HMH values EdReports' educator-driven, standards-based reviews of instructional materials. We share in EdReport's goal that all educators should have access to high-quality Science instructional materials that empower them to make the best instructional decisions for students.

We take all feedback on our products seriously and have carefully considered your comments. We appreciate the structured rubric for Gateway 2's "Coherence & Scope" that identified *HMH Into Science*® as completely fulfilling all expectations in that domain.

However, HMH has serious concerns with EdReports' interpretation of Gateway 1: "Designed for NGSS" due to the following:

- EdReports' review demonstrates preference for only one pedagogical approach to successful Next Generation Science Standards (NGSS) teaching and learning. In fact, there isn't a 'one size fits all' approach to teaching Science aligned to NGSS that can apply to the wide variety of situations and students in our nation's classrooms. NGSS outlines what to teach, not how to teach.
- The review's approach suggests an expectation for an old-school model of curricular materials, relying upon a "printed textbook" accompanied by rigid, scripted instructions for the teacher;
- There are internal inconsistencies within the review documents themselves that indicate an uneven application of the criteria and rubric.

NGSS's goal of flexibility contradicted in review

Research shows that fostering good student outcomes for all requires a flexible approach to NGSS, with a variety of strategies being applied, depending upon the needs of the students. EdReports concurs, as noted in a document they co-authored with Next Gen Science, *Critical Features of Instructional Materials Design for Today's Science Standards; A Resource for Science Curriculum Developers and the Education Field*.

Yet the rubric and criteria employed by EdReports' reviewers contradict this guidance. Instead they employ a narrow interpretation in identifying perceived weaknesses in *HMH Into Science*. In addition, the one-size-fits-all approach of the review is not demonstrably and transparently documented to be supported by efficacy research on student outcomes. No references are provided to reveal whose approach to NGSS is the basis for EdReports' rubrics and evidence guide.

EdReports' guidance in *Critical Features of Instructional Materials Design*...	**EdReports Implementation of Review**
"Therefore, in any single instructional unit, there is no expectation that students need to learn and use full PEs or even full elements of the SEPs and CCCs." (p. 6)	"Are unit objectives three dimensional? Which elements are targeted in each objective?" (Evidence Guide, p. 17) Throughout the reviews of *HMH Into Science®*, any instance of learning that i s not fully three-dimensional with all elements of SEPs and CCCs results in points lost on the rubric.
"In instruction and assessment, the elements of the three dimensions do not necessarily need to be combined in the same way as the performance expectations, rather, they can be mixed and matched in a variety of combinations." (p. 14)	"Do the summative assessment tasks assess all of the elements within the unit objectives?" (Evidence Guide, p. 17) Throughout the reviews, any assessment that is not fully three-dimensional with all elements of SEPs and CCCs results in points lost on the rubric.
Throughout, the guidance emphasizes balance and flexibility, rather than sheer elimination of any approach, as in this quote: "Less like 'Students hear or read about phenomena and problems.' More like 'Students directly experience, preferably firsthand or through media representations, a phenomenon or a problem'." (p. 28)	Throughout the reviews, EdReports' reviewers insist that it is inappropriate **at any time** for students to ever read about a phenomenon, even when that phenomenon is explored directly in a hands-on activity immediately afterwards.

Expectation of traditional curriculum configurations

In addition, with respect to *HMH Into Science®* K–5 specifically, EdReports' approach fails in another regard. The HMH program makes extensive innovations in structure and scope, but EdReports' criteria assume a traditional approach to curriculum. "Direct instruction" in this traditional view requires a printed textbook of nonfiction Science content for students to "read about Science," along with extensive and detailed scripting for the teacher, accompanied by some hands-on activities.

HMH chose an innovative approach, in which each lesson of *HMH Into Science®* K–5 includes a set of "FUNomenal Readers" which use realistic fiction to model individuals applying the SEPs and RTCs to a phenomenon in the context of a situation that connects to students' lived experiences. Because HMH indicates that these readers are options that can be used in Science time **or** in ELA/Reading time, EdReports assumed that these were not part of core Science instruction and were irrelevant. HMH's intent that these readers are key to supporting effective, three-dimensional NGSS learning experiences is clearly expressed in the materials and was re-iterated explicitly to EdReports at the outset of their review, and several times during the review process.

It is unfortunate that a review process intended to support the innovations in Science education that NGSS has brought is so firmly rooted in a singular approach, which is not supported by the evidence to be the sole effective approach to helping all students learn.

Suggestions of uneven application of criteria

The review documents themselves suffer from internal inconsistencies. To take one of many examples, the *HMH Into Science®* program is faulted for "telling students too much" instead of requiring independent sense-making at every juncture. A few criteria later within the same review, the *HMH Into Science®* program is faulted for the opposite, because it did not explicitly tell students that a basketball thrown in the air will eventually fall to the ground.

Conclusion

In summary, the rubrics and criteria used by EdReports do describe **one** well-intentioned approach to pedagogy and curricula that can support successful NGSS teaching and learning. However, the perspective that deviation from this approach will be ineffective is not supported by research. As such, this perspective may actually harm progress in Science education by needlessly restricting innovation.