Using the Emotional States Assessment Technique:
Guidelines for Instructors and Faculty Developers.

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This assessment technique has been derived from decades of research on human performance and emotions (Deiner, & Lucas, 1999; Nakamura & Csikszentmihalyi, 2003; Reminington, Fabrigar, & Vissar, 2000; Warr, 1999). It assumes that students experience emotions while they are learning and that some of these emotions validly reflect the state and quality of their experience. Moreover, it assumes that student enthusiasm is a preferred condition of good teaching and learning. This classroom assessment technique (CAT) should be of particular interest to instructors who want to learn how to increase student enthusiasm and promote a life-long passion for learning in their students.

The Emotional States Assessment Technique is a context-free, content-free, tool. This technique can be used in almost any learning situation and at any point in time. It is not biased for or against any specific academic discipline.   The present instructions describe its use at mid-term in a typical college-level course. However, with minor modifications, the technique can be applied at other grade levels (e.g., K-12) or used with other units of learning (e.g., smaller time units such as single class days, or larger units such as capstone courses or other terminating points in four-year programs of study). Because of its universality, the Emotional States Assessment Technique can be used throughout curricula to investigate the effects of teaching on learning. And because of its simplicity, it allows the aggregation of data across a variety of programs. It should be of interest to any institution that wishes to complement performance outcome assessment with emotion outcome assessment, that is, institutions that not only want their students to be more skilled and knowledgeable, but also more enthusiastic about learning itself. Two forms of this assessment tool have been developed: a graphic, more visual form that seems to be preferred by most instructors and students, and a quantitative form that may be useful for those who plan longitudinal research involving more advanced statistical analyses. If you are interested in the more quantitative form, please contact me: cwalker@sbu.edu   Instructions for using the graphic form are given below.

The Emotional States Assessment Technique yields several useful scores:

1. Simple frequency counts of the words students use to describe their emotions during learning renders a vivid picture of the emotional climate of a course or other units of learning experience [e.g., course sequences, majors, or degree programs]. These data become particularly rich when student supplied examples of related learning experiences are included.
2. The average percentage assigned to cell **A**, for *anxiety*, is an index of the proportion of learning moments in which students do not have sufficient control of a learning situation and where the outcome of is likely to be perceived as important.
3. The average percentage assigned to cell **C**, for *calmness*, indicates the proportion of learning moments in which students are experiencing positive outcomes, but may be at risk of being under stimulated.
4. The cell **D** score, for *dejection*, reveals the percentage of learning moments wherein students lack sufficient control of an uninteresting, negative experience.
5. In contrast, the cell **E** score, for *enthusiasm*, estimates the percentage of moments in which students feel in control of a provocative, meaningful learning experience.
6. Combining the scores of cells **A** and **D** gives an instructor an index of the amount of moments that students are having an unpleasant experience while learning, where as, the total of cells **C** and **E** estimates the percentage of learning moments associated with positive feelings.

7. The combined average total of cells **A** and **E** estimates the percentage of learning moments in which students find their learning experience to be stimulating, where as the total of cells **D** and **C** estimates the number of learning moments associated with too much control and under stimulation.

Guidelines for Implementation

      Assessment administration. A week or two before you plan to administer the Emotional States Assessment Technique, tell your students what you want to do, specifically how it will be done and what you will do with their feedback. Then ask them if they want to participate. If they agree, announce dates for data collection and the feedback session.

      If the performance of your students is graded during the first half of a course, a few days before the middle of the term will be a good time to administer this assessment technique. However, you may want to wait until after mid-term if mid-term grades are the first significant grades students receive in your course.

      Pass out the Emotional States Assessment Technique and ask students to complete it anonymously as individuals. Although the instructions are written on each form, to insure a higher percentage of student follow them, read the instructions aloud and answer any questions they have before beginning. Provide about 8 to 10 minutes for students to complete this instrument. Do not hurry them.

      Except for classes where the trust between student and instructor is high, it is best to have a third party (e.g., student leader, staff member, or colleague) collect the instruments and process the data. If the instrument is delivered online, the confidentiality of students will be protected in data collection and data processing. Online delivery also has advantage of immediate data sorting and scoring when a website enables database or spreadsheet programs.

