

## RTD Radical Empathy Personas

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The RTD (Rigorous Test Development) project is an attempt to build a professionalized content development practice that focuses on individual item quality, particularly by leaning into the importance of validity throughout the content development process. It assumes that content development professionals develop professional judgment that can be raised, honed and calibrated by providing frameworks and clarifying expectations in ways that account for the constraints and demands of typical practice within test development, today. RTD is a conscious and deliberate attempt to respond to the disparity in status, training and shared knowledgebases between psychometrically oriented professionals and content development professionals.

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## What is Radical Empathy?

Radical Empathy is a rigorous and disciplined technique used by CDPs (content development professionals) to examine items through the eyes of *the range of typical test takers* for an assessment. This difficult practice is important to assuring that items *elicit evidence of the targeted cognition for the range of typical test takers*. It is the heart of the RTD Item Alignment Examination procedure.

Radical Empathy is about understanding the cognitive paths through the item taken by as much of the range of typical test takers as possible and understanding how they might respond to the item. Because test takers vary so much – and in so many ways – there is no way for any one CDP to be sure that they have anticipated every possible experience of the item. In fact, CDPs should assume that they have *not* considered every cognitive path. Instead, they should strive to improve their ability to understand the range of typical test takers throughout their careers.

When engaged in Radical Empathy, a CDP needs to put on the hat, step into the shoes and look through the eyes of a test taker who is unlike themselves. A CDP must try to think through the item as that hypothetical test taker. This does *not* mean merely trying to spot obstacles that they think such test takers might stumble over. Rather, it requires consciously thinking through the item – *as the hypothetical test taker* – from the very beginning of the stimulus through every cognitive step, stumble, distraction, doubling back, insight, calculation, conclusion and everything else, all the way to picking a final answer.

## Developing Competence with Radical Empathy

Radical Empathy is particularly a particularly difficult practice for two reasons. First, we are rarely conscious enough of our own thinking (i.e., metacognitive enough) to easily shift it to think like someone else's thinking. Second, we rarely understand how others think well enough to be able to modify our own thinking about a particular problem to be like theirs. Developing that metacognitive awareness is critical to engaging in Radical Empathy, though that is another challenge. *This* packet is about recognizing the *range* of typical test takers – though it does not explore any of them in depth.

Understanding any one of these personas calls on knowledge and a kind of imaginative empathy by which CDPs sincerely engage in a deep consideration perspectives of test takers unlike themselves. This may begin with firsthand experience with such people – perhaps as a teacher, colleague or friend. CDPs may depend on learning about different perspectives on their own (e.g., through consuming scholarly research or through literature) or directly from those with more experience with such populations. Over time, CDPs get better at imagining the cognitive paths that different sorts of test takers may take in response to an item, including even sorts of test takers that they might not have any direct experience with, themselves.

Although there are usually multiple paths through an item – some successful and more unsuccessful – not all of these personas will be useful when examining every item. Some item may prompt some types of strategies, and some may prompt others. Some items may induce some kinds of mistakes, and some may induce others. Recognizing what might lead to different paths is a skill and a product of developing professional judgement over time.

Thus, Radical Empathy is among the most rigorous, complex and demanding aspects of CDPs’ work. Developing the metacognitive awareness, both the knowledge and the imaginative empathy that Radical Empathy requires and the professional judgment to know which test taker personas to consider with an item is the careerlong work mentioned above. It leans on experience, ongoing learning and careful reflection – all supporting improved competence with the practice of Radical Empathy.

(Understanding the cognitive paths taken by *the range of typical test takers* for an assessment is so much that no single person can do it by themselves. Rather, it take a range of perspectives, backgrounds and experiences among item reviewers. This may include multiple full time CDPs. It usually includes panelists on External Review committees, who are often teachers who bring experience with a range of test testers.)

## **This Document**

This document provides a few dozen personas that CDPs may use as reference for different test takers personas to consider when examining items. These hypothetical categories of test takers are by no means constitute an exhaustive list, but rather they offer a starting set that may act as a foundation for developing one’s proficiency with Radical Empathy.

