expect students to demonstrate proficiency in Intermediate Algebra (i.e. precalculus readiness) post-admission as usually measured by coursework at the college or placement exam. UW expects students to have completed the high school coursework prior to precalculus, as measured by a high school transcript.

What changes if any will there be for the baccalaureate institutions as a result of this change in the DTA?

None that we are aware of.

Have the other four year schools abandoned the DTA or do they accept the current QSR for transfer but hold students to a college math requirement for graduation?

Some schools hold transferring students to institution-specific requirements even when they transfer with the DTA. UW never forgives students of its admission requirements ([Core Subjects Requirements](http://admit.washington.edu/Requirements/Transfer/Requirements/CADR) at <http://admit.washington.edu/Requirements/Transfer/Requirements/CADR>) with or without the DTA. Gonzaga University require a college level math course with or without the degree. Four-year institutions subscribing to the DTA grant junior standing and

consider undergraduate GURs fulfilled with the provisos list in <http://www.washingtoncouncil.org/icrc/resources/documents/icrchandbook.pdf>, starting on page 10.

Students who transfer without the DTA must meet the general education requirement of the destination institution, which is often different than the current QSR section of the DTA. One of the advantages of the proposal is that it will give those students who complete the QSR/Math section of the DTA but do not finish the degree greater assurance of meeting the graduation requirement of the school they transfer to.

Why have the majority of the baccalaureate institutions moved to a math-specific requirement; is it for good educational reasons, or for exactly the kinds of administrative reasons outline in a previous post?

That question would best be answered by the baccalaureate institutions. The DTA is a transfer agreement, based upon what the 4-year schools have agreed to accept as equivalent to their general education standards.

Not all universities require Math prefix courses as a Quantitative requirement for the GUR. Do we have accurate data on the colleges that do?

Some preliminary surveying of EWU, CWU, WWU, WSU and UW catalogs suggest a movement toward a standard of MATH courses. However, given the weight of this proposal, a more official survey should be taken of the participating DTA institutions, perhaps through the ICRC listserv.

Whatever the outcome of that research, however, it's helpful to remember that the proposal under consideration does not bind the four-year institutions. They are not obligated to move their own GURs in any particular direction as result—nor does the question impact students who transfer with a DTA, given that they are considered to have met local GURs as a block.

At the universities that do not require a Math prefix course for GUR satisfaction, what percentage of their own students choose the non-math option?

Depends on the results of the research referenced in the previous question, but it would be of interest if we can find it.

If a university decides that they are unhappy with a college-level math course that a community or technical college has developed, will we be in a position to do this all over again in 3 years?

Based on the discussions at the task force meeting, we believe the answer is clearly no.

However, if 2-year schools become *extremely* creative in what they list as a MATH course, it cannot be ruled out. However, the 4-year representatives on the task force did state specifically

that they intended to defer to the 2-year math departments on what an appropriate course would be.

The proposed revisions demand that students satisfy the math requirement for graduation at WSU or WWU before they are half way to earning their 4 year degree. Further, they impose math requirements on students transferring to UW that UW doesn't impose on its own students. Why are we satisfying requirements for graduation at the 4 year institutions in the DTA requirements?

The DTA is not a degree, but rather an articulation agreement specifically designed to meet general undergraduate graduation requirements for the participating 4-year schools. Two excerpts from the ICRC guidelines, which define the DTA, help address this question:

Essentially, the transfer agreements ensure that a student who completes an Associate in Arts degree (or other designated direct transfer degree) at a public community college in the State of Washington will have satisfied the lower division general education (or core) requirements at the various baccalaureate institutions. The transfer student who has earned a degree covered by the Guidelines will generally have junior-level standing (90 quarter credits or 60 semester credits) at the receiving institution. Students who transfer within these agreements must still meet requirements in major, minor and professional programs...

V. CURRENT DTA ASSOCIATE DEGREE GUIDELINES

(Approved by ICRC October 10, 1996 – Effective Fall 1998) 7

For the purpose of these Guidelines, the Direct Transfer Agreement (DTA) Associate degree (sometimes called the Associate in Arts, Associate in Arts and Sciences, etc.) is defined as that degree awarded by a community college to students who have completed a transfer curriculum. In order to fulfill most general education requirements for a baccalaureate degree, the Associate degree should possess the following characteristics...

QUESTIONS RELATED TO POSSIBLE IMPLICATIONS FOR STUDENTS

What data do we have about DTA course-taking patterns for students with disabilities and will this change have a negative impact on their ability to get a DTA and transfer?