      Interpreting results. High scores in cells **A**, **D**, and **C** have implications for changes in learning and teaching. Instructors with high student dejection scores (cell **D**) may be creating a learning environment that does not have enough meaning and is difficult for students to control. These instructors are probably trying to challenge students, but unfortunately they are doing it in a way that suppresses the will to learn. Excessively difficult grading systems, arbitrary assignments that are indifferent to student needs and interests, and the mismanagement of performance evaluation are conditions likely to be associated with high dejection scores. On the other hand, high contentment scores (cell **C**) may signal a lack of motivation because students have too much control (i.e., the course is too easy). Simply increasing the amount of work required or, more preferably, slightly raising the level of difficulty of the work, should regain more optimal levels of student arousal. Finally, high anxiety scores (cell **A**), are likely to be found in courses where the work is meaningful and the goals of the course are important, but students are asked to do too much work or work beyond their skill levels. Decreasing the amount, but not the challenge of the work, should improve this situation. Another way students can deal with course-specific anxiety is to acquire the skills and knowledge they need to gain more control of the learning environment (e.g., through improving their topic-specific study skills, or test taking skills, or if a significant part of their work is collaborative, knowledge about group processes).

      Feedback sessions. Between class meetings review the eight quantitative scores, the frequencies of emotion words selected and your students' examples of alleged causes of their emotions. Also review their suggestions for increasing the number of students who feel enthusiastic about learning. Look for patterns and trends. The results of this assessment technique should be shared with students soon after it is administrated (e.g., the next available class). Even when the score for cell **E** exceeds the combined total for the rest of the cells, there is a need to share the results and gain insights into one's teaching. Instructors who consistently have significantly more than 50% of their students excited and enthusiastic over several years of teaching and in a variety of courses and subjects, are probably excellent teachers, however they still may need to understand *why* they are such adept professionals.

Because you will be asking students to reveal potentially intimate things about their emotions, small group discussions of the results facilitated by trained staff, teaching assistants, or the students themselves should be arranged instead of class-level, instructor-led discussions. Ask each group to elect a student to record the main points discussed and prepare himself/herself to give a short oral summary to the rest of the class. Let the students discuss the results for about 10 minutes, then give each group reporter about 2 minutes to summarize what was discussed, especially the things that, if done, are likely to increase cell **E** scores. After the last student group has reported, give your immediate reaction and begin a class-level discussion on what you and your students can do and *will do* to improve their learning. If you disagree with your students, tell them why, or if it is simply unfeasible to implement their suggestions, explain your position. You may want to give yourself a day or two before giving them your final reaction. Sometimes student feedback can be overwhelming or upsetting and you may need more time to reflect and consider your options *and* their options. Soon after you and your students have agreed on a plan of action, implement the plan. Involve the students in its implementation.

Finally, if you feel that what you have discovered in this process may be valuable to other instructors, share the insights on student learning you have discovered with colleagues via e-mail, a list server, or other interactive means of communication. Urge your students to apply what they have learned about themselves to other courses they are currently taking. If you have used this tool in a program of classroom research over an extended period of time, consider publishing your results in a discipline-specific journal on teaching and learning.