- Basic Test Taker Approaches & Strategies
- Demographics
- Generic Content Issues
- Subject-Specific Content Issues
- Learning , Sensory and/or Physical Conditions

Of course, these lists cannot substitute for the kind of training and reflection that Radical Empathy requires.

## Basic Test Taker Approaches & Strategies

This list lays out overall approaches and/or strategies that a test taker may take in response any test and/or item. Each could be applied in any content area. What they all have in common is that none of them are predicated on any particular level of knowledge or any kind of mistake. Instead, they are general approaches that test takers of *any* ability level might make use of. Each of them can lead to more success at some times, and less success at others. Some of them are test taking strategies that are taught explicitly to students, and others are strategies that students have taught themselves over time.

It is important to remember that none of these approaches are necessarily bad or mistaken and none are necessarily good, either. What might appear to a more ideal approach (e.g., The Imagined Test Taker) may be a less efficient approach for some and even lead to time pressures in actual authentic testing situations. There are reasons – even if they are not always *good* reasons – why test takers use each of these strategies. (Well, a *few* of these strategies really are self-destructive, but just a small handful.)

There is no reason to think that any test taker adopts a single strategy for an entire test. Some items are more likely to invite some strategies than others, and some strategies simply are not germane to some items. Furthermore, two (or more) strategies can end up producing the exact same cognitive path through an item. Therefore, these strategies and approaches are all relatively generic and there is no need to run through all of them for every item. CDPs must use professional judgement to figure out which might produce a cognitive path worth considering.

The test taker...

<b>The Imagined Test Taker</b>	...reads the stimulus all the way through and proceeds sequentially through the item – reading the instructions, then the stem, and then all the answer options – before selecting the key, because they know the content and understand the context.
Confident Test Taker	...works their way through the item no matter what, never thrown off by little bumps or minor confusions
Perfectionist	...dots every i and crosses every t, working methodically and double checking everything in order to ensure that they are doing it right, thus leading to overly slowly working through the item without making mistakes.
Savvy Test Taker	...looks for (and spots) the little hints in the item format and relies on testing experience to psyche out the item without even needing to know the Targeted Cognition.

The test taker...

Note Dependent Test Taker	<p>...usually relies on notes both for approaches to problems and as crutch for their confidence.</p> <ul style="list-style-type: none"> <li>• May build confidence through an item, but also may feel lost if confidence is not built (e.g., items that look or feel too complex).</li> <li>• May struggle to find entry point into the cognitive task.</li> <li>• May flail/guess when selecting algorithm, formula and/or rule to apply</li> </ul>
Reads the Item(s) First	<p>...reads the items before reading the stimuli, perhaps because they were taught to do this as a test taking strategy. Might not read the items in the order they were presented.</p>
Reads the Answer Options First	<p>...reads the answer options before reading the stem – and perhaps even the instructions – when encountering an item. This may occur before or after reading the stimulus.</p>
Stops at First Plausible Answer	<p>...does not go through <i>all</i> the answer options before selecting an answer, and moves on to the next item once they select their answer.</p>
Easiest First	<p>...first completes the items that appear easier to them, and then goes on to the items that appear harder. However, their perception of what items are easiest might not match others' judgment.</p>
Prior Knowledge as Obstacle	<p>...is more confident relying on prior knowledge to respond to items than on what is in the stimulus. May not have even read the stimulus, or may distrust the stimulus for one reason or another.</p>
Instruction Skipper	<p>...skips instructions before reading the stem and never goes back to catch them.</p>
Instruction Rusher	<p>...reads the instructions so quickly and or carelessly that they do not catch all of the details.</p>
Overconfident Rusher	<p>...rushes through passages and other stimulus – including diagrams and figures – and therefore misses details, perhaps mixing up relationships or getting details backwards</p>
Unconfident Test Takers	<p>...proceeds through an item seriously until they hit the first bump, and then partially disengages (e.g., starting to skim or look for easy outs).</p>
Question Overreader	<p>...turns a straightforward question into a trick question – because it just <i>can't</i> be <i>that</i> easy -- and thereby undermines what they know</p>
Self-Doubter	<p>...understands what is being asked of them, understands the Targeted Cognition and understands the context, and yet after selecting their answer – often the key – looks for a reason to rule out that answer and/or select other.</p>
Stimulus Skipper	<p>...responds to the items without examining the stimulus at all.</p>

The test taker...

