To Whom It May Concern:

CAST is a nonprofit educational research and development organization that works to expand learning opportunities and outcomes for all individuals through Universal Design for Learning (UDL). Founded in 1984, CAST (Center for Applied Special Technology) has explored ways to use digital technologies to make educational materials more accessible and inclusive so that all learners, including those with disabilities, can participate and progress in the general education curriculum. In that time, CAST has defined the principles and practices of UDL, which guides the design of flexible instructional goals, methods, materials, and assessments that consider from the outset the diversity and natural variability of learners in any educational setting.

In two decades of research and development, CAST has earned international recognition for its development of innovative, technology-based educational resources and strategies based on universal design and the principles of UDL. Some highlights for which CAST is recognized:

- Inventor and developer of Bobby, the first software to check website accessibility and guide Web designers to make improvements. Bobby has earned numerous awards.
- Creator (with Scholastic) of WiggleWorks, the first universally designed literacy program for beginning readers and winner of a Smithsonian Award for Innovation.
- Creator of CAST eReader, one of the first computer-based literacy tools to give learners of all abilities full access to e-text while supporting and enhancing their literacy development.
- Leader in developing the first National Instructional Materials Accessibility Standard (NIMAS) to guide the production and electronic distribution of digital versions of textbooks and other instructional materials so they can be more easily converted to a variety of accessible formats, including Braille and text-to-speech. NIMAS was incorporated into IDEA regulations in August 2006. CAST continues to lead the federally supported NIMAS Center to further develop and implement the standard.
- Leader of the National Accessible Instructional Materials (AIM) Center (and its predecessor, the AIM Consortium), a federally funded, collaborative effort by States to improve the quality, availability, and timely delivery of AIM.
- Originator of UDL principles and practices, which are incorporated into the 2008 Higher Education Opportunity Act, the 2010 National Educational Technology Plan, as well as many US Department of Education priorities, National Science Foundation grants, and private education initiatives (e.g., Google, Carnegie Corporation, Bill & Melinda Gates Foundation).
Partner with the University of Kansas and NASDSE in the federally supported Center on Online Learning and Students with Disabilities to evaluate policies and research whether online learning is working for students with disabilities and to develop new methods of using technology to improve learning.

Lead partner (with Vanderbilt University) in the federally funded National Center on the Use of Emerging Technologies to Improve Literacy Achievement for Students with Disabilities in Middle School. The Center is researching and developing a technology-rich learning environment—the Universal Literacy Network—that enables schools to provide personalized literacy support and instruction across content areas, leveraging the Internet.

Through strategic collaborations, CAST continues to work on behalf of all learners, especially those with disabilities, by seeding the fields of education research, policy, professional development, and product development with UDL-based solutions. Based on CAST’s extensive experience in universal design and the principles of UDL, we offer the following comments to the PARCC Draft Policies on Reading Access Accommodations & Calculator Accommodations for Students with Disabilities:

General Comments:

We believe that the proposed PARCC accommodations policy exceeds the charge of the consortium and has the potential to interfere with the rights of students with disabilities under the Individuals with Disabilities Education Act (IDEA), the Elementary and Secondary Education Act (ESEA), and Section 504 of the Rehabilitation Act of 1973 (Section 504). IDEA (20 U.S.C. § 1412(a)(16)) and Title I of the ESEA (20 U.S.C. § 6311(b)(3)(A), (C)(v)) require the participation of students with disabilities in state assessments.

Moreover, the right of students with disabilities to participate in state assessments is grounded in Section 504 and its implementing regulations, which prohibit discrimination and the denial of comparable aids, benefits, and services (34 C.F.R. § 104.4(b)(1)(i)-(iii)). In order for aids, benefits, and services to be “equally effective,” they must provide “an equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement” (34 C.F.R. § 104.4(b)(2)). All students who are served under IDEA are automatically protected under Section 504 (C.F.R. § 104.3(i)(2)(iii)). To deny a read aloud or calculator accommodation on those test items that do not directly assess decoding or basic calculation skills for students who, because of their disability-related needs, require such an accommodation in order to demonstrate what they know and can do would effectively deny these students comparable aids, benefits, and services - i.e., would deny them an equal opportunity to participate in the general curriculum aligned to the common core state standards and to attain the same level of achievement as their peers without disabilities.