Curriculum assessment applications. When the instructions on the emotional states assessment technique are modified for administering this tool at the end of a course or at other terminal points in learning (e.g., capstone courses) and summative, rather than formative evaluations are being done, the data can be aggregated and statistically analyzed to render an emotional topography of an entire curriculum.   Positivity ratios can be calculated [*Positivity Ratio = (E+C)/(A+D)*] for individuals, assignments, courses, sequences, departments, colleges or schools. Courses that reliably arouse much more positive than negative emotions in students (i.e., ratios greater than 3 to 1) can be identified (Fredrickson & Losada, 2005), more importantly, such data can be used to spur research on why these emotions are being felt and if they are associated with desirable gains in student knowledge and skill. In the hands of teams of instructors, these data can elucidate curriculum-based strengths, guide change, and stimulate positive developments in teaching and learning.
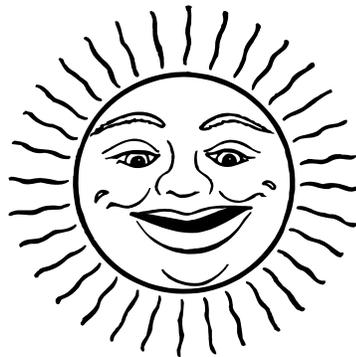
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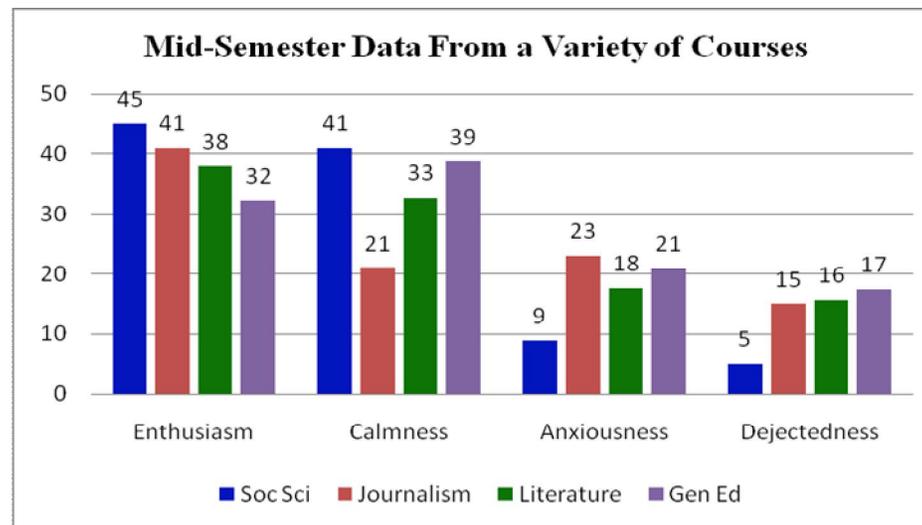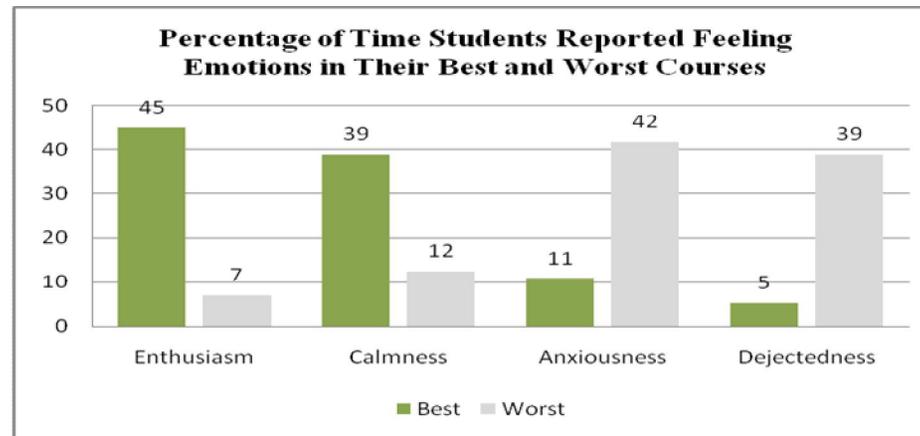
Instructions For Reporting

EMOTIONAL STATES DURING LEARNING

➤ **First,** in each of the four boxes read the lists of <u>emotions</u> and circle the ones you have <u>felt most often</u> thus far in this course.

➤ **Next**, in the space provided write a brief description of a <u>specific experience</u> you have had that you believe has caused your emotion(s).

➤ **Then**, within the inner most box, write your estimate of the <u>percentage of time </u>you have felt the emotions you have identified. Do this for all four boxes; please have your <u>percentages total 100</u>.

