



The standard for rigor via a discussion-based model at CBCP

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This guide is an extension of *Spark*, an overview of the vision and K2 instructional model at Chicago Bulls College Prep. If we've defined rigor as *holding a higher expectation for demonstrated student understanding*, consider this guide a focused look at exactly what is meant by "higher expectation" in the context of classroom design and execution. It hinges on the assumption that the very best teachers will ultimately make themselves unneeded.

Core tenets –

To uphold the standard for rigor at CBCP, all of the following must occur.

1. Homework as preparation for students

- *Prep is most often given in advance of the class* – With advanced preparation, students are empowered to reach deeper levels of understanding during the class itself.
- *Prep covers conceptual understanding of "why" or any historical context that helps to answer "why"*. Understanding why is the key to deciding what to do when faced with an unknown problem or situation. Purpose is paramount to problem-solving and ingenuity.
- *Depth is preferable to breadth*. We focus on quality in order to accelerate coverage. Depth of understanding quickens the acquisition of new concepts, translates to more learning outside of the classroom, and ultimately yields more growth. As often as possible, we make time variable and mastery fixed by choosing central/foundational standards and expect complete understanding.
- *Prep is aligned to achieve desired results*. We use and track student data in a way that's predictive of the desired outcome in order to make relevant planning decisions.
- *Prep unites concepts cumulatively such that none become irrelevant or forgotten*. Great planning intuitively connects all that has come before via clear reasoning. Such builds greater depth of understanding.
- *Prep is a dragon that builds investment*. We foster self-efficacy through perseverance in the face of challenges.

2. Discussion or performance-based classroom structure

- *Students spend the majority of class time interacting directly*. They have the continued opportunity to respond to, correct, motivate, and/or lead one another.
- *Students are organized into smaller groups or squads; class oscillates between smaller groups and whole group as needed*. Consistent, cohesive squads and teams develop group accountability.
- *A mix of Hot, Warm, and Cold prep ensures complete student development. Prep can always be thought of as the work that students do in advance of their answers or performances.*
 - *Hot* – This is just another way of saying the first bullet under #1 above. Students receive prompts in advance and have time to develop their own answers or conclusions prior to arriving in class. The majority of class days follow this model. Such builds depth of conceptual understanding that empowers students to better retain information and increase learning rate over time. Fosters resourcefulness and engagement.
 - *Warm* – Students receive new prompts during the class but are permitted to discuss and come to conclusions with group members. Time pressure is applied. Builds listening, communication, and academic skill under time constraints.
 - *Cold* – Students receive new prompts during the class and are not permitted to discuss with others before offering their own conclusions. Time pressure is applied. Builds independent academic skill under time constraints. Cold prep can but may not necessarily overlap with regular student assessments.



- *Students are given specific feedback regarding the quality of their responses or performance.* This can come from anyone, but it must specifically address either the shortcoming or reason for excellence to be effective. Ideally, kids should be locked into every answer and carry a critical eye. We train ears and eyes to identify violations of the standard via modeling through this feedback.
- *Repeated opportunities are given until the standard is met.* Feedback itself is not enough. There must always be another chance to deliver on high expectations (again, time variable and mastery fixed). We don't lower the expectation on the repetition.

3. High-quality student answers or performances

- *Students always answer why.* Every answer contains a relevant reason for the answer or approach given.
- *Student answers are 100% correct.* We envision the 100% standard before the response so we know what to listen/look for. We think of relevant points which compose the standard (a rubric of sorts) when the question or prompt is authored.
- *Student answers are exhaustive.* Some prompts have more than one correct answer, but no answer is correct without justification. Exhaustive answers include relevant justifications and explanations, full sentences, and no teacher interruptions or modifications to student statements.
- *Student answers are frequently greater than 1 minute in length.* Open-ended communication provides the opportunity for students to structure ambiguity and organize thoughts.
- *Students use few pronouns and especially avoid the use of "it".* Specificity in responses creates a higher expectation for communicating understanding. Extreme clarity increases engagement and ensures all can follow.
- *Students use standard academic English and avoid "like" as a filler word.* Students must think before and while they are speaking. Every answer or speaking opportunity is a mini-performance. All performances must be excellent.
- *Student answers are clearly audible to all in the classroom.* Class engagement depends on hearing every word. Requiring an audible tone is a confidence-builder in those who struggle.

Points for further discussion –

The following questions are posed to provide some guidance regarding decisions to be made within the context of the core tenets. They don't define the requirements; they are merely suggestions for consideration.

What is the most important function of the teacher in a discussion-based design?

Overall, it's guardian and enforcer of the high standard. At the start, the primary role of the teacher is to author excellent and relevant prompts and then listen like a bat and watch like a hawk for violations of the rigor standard. When one sees or hears them, they should make the right judgment call to address and reinforce.

What are the three most important decisions a teacher can make in a discussion-based design?

1) The choice of the prep and temp (hot, warm, cold); 2) the feedback given – who gives it, what it entails, and when; and 3) the accountability for student preparation – made via the class culture, investment, self-efficacy, and group accountability structures that cause students to arrive prepared.

How does one write excellent questions?

First, one uses data to align the question topic to the desired standard or outcome. Then, they ask "why", break down the standard, and expect perfection.