Stimulus Skipper (Partial)	...does not examine the entire stimulus (i.e. noticing only major elements) before responding to items.
Stimulus Skipper (Strategic)	...does not examine the entire stimulus (i.e., noticing only major elements) before reading items, but then <i>does</i> look for answers in the stimulus.
Logic Master	...applies (non-assessment) rules of thumb and logic to eliminate answer options.
Intimidated but Diligent Test Taker	...keeps applying “obvious” approaches until they get to an answer option.
“You” Misreader	...misunderstands use of the second person (i.e., <i>you</i> ) in an item as referring to themselves – rather than the general non-specific you – and therefore substitutes their own views for whatever is in the stimulus, perhaps even leading to a little argument or clash with the instructions/stem.

## Demographics

This list contains demographic factors, each of which contains multiple potential personas. For example, *gender* contains both male and female categories (in addition to gender fluid and non-binary categories). In the context of Radical Empathy work, considering these test taker personas is very similar to considering fairness issues of bias and sensitivity. That is, it involves asking whether are there differences in culturally determined access/exposure to experiences that may tend to lead one category of test taker to a different cognitive path through an item than another categories in the same demographic factor?

The earlier in item development that these types of issues are caught, the easier – and less expensive – it is to fix them. They should not wait for External Review; fairness issues are everyone’s responsibility.

Of course, these different demographic factors interact and overlap. Therefore, though there are (disturbing) correlations between ethnicity and socio-economic status in this country, they should also be considered separately. Conversely, gender should be considered not just as its own as its own set of categories, but also how it interacts with other demographic factors.

Again, not every demographic factor will be germane to every stimulus or item. In fact, we *hope* that none of them are germane to any particular stimulus or item. However, when CDPs engage in efforts at Radical Empathy, they should have an eye open for the possibility that each of these might be germane and they should try to catch items for which they are. CDPs must use professional judgement to figure out which might produce a cognitive path worth considering for an item.

The test taker...

Urbanities	...lives and/or has grown up in an urban area. ...lives and/or has grown up in an suburban area. ...lives and/or has grown up in an rural area.
Gender	...is/identifies as male. ...is/identifies as female. ...is/identifies as non-binary. ...is/identifies as gender fluid.
Race/Ethnicity	...is of a particular race (e.g., White, Black, Asian, Native American, etc.)? ...is of a particular ethnicity (e.g., Hispanic, Mexican, Puerto Rican, Spanish, African-American, Korean, Korean-American, Italian, Jewish, Polish-American etc.).



SES	<p>...is part of a low income household.</p> <p>...is part of a working class household.</p> <p>...is part of a middle class household.</p> <p>...is part of a professional household.</p> <p>...is part of an upper class household.</p>
Immigrant Status	<p>...is an immigrant.</p> <p>...is part of a household that includes immigrants.</p> <p>...was born and raised in this country.</p>
EL Status	<p>...did not learn English as their first language.</p> <p>...speaks a language other than English in the home.</p> <p>...grew up speaking English in the home.</p>

## Generic Content Differences

As the goal of an assessment is to elicit evidence of the Targeted Cognition (i.e., the KSAs represented in each content standards), it is important to think through items in the persona of test takers with different relationships to the standards/Targeted Cognition. It is also important to consider test takers with different relationships to Other Cognition (i.e., the additional KSAs that test takers may tap in order to respond to an item).