➤ **Finally**, please use the back of the form to offer suggestions on specific things your <u>instructor</u> and <u>classmates,</u> and <u>you</u> could do to increase the number of students in this course who feel excited and enthusiastic about learning.

High Scores	Possible Causes	What Faculty Might Do	What Students Might Do	Comments
Anxiety	*Insufficient student control of learning of important course contents.*	• *Reduce quantity but not challenge of learning tasks.* • *Offer more choice in assignments and grading procedures.* • *Teach course-specific learning skills.*	• *Develop new meta-cognitive skills.* • *Invest more time and effort in course work.* • *Study and work with others.*	
Calmness	*Too much control of acceptable but not inspiring course contents. However, it can indicate a trustworthy classroom climate.*	• *Increase the level of challenge.* • *Assess student interests and adjust course contents and assignments.* • *Increase pre-class student work and preparations.*	• *Volunteer to do more.* • *Participate more and do more engaged learning.* • *Do higher quality work.* • *Increase challenge.*	
Dejection	*Insufficient student control of irrelevant, arbitrary, unimportant course contents.*	• *Assess grading procedures.* • *Assess student interests.* • *Seek ideal levels of challenge by reducing amount of student work and maybe difficulty of work.*	• *Give constructive, useful feedback to the instructor.* • *Embrace changes in course contents and procedures.* • *Study with others.*	
Enthusiasm	*Ideal student control of interesting, important and relevant course contents. Ideal classroom social climate.*	• *Transfer techniques, methods and insights to other classes.* • *Do additional assessments to gain insight into one's success.*	• *Transfer and apply insights and meta-cognitive skills to other courses.* • *Give constructive feedback to other instructors*	

Comparison Data: The Emotional States CAT was given to 56 seniors (29 women). They were asked to complete the assessment tool with either the best or worst college course they had taken in mind. To refresh their memories, first they were instructed to write a summary of the syllabus, assignments, grading procedures, instructor traits and style of instruction. Then, with order counterbalanced, they described their emotional experiences while learning in their best and worst courses. The results of this study are depicted in the graph below. For additional information, instructors from four other courses (average class size was 26) shared their results that are depicted in the second graph below.

Percentage of Time Students Reported Feeling Emotions in Their Best and Worst Courses

Emotion	Best	Worst
Enthusiasm	45	7
Calmness	39	12
Anxiousness	11	42
Dejectedness	5	39

Mid-Semester Data From a Variety of Courses

Emotion	Soc Sci	Journalism	Literature	Gen Ed
Enthusiasm	45	41	38	32
Calmness	41	21	33	39
Anxiousness	9	23	18	21
Dejectedness	5	15	16	17

Course Title _____   Course Number _____   Date _____

STUDENT REFLECTIONS ON EMOTIONAL STATES DURING LEARNING

INSTRUCTIONS: *Pause for a moment and think about the first half of this course. What kinds of emotions have you felt while being a student in this class? Please use the diagram below to report the emotions you have had.* **First,** *in each of the four boxes read the lists of emotions and circle the ones you have felt most often.* **Next,** *in the space provided write a brief description of a specific experience you have had that you believe has caused your emotion(s).* **Then**, *within the inner most box, write your estimate of the percentage of time you have felt the emotions you have identified. Do this for all four boxes; have your percentages total 100.* **Finally**, *please use the back of this form to offer suggestions on specific things that your instructor, classmates and you could do to increase the number of students in this course who feel excited and enthusiastic about learning.*

A	*Specific Experience*	*Specific Experience*	E
ANXIOUS			**E**NTHUSIASTIC
UNEASY			ALIVE
TENSE			EXCITED
AFRAID			CHEERFUL
WORRIED			HAPPY
	_____ %	_____ %	
	_____ %	_____ %	
DEJECTED			**C**ALM
APATHETIC			PEACEFUL
GLOOMY			SERENE
SAD			RELAXED
WEARY			TRANQUIL
D	*Specific Experience*	*Specific Experience*	C

Things **your instructor could do** to make you more enthusiastic about learning.

Things **your classmates could do** to make you more enthusiastic about learning.

Things **you could do** to make yourself more enthusiastic about learning.