

Conditions for Challenging Learner Performance

Peter Smith¹ and Linda Spoelman²

Abstract

Thoughtfully challenging students to display higher levels of performance can stimulate personal and professional growth. To do this effectively, it is important to be aware of the positive and negative consequences of issuing different levels of challenge. There is always a tension between challenging the performance of learners and providing affective support. Faculty need to learn to embrace this tension and preserve a healthy balance by neither challenging simply for the sake of challenge nor accepting mediocre performance in the guise of learner support. In this paper, challenging performance is presented as the culminating step in a methodology for creating a Quality Learning Environment (QLE). The methodology is shown to be consistent with educational literature on self-regulation. Educator and learner actions associated with issuing productive challenges are also aligned with different levels of maturity in self-regulation.

Role of Affect in Learning

Learning outcomes achieved in the classroom are a product of the level of learner challenge and the level of learner support maintained by the educator. The learning experience needs to be knowledge centered as well as student centered and should be mediated by ongoing assessment (Bransford, Brown, & Cocking, 2000). Typically, students seek a comfort zone in which the challenge they take does not exceed their perceived level of skill or competency. This is often the learning state that exists outside the classroom or in passive learning environments. Educational researchers have concluded that limited learning is likely to occur under these circumstances (Ames & Archer, 1988).

Numerous authors emphasize the role of affect in decision making and performance because of its influence on cognitive processes (Damasio, 2005; Goleman, 1997; Picard, 1997). Mikulincer, (1988) found that learners who use an “internal” attribution perspective (an assumption that they are personally invested and that results depend on their efforts) are more strongly affected initially by frustrating feedback, or failure, but will persist if there is only one failure. Learners who attribute their learning to external factors may not take as much responsibility for their own learning and therefore may be less frustrated. These authors and others present a compelling case for a more active classroom environment in which affect, as well as the cognitive gains of the student, are closely monitored. Their work illustrates that presenting challenges in an ad hoc manner, without a support system created by active feedback and/or a team environment, is likely to produce emotions of frustration, anger and then disengagement.

Methodology for Creating a Quality Learning Environment (QLE)

An effective learning environment can catalyze a person’s growth, development, and performance (Bransford, Brown, & Cocking, 2000). In order to improve student learning performance, faculty should strive to create an environment which allows for greater student ownership, responsibility, and control of the learning process (Smith, 2007). It is important to create this environment early in a course so that mutual trust and respect can develop before major challenges are encountered. Table 1 outlines ten steps for creating a quality learning environment, paving the way for effectively challenging learner performance.

Conditions and Contexts for Effective Challenge

Challenging performance is part of a system which includes individual learners embedded in a learning community working through the curriculum. Teaching within this system requires an educator to clarify the learning context by answering who, what, when, where, and why before initiating specific challenges. The answers to these questions help set the context for effective challenge.

- Who? Recognize that each person is at a different place in the learning journey. Most often, challenges are made to individual learners whose needs are identified by scanning the entire learning group. It is necessary to challenge a whole group when widespread mediocre performance is observed.
- What? Identify the domain in the Classification of Learning Skills which needs the most focus to support learner growth (Apple, 2007).

¹Department of Mathematics and Computer Science, Saint Mary’s College

²Department of English, Grand Rapids Community College

- When? Use assessment techniques to discern when the learner is ready to improve performance, and take advantage of “teachable moments.”
- Where? Determine the best location to issue the challenge — in the classroom, in a small group setting, or one-on-one in an office consultation.
- Why? Establish a purpose for each challenge and it should be part of a series of challenges leading to attainment of meaningful learner goals.