As part of the requirement for the participation of students with disabilities in state assessments, the ESEA mandates the provision of “reasonable adaptations and accommodations for students with disabilities ... necessary to measure the academic achievement of such students relative to State academic content and State student academic achievement standards.” (20 U.S.C. § 6311(b)(3)(C)(ix)). Similarly, IDEA requires the provision of “appropriate accommodations,” where necessary, and as indicated in the child’s Individualized Education Program (IEP) (20 U.S.C. § 1412(a)(16)(A)). IDEA regulations further specify that states must adopt guidelines for the provision of appropriate accommodations that “(i) identify only those
accommodations for each assessment that do not invalidate the score; and (ii) instruct IEP Teams to select, for each assessment, only those accommodations that do not invalidate the score.” (34 C.F.R. § 300.160(b)).

It is not the role of PARCC to determine strict “eligibility” criteria for specific accommodations. Rather, PARCC should remain focused on identifying general guidelines that IEP Teams could follow with respect to decisions regarding the selection of appropriate accommodations for students. It is also worth pointing out that while the IEP Team is charged with selecting appropriate accommodations that provide the student with a free appropriate public education (FAPE) and do not invalidate the student’s assessment score, the right of students with disabilities to participate in state assessments may not be compromised as a result of the action (or inaction) of the IEP Team. The right to participate resides with the student alone.

We further believe that it is premature to be discussing appropriate accommodations for the PARCC assessments. It is first necessary for PARCC to clarify which embedded accessibility features will be available to all test takers. Moreover, it is critical that PARCC provide a clear description of its item design procedures with respect to the constructs that each item is intended to measure. As proposed, the restrictive read aloud and calculator accommodations policies would apply to the entire English language arts or mathematics assessment, rather than applying only to those specific items that are intended to measure decoding and calculation skills, respectively. The failure to differentiate between decoding and higher level comprehension skills, or between basic calculation and higher level mathematical skills, could result in the denial of meaningful participation for certain students in the assessment.

Recent research has indicated that read aloud accommodations do not interfere with the measurement of reading comprehension ability (Rogers, Thurlow and Cristian, 2012). Additionally, this accommodation has been found to be of particular benefit to students with disabilities (Fletcher, J. M., et al., 2009). Jackson (2012) notes that for students with visual impairments who use audio-supported reading, “the task of reading and comprehending text can occur with greater efficiency, thus opening up learning opportunities that will support students in maximizing their educational potential” (p.1).

Digitally-based assessments have the potential to promote enhanced access to the assessment and the general education curriculum for students with disabilities. The state read aloud and calculator accommodations policies on which the proposed PARCC policy is based, however, were designed for paper and pencil assessments, a medium that is very different from digital environments. It is also worth noting that there is no discussion within the PARCC accommodations policy as to whether the proposed read aloud accommodation would be provided through synthetic text-to-speech, recorded voice, or a human reader. Additionally, we have a question about the estimated number of students (1-1.5% of all students assessed) who would benefit from such an accommodation. This estimation derives from numbers in Massachusetts; however, there is no basis to assume that these numbers are accurate or generalizable for the rest of the country. It is also unclear about how these numbers account for students taking the alternate assessment based on grade level or alternate achievement standards.

Moreover, there is concern that the proposed PARCC accommodations policies will have an adverse impact on classroom instruction and instructional decisions made by IEP Teams, including the provision of accessible instructional materials (AIM). IDEA requires that states and districts provide accessible formats, including digital text, to
students with disabilities who need such formats in order to be involved and progress in the general education curriculum (34 C.F.R. § 300.172(b)(3)). Best practice suggests that assessment accommodations align with those accommodations that the student receives during classroom instruction. By inappropriately limiting the students who may use the read aloud or calculator accommodations on assessments, the proposed PARCC accommodations policy may also inadvertently limit the number of students who will receive and benefit from these accommodations during classroom instruction, in violation of their rights under IDEA and Section 504.

Finally, while not a part of this particular policy statement, we are concerned about an additional issue: It is understood that the original charge for PARCC was to create formative assessments in addition to the summative assessment described here. It appears, however, that the formative computer-based diagnostic assessments that PARCC is developing are to be administered only on an optional basis. The importance of the formative assessment process cannot be overstated. Teachers, students, administrators and parents benefit from the data collected in well designed formative assessment. The formative assessment process provides information about performance during the instructional episode so that modifications, changes, and alterations in instruction may be made to support achievement toward the instructional goals. Without formative assessment procedures established and well implemented, educators, students and parents may not be well informed about progress toward a goal and only obtain summative data about performance after instruction has occurred by using only summative assessments—in other words after it is too late to support or change instruction. Without the benefits of formative assessment, policies related to summative assessment become more critical for students with disabilities.

