



# POD — IDEA Center Notes

JULY 2005

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# IDEA Item #4: "Demonstrated the importance and significance of the subject matter"

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## Background

On the first day of class, students arrive with a great sense of expectation and a range of emotions. What will this course be like? What am I going to learn? Is this going to be boring? As teachers, we love our content, think that it is important, and believe students will benefit from having taken our courses. Realistically, though, we know that not all of our students will share this perspective. We also know that if we want our students to learn, we must somehow engage them in course work and empower them to take responsibility for their learning. We must create conditions that promote intrinsic motivation

Researchers and educators since John Dewey's time have studied and tried to identify those factors that contribute to student motivation. While intrinsic and extrinsic rewards and social opportunities play a part, the thing that motivates most learners is the usefulness of the information and its potential for impacting others (1). Thus, it behooves teachers to demonstrate the relevance and significance of the subject matter from the first day of class to the last. We can stimulate motivation by both showing our students the content's real-world connections and by involving students in activities that inspire creative applications. Item #4 is most strongly correlated with teacher behavior items related to involving students (items #1 and #3), communicating clearly (items #6 and #10), and stimulating or inspiring students (items #8, #11, #13, and #15). In addition, Item #4 correlated with learning objectives focused on basic and advanced levels of cognitive knowledge and on interest in life-long learning. Reviewing your ratings on these items will help you determine students' views of the relevance of your course.

### **Helpful Hints**

Showing real-world connections and involving students in activities that inspire creative applications are strategies grounded in both constructivist theory and theories of motivational design. Constructivist theory (2) says that learners should engage in authentic and situated activities within a community of learners so that they can make connections between existing knowledge and new content. Active learning strategies lead students to make these connections and develop new schema. Keller's ARCS (Attention Relevance, Confidence, Satisfaction) model for motivational design of instruction (3) focuses on creating conditions that emphasize the utility of instruction for current and future uses, link content to students' prior experiences, needs, interests, and motives and thus lead to intrinsic motivation. Combining the theories and translating them into practical, relevant, classroom experiences requires the use of varied instructional alternatives. For example, use case studies, simulations or individual/group problem solving exercises; include interaction with experts; ask students to apply new knowledge to familiar and to new situations; and consider service learning projects that demonstrate not only how, but why the content is important and useful.

Case studies and simulations offer students the opportunity to be actively involved in solving real-life, open-ended problems that have potential for provoking extensive research, discussion among and between classmates and teacher, contributions from career and life experiences, and critical thinking (4). Another relevant activity is to have student interview guest speakers, whose credibility is enhanced by their experience in the trenches. Avoid the typical protocol of having the speaker simply arrive, speak, answers questions, and leave with little preparation or follow-up from the students. Make this a more active learning experience by organizing for the visit and defining students' roles in learning from the visitor. After defining the objectives, have students learn more about the topic. Then, have each student prepare a list of questions, share those questions in small groups, and select a set of them to be posed by a student-selected panel. After the presentation, have the panel interview the speaker. All students should be making notes both during the speaker's presentation and during the panel discussion. After the speaker leaves or before the next class, ask students to reflect upon the guest's thoughts and connect these to the session's objectives, students' experiences, and the implications for upcoming course topics. Applying new knowledge, especially in relevant and meaningful situations where the impact of the activity is visible and tangible, is perhaps the most powerful way to demonstrate the importance of course content.

Other approaches include the use of content with emotional impact; presenting conflicting evidence and opinions, and connecting ideas across disciplines. For example, brain and learning research (5) has shown that emotion and learning are strongly *linked* simply because the sequence of brain functions first filters new information through centers that involve emotional responses. The objective is to get students' attention and engagement. Introducing ideas using drama, humor, demonstrations, media, simulations, or role-playing can capture the opportunity to quickly engage students, and following up with the presentation of conflicting ideas can continue that engagement at a deeper cognitive level. Demonstrating implications and applications of the ideas further emphasizes that content exists to be used in practical and important ways.

Involving students in the kinds of activities described above helps address the issue of content relevance, or significance, in your classroom. If students understand that they can use the knowledge and skills they have gained to better themselves and the lives of those around them, they will feel a sense of empowerment and will be motivated to learn.

#### **Assessment Issues**

Assessing the learning that results from students' participation in relevant, authentic activities in the classroom requires the use of different measurement techniques than those typically used to assess learning. Authentic tasks require authentic measurements (6). Authentic measures typically include observational techniques and the use of checklists, rating scales, and rubrics. For example, since using a case study approach implies that you are interested in not only the solution students produce, but also the process by which they arrived there, it is desirable to know the steps students took to solve the problem. One method to assess students' problem-solving skills is Angelo and Cross' classroom assessment technique (CAT), "Documented Problem Solutions," wherein students describe each step of the process (7).

Another useful tool is a case-study rubric described by Myers and Jones (4). As for assessing students' learning in the guest-speaker experience, consider another CAT, "RSQC2." Students <u>R</u>ecall meaningful points, <u>S</u>ummarize the most important into one sentence, note <u>Q</u>uestions not answered, <u>C</u>onnect the main points with objectives and the course, and <u>C</u>omment evaluatively on the experience. Utilizing these techniques in conjunction with other teachermade, observational tools provides you with information you need to evaluate the quality of students' learning and their feelings about the significance of the subject matter.

#### **References and Resources**

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IDEA Paper No. 1: Motivating Students, Cashin

IDEA Paper No. 41: <u>Student Goal Orientation</u>, <u>Motivation</u>, and <u>Learning</u>, Svinicki

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