

Table 2. Proposed Written Communication Framework from Sparks et al. (2014)

Construct dimension	Definition	Example assessments	Example rubric statements
<b>Knowledge of social and rhetorical situations</b>			
Task, context and purpose	The ability to effectively consider and adapt one's writing to particular purposes (to inform, to argue, to persuade), contexts (academic, professional, social) and task instructions.	Any CR that asks test takers to respond to a specific task or prompt (e.g., "develop a position on the issue described, supported by reasons and examples"); essays that do not respond to the prompt are "off topic" and receive a 0. Explicitly, CUNY CATW (critical response to task and text is one trait dimension). Rhetorical skills CAAP items dealing with "strategy" assess purpose (e.g., "Is X appropriate, given a particular purpose?").	CLEP® College Composition: degree of focus on the assigned task; CATW: critical response to the writing task and the text; COMPASS Writing Skills: rhetorical skills (strategy: appropriateness of expression for audience and purpose, supporting material to strengthen writing, effective choice of theme or purpose statements); TOEFL iBT® test: appropriateness of the essay for topic and task (independent); GRE-AW: degree to which the writer addresses the specific task directions.
Audience awareness	The ability to effectively consider and adapt one's writing to particular audiences (e.g., experts, nonexperts, specialists, general).	Writing process items of College BASE (ask about whether X would be appropriate, given Y audience); CAAP, COMPASS E-Write, and College BASE each specify an audience for the essay task(s), for example, "Start your letter, Dear School Board:"	CAAP: supporting assertions appropriately for a given audience; CLA+: effectiveness of essay in persuading audience; COMPASS Writing Skills: rhetorical skills (strategy: appropriateness of expression for audience and purpose).
Genre conventions (text types/forms)	The ability to compose texts that adhere to conventions (formal and informal guidelines as to what is appropriate for a piece of writing) specific to the genre or type of writing (e.g., argument, exposition, essay, critique, summary). For higher education, writing arguments and research reports are common and valued genres.	Most CR tasks require <i>argument</i> writing or a <i>critique</i> , typically in the format of a 5-paragraph essay. CLA+ Performance Task (argument), CAAP Essays, CLEP® College Composition (argument), GRE® issue (argument); MCAT® writing (expository), TOEFL® integrated (expository), CSU English Placement Test (source-based expository).	APELC: development of a position on the topic; CLA+: effectiveness of essay in persuading audience, identifying flaws in a specific argument.

Construct dimension	Definition	Example assessments	Example rubric statements
Composing in multiple modes and forms	The ability to use a variety of technologies (pen and paper, digital software, online environments) to create written products, which may include multimedia elements, particularly when communicating complex information and ideas.	No assessments we reviewed tested this. Portfolio assessments; innovative item types (e.g., select an image that best illustrates your point).	n/a
<b>Domain Knowledge and conceptual strategies</b>			
Disciplinary conventions (major/field)	The ability to compose texts that adhere to conventions (formal and informal guidelines as to what is appropriate for a piece of writing) specific to one's discipline or field of study; related to genre conventions. Includes conventions related to source attribution, content, tone, style, organization, and use of evidence, as appropriate given the discipline.	No assessments we reviewed tested this. Portfolio assessment	n/a
Content development and organization	The development and logical expression of ideas in writing. The ability to fully develop one's ideas with supporting information and examples from one's prior knowledge, reading and experiences, and to present information and ideas in a logical, organized and coherent way.	Any direct writing assessment; <i>e-rater</i> <sup>®</sup> scores a limited version of this construct (i.e., development as sentence length, rather than quality or appropriateness of examples chosen to support a point, as a human might interpret it; organization can look for discourse elements such as thesis statement).	<i>Content development.</i> ACCUPLACER <sup>®</sup> : program elaboration of ideas and presentation of supporting details; AWPE: quality of reasons and examples; development and elaboration; APELC: quality of evidence and explanations in support of the position; CAAP: supporting assertions with appropriate evidence; CLA+: developing relevant support for a position; COMPASS Writing Essay: extent to which the topic is addressed by the development of ideas and the specificity of details and examples; CATW: development of ideas; CLEP College Composition: development of ideas and support; TOEFL iBT program: development and support of ideas using examples or evidence; GRE-AW: the development of reasons and/or examples to support a position/analysis.