Consequences of Over and Under Challenging

Mediocre performance can be the result of both over and under challenging. When over challenged, a performer tends to become frustrated or angry and is motivated to avoid failure. These learners are “reluctant to put forth the effort necessary for success; ... they may choose easy learning tasks in which they are assured of success” (Cross, 2001). For this reason, it is best to challenge

Table 1 Steps in the QLE Methodology

Step	Description
1. Establish initial respect	Learners want to be recognized as individuals, what he or she can contribute, and given credit for their potential to perform in new situations.
2. Start with no prejudging	People like to start with a “clean slate” that has no history or baggage that could negatively influence the building of a new relationship. This does not mean ignoring information that faculty might know about a student; it means not letting this information create a prejudicial attitude toward him or her.
3. Obtain shared commitment	Best results will occur when both faculty and students are “on the same page” with respect to their commitment to working together to achieve the course outcomes. A faculty member wants students to be committed to learning, to their community, and to hard work. Students want to know that their instructor is determined to help them achieve the course outcomes.
4. Foster and support risk-taking	Past educational experiences can discourage students from taking risks because of the negative reinforcement that often follows. In order to change this perception, it is important that faculty be supportive of risk-taking, especially after an unsuccessful experience.
5. Permit the learner to fail	Students need to understand that their demands for affirmation, validation, and answers to every question will not always be met. Working in a risk-taking environment means challenging students to think critically, to affirm and validate on their own, and to generate answers to their own questions.
6. Set high expectations	Students typically perform to the level of faculty expectations. As faculty observe students achieving at higher levels, expectations for their future performance increase, leading to setting higher standards.
7. Establish clear performance criteria	People in challenging situations want clear performance criteria that are stated explicitly rather than implicitly.
8. Implement a quality assessment system	Students want feedback to let them know how to improve, especially when their performance does not meet the established standards. This information will have the greatest impact and benefit when given promptly in a positive manner.
9. Document performance	Students need to see evidence that they are making progress; otherwise, they will lose motivation to work hard. They also need to see tangible proof of their progress.
10. Continuously challenge performance	Growth occurs not when we are “coasting,” but, rather, when we are challenged. By challenging students to display higher levels of performance, a faculty member shows respect for learners. Letting that person “slide by” with work that is below their potential can be taken as an insult.

intermittently, allowing time to recoup between challenges. Over challenged individuals sometimes display disruptive behavior. They can't really engage so they distract or act out. Learners who are under challenged will show signs of boredom, detachment from the task, failure to participate, and even disruptive behavior, depending on the context and their level of motivation. To correct this behavior, the facilitator needs to "raise the bar" on their performance.

Rothman (2004) hypothesized that behavioral change resulting from experiencing a performance challenge follows the four phases. These phases are initial response, continued response, maintenance, and habit. In the initial response phase, learner expectancies, sense of self-worth, and attributions of success vary widely. At the beginning of a course, educators need to assess the range of variation in learning skills present in the class and help learners adapt their learning styles to meet day to day course expectations. Once students understand how to perform at a targeted level of quality, they are likely to persist longer, feel more confident, and attribute their progress to their own increasing capabilities. During the initial response phase and continued response phase educators must provide a well-structured curriculum and facilitate it carefully to establish shared commitment to course outcomes. The maintenance and habit phases can take longer and may extend over a number of courses or even a degree program.

Strategies for Challenging Performance

Tables 2, 3, and 4 map educator and learner actions associated with challenging learner performance to Rothman's phases of self-regulation. This includes classification of different steps in the QLE methodology as well as general facilitation techniques that support different levels of challenge.

Conclusions

Challenging student performance is one of the most difficult activities in higher education. It is more of an art than a science, although it is helpful to have a set of principles to guide educator and learner actions. It is especially important to have a supportive, risk-friendly environment so that educators and learners feel secure enough for performance to be challenged. The QLE methodology in Table 1 is offered as a tool for creating and sustaining these conditions. Tables 2, 3, and 4 map learner and educator actions to steps in the QLE methodology, suggest best practices for classroom facilitation, and provide heuristics for self-directed learning to promote higher level self-regulatory response. The current level of performance must be thoroughly explored by the educator as well as the learner before collaboration on a higher level of performance can begin in any meaningful way.