**Specific Comments about the Proposed Language in the Accommodations Policies:**

In addition to our overall concerns stated above, we also have several concerns about the specific language that is proposed under these sections.

Under the Proposed Eligibility Requirements for both the read aloud and calculator policies, the proposal includes the following criteria:

- Student receives ongoing, research-based interventions to access printed text or learn braille, as deemed appropriate by the IEP team and indicated as a specific instructional goal in the student’s IEP; AND
- **Student only has access to printed text during routine instruction through the use of reading access accommodations, outside of time spent in direct reading or braille instruction;** AND
- The accommodation is listed in an approved IEP with the disability documented by objective, measurable data points and evaluation summaries from locally-administered, research-based diagnostic assessments.

**Concern:** What is the intent of the use of the word *only* in the above statement? Does it refer to students who ONLY have access to printed text through the use of the read aloud accommodation? Or, does it refer to students who ONLY have access to an accommodation during regular classroom instruction?
**Statement:** CAST believes this language is ambiguous. It may cause students to be denied an appropriate accommodation based on misunderstandings of these provisions. It is also a concern that students will be precluded from accommodations based on decisions educators make about whether they use read out support or calculators during routine instruction.

**Concern:** What is the definition for research based diagnostic assessments in the proposal? What do research-based interventions refer to in the proposed eligibility requirements?

**Statement:** This policy appears to be beyond the original charge of the Consortium. CAST believes that such a statement should be accompanied by an extensive listing of research based interventions and diagnostic assessments.

**Read Aloud Accommodation:**
There are two distinct populations of students for whom this accommodation is being proposed:

- Student with a specific disability that severely limits or prevents him/her from accessing printed text even after varied and repeated attempts to teach the student to do so. The student must be a virtual non-reader (i.e., at the beginning stages of learning to decode), not simply reading below grade level; **OR**
- **Student with visual impairments who is has not yet learned braille.**

**Concern:** What is meant by “virtual non-reader”? How is an older student reading substantially below grade level expected to demonstrate understanding of what they know and can do?

**Statement:** This language appears to be arbitrary and overly restrictive. The term, “virtual non-reader” is not defined in the law or educational literature. Also, since these are digital assessments, considerations need to be oriented to that environment. It is inappropriate to apply the paper/pencil test rules to the digital environment.

**Concern:** Why are students with visual impairments who have not yet learned Braille addressed separately? Why are statements of student eligibility multi-tiered?

**Statement:** IDEA does not mandate Braille instruction for all students with visual impairments. Rather, IDEA requires that as a special factor to consider in the development of an IEP for a child who is blind or visually impaired, the IEP Team must “provide for instruction in Braille and the use of Braille unless the IEP Team determines, after an evaluation of the child’s reading and writing skills, needs, and appropriate reading and writing media (including an evaluation of the child’s future needs for instruction in Braille or the use of Braille), that instruction in Braille or the use of Braille is not appropriate for the child.” (20 U.S.C. § 1414(d)(3)(B)(iii)). PARCC’s proposed accommodations policy, in addition to separating out students with visual impairments from other students who struggle to access printed text, gives the inappropriate assumption that all students with visual impairments must learn Braille. Moreover, a child who has begun instruction in Braille may still require a read aloud accommodation on the assessment in order to be able to show what they know and can do. To deny the student this accommodation would violate their rights under IDEA and Section 504.
**Calculator Accommodation:**
The proposed accommodations policy states:

- Student has a specific disability that severely limits or prevents him/her from calculating, even after varied and repeated attempts to teach the child to do so. The student must be unable to calculate single-digit numbers (i.e., 0-9) without a calculation device, using the four basic operations of addition, subtraction, multiplication, and division.

**Concern:** Why is the determination for use of a calculator based on the learner’s proficiency with single digit operations versus efficiency in the operation of calculations? What are the considerations for development and developmental levels and grade level when determining eligibility for use of calculators?

**Statement:** The efficiency of calculations rather than calculation of single-digits may cause a cognitive overload; due to limitations in working memory, some students may use other strategies in making calculations. Moreover, additional clarification is needed to specify whether the term calculator refers to a digital or hand-held calculator. If the intent is to include a digital calculator, there needs to be clarification regarding the opportunity to use a device such as a switch to access the calculator.

**Conclusion**
CAST thanks you for the opportunity to submit these comments. We urge PARCC to reconsider the stated accommodation policies. We look forward to working with you further to incorporate the principles of UDL into the PARCC assessments in order to ensure the full and meaningful participation of all students, including those with disabilities.

Sincerely,

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