It is very straightforward to read an item through the eyes of a hypothetical test taker with mastery of the required cognition (i.e., both targeted and other). It is a bit harder to think of the all the different factors that might lead test takers to different cognitive paths through an item, many of which are not tied to the actual Targeted Cognition. This is why lists such as these may be useful. Test takers may read, understand and respond to items quite differently from each other, based upon their varied understanding of the knowledge, skills and abilities that the item taps into.

Some types of issues apply across content areas and could apply to stimuli or items in any of them. For example, CDPs certainly should think through how the *specific anticipatable misunderstandings of the Targeted Cognition* would impact a test taker’s cognitive path through an item. Because reading is virtually always a part of tests in *any* content area, CDPs should consider how different problems that test takers may have with reading may impact their cognitive paths through items, regardless of content areas. Other pan-subject issues may appear slightly differently in different content areas, though they follow from similar root causes.

Again, not every category of imperfect content proficiency will be germane to every stimulus or item. And, again, multiple issues could interact in a single test taker. CDPs should look at the individual item to determine which ones – in addition to Specific Misunderstandings of the Targeted Cognition – might produce a different cognitive path. CDPs must use professional judgement to figure out which might produce a cognitive path worth considering.

The test taker...

<b>Specific Misunderstandings of the Targeted Cognition</b>	...has [this or that] misunderstanding of the Targeted Cognition. ...misapplied the Targeted Cognition by [doing this or that].
Content Holes	...has [this specific misunderstanding] of a KSA <i>outside the standard</i> .
Strong Reader	...is a careful and accurate reader.
Reading Challenged	...has a tendency to bail on longer passages, long instructions and perhaps even longer answer options. ...turns to their own experience and prior knowledge when answering items to avoid having to read.

The test taker...

Impatient Reader	... <i>can</i> read carefully but has a tendency to skip the middle of longer passages and longer instructions.
Less Advanced Reader	...is thrown by more complex sentences and more advanced vocabulary in stimuli and instructions.
Missing Terminology	...is thrown by unrecognized or forgotten terminology, leading to bailing on entire passages or at least skipping parts of them.
Alterative Tasks	...finds a way to respond to the item that does not require the Targeted Cognition.
Lack of Exposure to Complexity	...is not accustomed to the kinds of complexity in items (i.e. in problems, problem context and/or reading passages) that CCSS and NGSS require.
Limited Exposure to Less Central Content	...simply has not be taught part of the standards (e.g., statistics in math, poetry & drama in ELA, engineering in science).

## Subject-Specific Content Issues

Just as there are categories of differences in students' relationships to the content that apply across all content areas on any test, there are categories of differences specific to the different content areas. As with the generic content differences, these Additional KSAs (i.e., KSAs that are not part of the Targeted Cognition that the item is trying to elicit evidence of proficiency with) can lead test takers to go down different cognitive path or present obstacles that have nothing to do with the standard to which the item is aligned.

ELA tests have their own content issues – which can be either imperfect content proficiency or routes to alternative successful paths through an item – that are unique to ELA. On the other hand, science and math share content issues. Because reading can be so important with science assessments – particularly the kinds of rich three dimensional assessments that are so desirably for NGSS-aligned tests – some ELA content issues also apply to science assessments. For example, though it is not listed below as a science issue, test takers may look for language in answer options that match language presented in the scenario. Science and math share other potentially strategies that are not applicable to ELA, and therefore are also listed below.

Again, not every category of imperfect content proficiency will be germane to every stimulus or item. And, again, multiple issues could interact in a single test taker. CDPs should look at the individual item to determine which might produce a different cognitive path. CDPs must use professional judgement to figure out which might produce a cognitive path worth considering.

<b>ELA</b>	The test taker...
Psyching Out Teachers	...picks the biggest words, most longest phrases and the most complex sentences.
Vocabulary Challenged	...does not understand grade level or academic vocabulary, relying upon guessing meanings – not always based on good strategies.
Looks for Matching Language	...tends towards answer options that quote or otherwise match language in the stimulus. (Also in science.)