Construct dimension	Definition	Example assessments	Example rubric statements
Use of sources and textual evidence	The ability to comprehend and critically analyze a source text (i.e., text, document, data table, image) and to effectively incorporate information drawn from source texts to develop and support one’s ideas, using appropriate attribution.	CUNY CATW; CLA+ Performance Task; CLEP College Composition; CSU English Placement Test.	<p><i>Organization.</i> ACCUPLACER program: overall structure of response and sequence of ideas; AWPE: organizational structure; ASSET Writing Skills: organization; CAAP Essay: organizing and connecting ideas; CAAP SR: organization of ideas, relevance of statements (order, coherence, unity); CLA+: organizing arguments, organizing an essay and using transitions; COMPASS Writing Skills: rhetorical skills (organization: organization of ideas, relevance of statements [order, coherence, unity]); COMPASS Writing Essay: unity and coherence achieved through logical sequence of ideas; CATW: structure of the response (thesis and connection of ideas); CLEP College Composition: organization; TOEFL iBT: organization, unity, progression, and coherence; GRE-AW: organization (for both task types); MCAT exam: organization.</p> <p>APELC: quality use of sources; CLA+: use and analysis of specific sources, use of sources to support decisions; CLEP College Composition: degree to which candidates synthesize two sources; CATW: critical response to the writing task and the text; TOEFL iBT: task-appropriate use of sources (integrated).</p>
<p><b>Knowledge of language use and conventions</b></p> <p>Language use: word choice, tone, voice and style of language</p>	The ability to compose text that conveys meaning clearly by using appropriate word choice, sentence variety, tone, voice and style; what is appropriate will be determined by the context, purpose and genre of writing.	Any direct writing assessment; <i>e-rater</i> scores this construct in terms of word choice (sophistication of vocabulary) and use of varied syntax; tone/voice cannot quite be assessed in the way that a human rater might interpret them.	ACCUPLACER: effectiveness of sentence constructions; AWPE: word choice, variety and complexity of sentence structure; APELC: control of the elements of effective writing; CAAP: expressing ideas clearly and effectively; CLA+: effectiveness of word choice; COMPASS Writing Skills: rhetorical skills (style: precision and appropriateness of word choice, effective management of sentence elements, avoidance of ambiguous pronoun

Construct dimension	Definition	Example assessments	Example rubric statements
Language use: grammar, usage, syntax and mechanics	The ability to compose text that is relatively free of errors in grammar, usage, mechanics, syntax and spelling. Command of the fundamental skills needed to produce fluent text.	Any direct writing assessment; <i>e-rater</i> scores this construct, with most differentiation among low scorers. Revision-in-sentence-context items assess errors at the sentence level.	references, economy in writing); COMPASS Writing Essay: effectiveness of style; CATW: sentence structure and word choice; GRE-AW: sentence structure; MCAT writing: control of vocabulary and sentence structure; EPP: organize units of language for coherence and rhetorical effect.  ACCUPLACER: control of language usage and mechanics; AWPE: control of the conventions of standard written English; CLA+ facility with the conventions of standard written English, control of grammar; COMPASS Writing Essay: control of the conventions of standard written English; CLEP College Composition: control of the conventions of standard written English; CATW: grammar, usage and mechanics; TOEFL iBT: overall language facility, including grammar, usage, mechanics; GRE-AW: control of the conventions of standard written English; EPP: organize elements into larger units of meaning.
<b>Knowledge of the writing process</b>			
Writing processes (planning, drafting and revision)	Strategic knowledge of the writing process, including prewriting strategies (idea generation, research), drafting, reviewing, revising, editing and responding to others' feedback.	Revision-in-context items (revising, editing); rhetorical skills items (research, prewriting); keystroke logging (measures actual writing process, but not operational).	EPP: organize units of language for coherence and rhetorical effect, organize elements of writing into larger units of meaning. <i>Note that all assessments requiring revision-in-context type items, where examinees detect and correct errors in texts, would fall here</i>

*Note.* CR = constructed response; CUNY CATW = City University of New York/CUNY Assessment Test in Writing; CAAP = Collegiate Assessment of Academic Proficiency; CLEP = College Level Examination Program; GRE-AW = Graduate Record Examinations Analytical Writing; College BASE = College Basic Academic Subjects Examination; CLA+ = Collegiate Learning Assessment; MCAT = Medical College Admission Test; CSU = California State University; APELC = Advanced Placement English Language and Composition; AWPE = Analytical Writing Placement Examination; SR = selected response; EPP = E-Proficiency Profile.