**Table 2 Preparation for Course Challenge
(initial response phase)**

Educator Actions	Learner Actions
<p>QLE steps:</p> <ul style="list-style-type: none"> Establish initial respect Foster/support risk-taking Start with no prejudging Permit the learner to fail Obtain shared commitment <p>Facilitation techniques:</p> <ul style="list-style-type: none"> Use a background knowledge probe to determine prior knowledge and readiness for new concepts (Angelo, 1993) Have students work in groups so they can share knowledge and motivate each other to meet greater challenges than they can as individuals (Johnson, 2003) Use mastery learning where the learner is expected to continue trying until success is achieved (Cross, 1976) 	<ul style="list-style-type: none"> Become aware of goals and expectations for behavioral change Validate that goals are meaningful and attainable Join learning community where others will be working on similar goals Actively engage in planned process to meet goals Self-assess progress in meeting stated goals and expectations Affirm that goals are socially desirable and appropriate

**Table 3 Managing Challenge to Meet Course Expectations
(continued response phase)**

Educator Actions	Learner Actions
<p>QLE steps:</p> <ul style="list-style-type: none"> Set high expectations Establish clear performance criteria Implement a quality assessment system Issue challenge <p>Facilitation technique:</p> <ul style="list-style-type: none"> Answer who, what, when, where, and why 	<ul style="list-style-type: none"> Recognize issues associated with developing control over actions Assess motivation—are challenges worth the effort? Embrace assistance from instructors and peers in cultivating new behaviors Assess self-regulatory strength—is there sufficient time to recoup between challenges?

**Table 4 Managing Challenge Above and Beyond Course Expectations
(maintenance and habit phases)**

Educator Actions	Learner Actions
<p>Facilitation techniques:</p> <ul style="list-style-type: none"> Test robustness of life skills by adding dissimilar and unfamiliar challenges Provide time to recoup between challenges Provide frequent feedback and assessment of performance Organize supplemental materials for individuals or groups who meet or exceed course challenges Celebrate successful completion of challenge 	<ul style="list-style-type: none"> Practice and refine new behaviors without external prompting Independently assess value of new behaviors Make conscious decision to internalize behaviors Set even more challenging goals that evoke higher level knowledge and skills Repeat change process in pursuit of one's personal and professional life vision

References

- Ames, C. and Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology*, 80, 260-267.
- Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers*. San Francisco: Jossey-Bass.
- Apple, D., Beyerlein, S., Leise, C. and Baehr, M. (2007). Classification of Learning Skills, *Faculty Guidebook: A Comprehensive Tool for Improving Faculty Performance* (4th ed.). Lisle, IL: Pacific Crest.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
- Cross, K. P. (1976). *Accent on Learning*. San Francisco: Jossey-Bass.
- Cross, K. P. (2001). *Motivation: Er...will that be on the test?* The Cross Papers (5). Mission Viejo, CA: League for Innovation in the Community College.
- Damasio, A.R. (2005). *Descartes's error: emotion, reason and the human brain*. New York: Penguin.
- Goleman, D. (1977). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Johnson, D.W. and Johnson, F.P. (2003). *Joining together: Group theory and group skills*. Boston: Allyn & Bacon.

- Mikulincer, M. (1998). Reactance and helplessness following exposure to unsolvable problems: The effects of attributional style. *Journal of Personality and Social Psychology*, 54, 679-686.
- Picard, R.W. (1997). *Affective computing*. Cambridge: Massachusetts Institute of Technology Press.
- Rothman, A. J., Baldwin, A. S., & Hertel, A. W. (2004). Self-regulation and behavior change: Disentangling behavioral initiation and behavioral maintenance. In R. Baumeister, & K. Vohs (Eds.). *Handbook of self-regulation: Research, theory, and applications* (pp. 130-148). New York: Guilford Press.
- Smith, P. and Apple, D. (2007). 'Overview of a Quality of Learning Environments', module in *Faculty Guidebook: A Comprehensive Tool for Improving Faculty Performance, Fourth Edition*. Lisle, IL: Pacific Crest.