<b>Math &amp; Science</b>	The test taker...
Context Specific Proficiency	...can solve problems very similar (e.g., set in the same context) to the ones they were taught, but has much more difficulty with applying the Targeted Cognition in novel contexts or presentations.
Aesthetically Driven	...tends to picks the prettiest graph, tallest column, etc..
Image Skipping	...does not slow down to read through images, figures and/or diagrams carefully.

**Math & Science**

The test taker...

Images Fixating	...jumps to images, figures and/or diagrams, and does not read text – including instructions) carefully when they are part of the stimulus.
Table/Graph Misreading	...gets confused by tables and graph (e.g., confusing x- and y-axes, misreading coordinates, losing track of column headings, etc.).
Lack of Familiarity with Types of Charts, Tables and/or Graphs	...does not understand anything but the simplest forms of charts. ...does not know how to put together a chart/table/graph.
Picks the Smartest Looking Option	...tends to pick the most mathy-looking answer option.
Pick the Simplest Looking Option	...tend to pick the simplest looking answer option.
Algorithm Misapplication	...quickly jumps to conclusions about which algorithm to apply.
Calculator (lack of) Fluency	...has trouble using a calculator, perhaps relying on estimation. ...jumps too quickly to using a calculator or other arithmetic.
Algebra Intimated	...loses confidence at the first sign of variables or algebraic expressions ...tries to solve algebra items without using algebra. ...just ignores variables and treats expression/equation like arithmetic expression/equation with just the coefficients.
Arithmetic Intimidated	...loses confidence when faced with operations with fractions or complex looking arithmetic expressions. ...makes mistakes with operations on fractions. ...replaces other operations with addition.
Arithmetic Sloppy	...understands arithmetic operations but performs them sloppily (e.g., regrouping mistakes, order of operations mistakes, etc.).
Plug & Chug	...does not apply the correct technique or approach, instead relying upon a more laborious effort with simpler tools.
Back Solving	... plugs the answer options back into the equations and selects the answer option that works

## Learning , Sensory and/or Physical Conditions

Learning, sensory and physical conditions present their own challenges in item development. Of course, mindfulness of these various disabilities cannot ever override content or require reinterpretation of content standards for a general population assessment. However, CDPs should be aware of when elements of items (or stimuli) needlessly interfere with opportunities for students with disabilities to demonstrate the proficiencies they *do* possess with the standards.

These categories of difference pose particular problems because they may challenge assumptions that standards rest upon without addressing explicitly. For example, the Common Core State Standards talk about grade-appropriate texts, and expect a range to skills to be applied to them by readers and writers. Some of these conditions pose questions to thoughtful educators about what constitutes a grade level text – questions without definitive answers.

Item Alignment Examination and Radical Empathy itself do not provide answers to these questions. Rather, they raise our awareness of questions and challenges so that we address them more mindfully – even when a truly satisfying answer is not available.

Again, not every category of imperfect content proficiency will be germane to every stimulus or item. And, again, multiple issues could interact in a single test taker. CDPs should look at the individual item to determine which might produce a different cognitive path. CDPs must use professional judgement to figure out which might produce a cognitive path worth considering.

### The test taker...

ADHD	...has trouble maintaining focus for longer passages and/or items.
Medically Treated Conditions	...may lose focus later in a test, as the effects of medication wane.
Color blindness	...may miss or misunderstand color differences on maps, diagrams and tables – or any mention of color.
Dyslexia	...in the lowest grades may have issues with particular letter pairs (i.e., K-3). ...have trouble with abbreviations in column headings in data tables
Autism Spectrum	...tend to read everything literally, making intentional metaphors, figurative language and even idiomatic expression confusing. ...may respond to good/detailed descriptions with disagreement (because they imagined something different).
Sensory Disabilities	...may find some items type or item elements particularly challenging. ...may require alt text for figures, diagrams and illustrations. ...cannot jump around passages and other stimuli easily. ...may not have experience with things that others take for granted.

The test taker...

Physical Disabilities	...may find some technology enhanced items type particularly challenging. ...may not have experience with things that others take for granted.
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