- Ask “why” – As one reviews a specific output they ultimately want students to perform, they should ask, “Why should someone know this? What’s the purpose of this question?” The more clearly one knows this answer for themselves, the better and more rigorous the question writing will be.
- Break down the standard – We decide what mental or physical tasks we want students to perform as they prepare and discuss.
- Expect perfection – One must know the destination before they can decide the path. We often decide what a 100% perfect, highest-expectation answer looks like for the prompt at hand. A better answer may ultimately result from the discussion, but this serves as a starting point. On most assessments, students are charged to choose or develop the “best” answer. That means developing the skill to decide which of two right answers is better. Developing a specific rubric in one’s own mind for the “best” answer can sharpen question writing.

What should the teacher do when student responses are incorrect or violate the rigor standard?

The short answer is that all violations must be addressed by someone, and corrections should be repeated until the standard is met. This question is also a flavor of each of the following: When should the teacher jump in during student or whole class discussions? What frequency of feedback should be offered by the teacher? At what times and in what ways should students be permitted to offer feedback to one another? When should students be asked a different, more accessible question versus just sending them back to their groups to discuss?

The ways in which rigor violations are addressed will to some extent depend on the situation and class design, but there are always higher or lower percentage choices that can be made. The advanced teacher more often makes higher percentage choices than lower percentage ones. A few philosophical guidelines are included to help:

- Repetition is the best rigor “consequence”. Anything worth doing is worth doing well. If it isn’t good enough, provide the reason why and ask that it be done again. Sometimes this will occur after having had the chance to discuss or practice the topic further with others.
- Quality is king. Someone needs to intervene every time a statement is incorrect or unjustified and provide the feedback on why. It can be immediate or after the fact, but generally speaking, more feedback is better than less. It’s always better if students provide it to each other, but even the provider must be held to the highest standard. No one is immune to correction.
- Feedback in the moment is recommended. When provided frequently, feedback can increase class engagement by better training other students to listen at a high level and then continue the interventions on their own. It also helps all students follow along more closely. There’s less confusion when incorrect statements aren’t tacitly accepted as correct through silence.
- Sometimes it will be necessary to ask a different question during a teachable moment. If one has the choice, better to ask a parallel question that’s almost a “metaphorical equivalent” than to ask a question that’s simply easier or circumvents the skill one wants students to acquire.

Should novice or new teachers utilize a discussion-based classroom design?

Yes, if the teacher is part of a school where all classrooms use a discussion-based approach. As the K2 model is a hierarchical one, it does make sense to master some foundational items before moving to more advanced ones. That said, with the support of class consistency across a school, the novice teacher can still focus on these foundational items in the context of a discussion-based design. The nature of the novice teacher’s choices and focus will just be a bit different. They will need to collect data more frequently to ensure their prep questions align well to the desired outcome. During student group discussions, the novice teacher should be a bit more concerned with enforcing that students are on task and participating. They should more often be watching closely for discipline violations than for rigor violations. They should be wary of lowering their awareness to what’s going on in the broader classroom. The novice teacher should continue to prioritize areas of development outlined in the K2 model even while in a discussion-based design.



How much time should be given to whole class versus group discussion time?

Majority in groups due to the higher engagement factor, but it depends on the purpose for which each is used in your class design. While listening to group discussion intently is recommended, on a typical day, whole class discussion can be the primary means of rigor enforcement and redirection. In that way, group discussion is where the work and genesis of ideas occurs, while whole class is the litmus test and redirection time that ensures all groups are collectively making meaningful progress. Given the purpose, it's a check that's recommended somewhat often. Some days have longer projects or more engrossing topics requiring extended time, so again, purpose drives the decision.

What is the right mix of hot, warm, and cold prep days or class portions?

The majority should be hot in order to drive depth of understanding, but the ultimate mix depends on the class and their performance data. Does the class have good conceptual understanding but suffer from the ability to apply it under time pressure? Then more warm or cold days are in order. Are students having trouble retaining information or providing solid justifications for their reasoning? Then more hot days are in order. A recommended class mix usually falls around 60-70% hot, 10-30% warm and 10-30% cold depending on the group. The choice of the type of prep and its timing is as significant as the choice of the questions or prompts. It's a planning choice that should be informed by data to positively affect and predict the desired outcome.

What is the best grouping strategy and how long should student groups remain together?

This is another that's largely preferential and dependent upon your purpose in grouping. With a strong culture, a relatively larger group can more effectively solve problems without sacrificing engagement or participation. Many prefer heterogeneous groupings for the distributed benefits that come from the student to student education. Taking into account cultural points in terms of diversity and working styles are also helpful when grouping. Finally, many prefer having groups stay together for at least a semester. The consistency and time create lasting bonds that give students a family identity within the larger class.

What amount of guidance should be given to students regarding the discussion they do in groups?

A whole lot. At least 20-30% of the time in a course can involve cultural work related to how students interact with one another in their groups. It's setting expectations and enforcing expectations over and over again. Culture is a garden that must always be tended if it's going to be its most beautiful, and the class culture lives or dies with how students interact with one another. Listening to student group discussions shows how the learning will go outside of class (a necessary component for exceptional growth!). One should use that data to inform what training and structures are provided to students and their discussion groups with the goal of empowering them to meet the rigor standard independently.