Some data on students with disabilities has been gathered and posted to the Math listserv and can also be found on the Math in DTA wiki at <http://math-in-dta.wikispaces.com/System+Data>

Understandably, much of this discussion has been focused on the ramifications of the college level courses. However, it must be emphasized that this is a proposal in two parts, so both numbers should be examined; 1) how many students with disabilities will be negatively impacted by the loss of alternative courses, and 2) how many students with disabilities are currently being impacted by needing to navigate developmental sequences aimed at Intermediate Algebra proficiency. Currently all of these students are required to complete intermediate algebra before even taking their QSR requirement; part of the impetus for changing the DTA language was to create better options and pathways for students not served

well by the existing emphasis on calculus preparation in the existing math pre-college curriculum.

Will this change increase the number of students who transfer without a DTA?

There's no way to answer this question at the moment. But students who transfer without the DTA will transfer more efficiently as MATH courses will more likely meet 4-year GUR requirements with or without the degree.

Will this change increase the number of students who delay taking the math course/s they need to take?

Arguably, the opposite might occur. By allowing greater flexibility in the pre-college math curriculum, the proposal would empower the CTCs to create shorter, more career-relevant pathways through remedial/developmental mathematics, where students are now too often discouraged and lost. Success rates are higher in the college level MATH courses, once students get there. At SFCC, for example, during the 2007-8 school year the success rate in developmental courses was 54% with intermediate algebra in particular having a success rate of 58% (contributing to approximately 2/3 of students placed in developmental math never completing the developmental curriculum); the success rate in college level courses was 67%, with Math& 107 in particular having a success rate of 80%.

QUESTIONS RELATED TO IMPLICATIONS FOR CURRICULA AT COMMUNITY & TECHNICAL COLLEGES

Is it an acceptable and reasonable option to offer a symbolic logic course with a MATH prefix?

We believe the answer is yes. However the content standards and faculty qualifications of the local math departments would come into play; the decision would be up to individual colleges.

The proposal seems inconsistent with our educational values; won't instruction in logic wither if it is not included in the scope of a basic skills requirement?

Being a transfer agreement between many schools, the DTA is motivated by the needs of transfer. Values lie within the degrees designed by local institutions and, to some extent, the accreditation standards they are required to meet.

Who and what defines a college level math course, especially when there's no mention of intermediate algebra?

However colleges choose to define it now; the changes in the DTA language don't affect the definition of "college level math." For 2 year colleges, the best answer arguably is how it transfers to a 4 year school; if a baccalaureate school awards college credit, it is college level.

We all couldn't agree on what intermediate algebra is, so are we not just shifting the issue?

The proposal doesn't involve an agreement about the specific mathematics involved in pre-college or college-level math; trying to define a consensus about the mathematics was considered and rejected by the task force as being unnecessarily complicated and difficult to achieve. The current proposal doesn't require any such agreement; it reflects an agreement across the baccalaureate institutions that they trust CTC math departments/faculty to define and enforce "college-level" math as they see fit.

Why does the proposal not consider logic important enough to be included in the scope of the basic reasoning skills requirement for transfer?

It is not a question of importance. There are a number of reasons why, in the long run, a trade-off here may be appropriate — some of them administrative, yes, but others educational. First, there's undeniably an administrative motivation, yes. The DTA is an inter-institutional agreement based upon what the baccalaureate institutions have agreed to accept as equivalent to their general education standards. In that context, the current proposal is a compromise that would eliminate the lone place in that agreement where pre-college skills are referenced.

Beyond that, there are educational reasons for the change. Most compellingly, the proposal would encourage innovation and efficiency in the pre-college math curriculum, where, as noted elsewhere, student progression is seriously bottlenecked system-wide. Further, the change to a MATH-only GUR reflects a nationwide trend toward higher demands for numeric literacy and, more generally, stronger math-science preparation, something that the four-year institutions have already moved toward.

Finally, it's reasonable to ask whether the change would in fact diminish the importance of logic in student course-taking. Data indicate that less than 9 percent of DTA-earners take logic to fulfill the QSR even now, suggesting that the proposal might not swing enrollments away from logic in any significant way. Further, the logic courses continue to meet distribution requirements in other areas such as Humanities, sustaining the course's value as a core subject in the DTA's framework.

What are the implications related to prerequisites for non-math courses?

The proposal, if adopted, would have no direct effect on the prerequisites for non-MATH courses. For example, if a college's Symbolic Logic course now requires a "traditional" Intermediate Algebra course as prerequisite, that wouldn't change — unless the college chose to change it. To say it another way, since non-MATH courses would no longer satisfy the QSR, their prerequisites are immaterial to their function in the DTA.