

## Attachment 3

**Overview of STE Review Process to Date**

<b>Date</b>	<b>Action/Event</b>	<b>Expert Contributors</b>
March-May 2009	Public survey for input on the 2001/2006 STE Framework and standards	
April 2009	Review Panel selection	
May 6, 2009	<i>Panel Meeting #1</i> Orientation Welcome, context, charge, resources, logistics Review of current performance data & targets A state definition of STE literacy Discuss grade-by-grade vs. grade span options	
June 11, 2009	<i>Panel Meeting #2</i> Progression and scope of the standards Overview of strand maps Learning progressions Analysis of strand maps for enhancing progressions and scope	Mr. James Gorman, Northbridge Public Schools Dr. Jane Heinz-Fry, Museum Institute for Teaching Science Dr. Carol Smith, UMass Boston Dr. Marianne Wisner, Clark University
August 20, 2009	<i>Panel Meeting #3</i> Integration of science and design skills (STE skills) and content What is currently in standards Relationship to 21 <sup>st</sup> century skills	Mr. Charles Fadel, Cisco Systems Dr. Katherine McNeill, Boston College Ms. Jackie Miller, Education Development Center, Inc.
September 16, 2009	<i>Panel Meeting #4</i> College readiness—defined, elements, representation in grades 9-12 Relationship to scientific and technological literacy STE college readiness options	Dr. Catherine Dignam, Framingham State College Mr. Nyal Fuentes, MA ESE Dr. Richard Larson, MIT Mr. Chris Lazzaro, College Board Dr. Jo Ellen Roseman, Project 2061, AAAS
October 14, 2009	<i>Panel Meeting #5</i> Topic review and advocacy considerations Return to grade-by-grade & grade span options Overview of public sessions and phase 2	
October-November 2009	12 Regional public input sessions and selected presentations at professional organization conferences and Board of Education Advisory Councils for Mathematics & Science and Technology/Engineering Response (n=288) to phase I direction setting	Co-presented by Review Panel members and ESE staff
November 12, 2009	ESE workshop on learning progressions and the MA STE standards	Dr. Alicia Alonzo, Michigan State University Dr. Aaron Rogat, Columbia University Dr. Stephanie Slater, University of Wyoming Dr. Timothy Slater, University of Wyoming Ms. Kristen Wendell, Tufts University Dr. Marianne Wisner, Clark University

\* Served on prior STE Framework Review Panel

+ Currently serves on, or had recently served on, Board of Education Advisory Council for Mathematics and Science or Technology/Engineering

December 2009- November 2010	Commission concept and skill progressions summarizing research of how students learn each STE topic	Developed by a wide range of educational researchers across the country and internationally
March 25, 2010	<i>Panel Meeting #6</i> Revision of standards and strand maps	
April 29, 2010	<i>Panel Meeting #7</i> Revision of standards and strand maps	
May 26, 2010	<i>Panel Meeting #8</i> Revision of standards and strand maps	
June 24, 2010	<i>Panel Meeting #9</i> Revision of standards and strand maps	
November 1, 2010	<i>Panel Meeting #10</i> Revision of standards and strand maps	
December 16, 2010	<i>Panel Meeting #11</i> Revision of standards and strand maps	

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