

The Perceived Difficulty Assessment Questionnaire (PDAQ): What's it all about?

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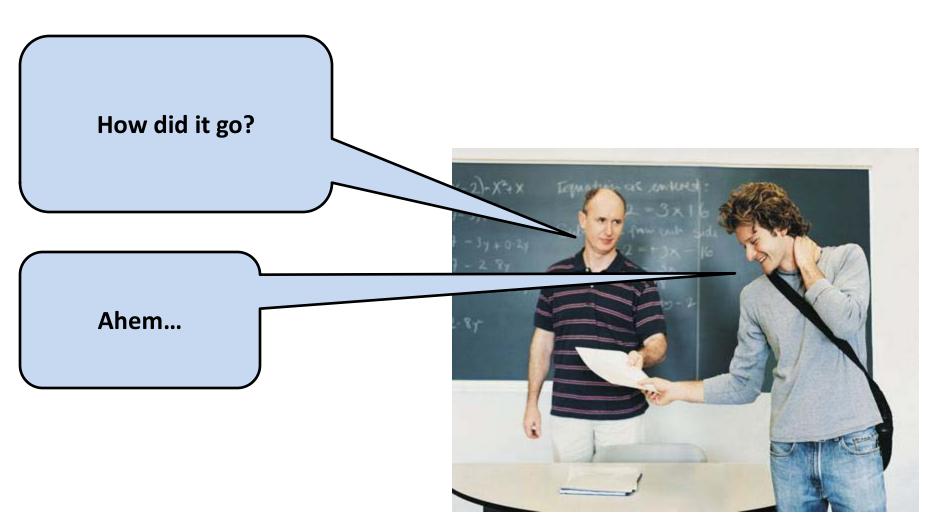
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- 1) Introduction What's the PDAQ about?
- 2) Theoretical framework
- 3) How does it work?
- -----break-----
- 4) Case study RPTM 120
- 5) Testimonies
- 6) Q&A

INTRODUCTION

The Perceived Difficulty Assessment Questionnaire (PDAQ) has its origins in a simple question most instructors ask their students after an examination...



Instructors often ask this question because they are interested in comparing four things:

- individual perceptions of student performance;
- class perceptions of student performance;
- factors affecting student performance;
- actual student **performance**;

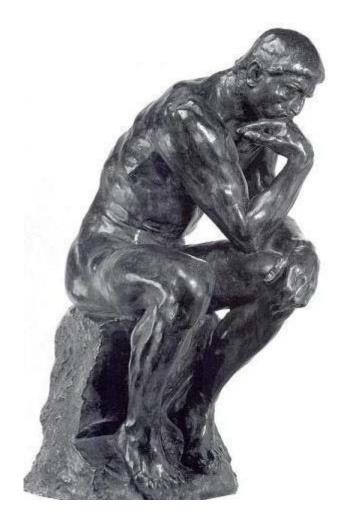
The responses are not always forthcoming, nor are they always helpful for the instructor...

Student response	Actual performance
"It went great! I aced it!"	F
"AhemFine, I guess."	B+
"I bombed it."	A-
"Not good. Not good at all. I didn't study, but you should let us retake it."	C
"Pretty good, I just didn't finish Question #5."	A-
"I'm so tired."	D
"It was very difficult. Took me ages, too."	B-
"Okay. I mean, I didn't do great, but I didn't do bad either."	Α

It is also difficult to survey large classes on a one-to-one basis...



What can we do?





Let's ask everybody!

					Total – 100 points
RATE TH	IS EXERCISE -	-please help	increase the	quality of th	is course by
	answe	ring the foll	owing questio	ns (circle th	e appropriate answer).
	Answ	er them as tr	uthfully as po	ssible. Than	k you.
Difficulty	Very Difficult	Difficult	Fair	Easy	Very Easy
Length	Very Long	Long	Just Right	Short	Too Short
Opinions/c	omments				

We introduced the PDAQ in different courses...

RPTM 300Y – TOURISM BEHAVIOR (~15 students)
RPTM 210 – INTRODUCTION TO COMMERCIAL
RECREATION (~100 students)

Over several semesters...

SUMMER 2007 FALL 2007 SPRING 2008

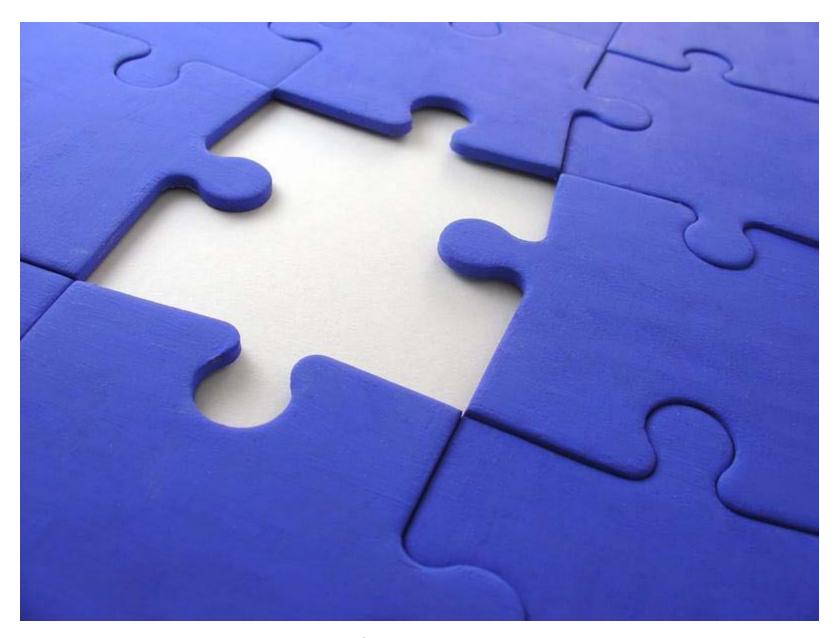
The results were encouraging... (Ribeiro & Yarnal 2010)

For the instructors:

- gives individual and class perceptions of examination difficulty;
- helps identify "problem questions;"
- helps "fine tune" class assessments;
- provides both quantitative and qualitative data about examinations;
- provides immediate student feedback on examinations;
- becomes useful as a learning motivation tool;
- shows the students the instructor cares;
- can help "rejuvenate" the class;

And for the students:

- gives students an opportunity to reflect and comment on examinations;
- increases personal responsibility for learning;
- allows the students to do some evaluating themselves;
- becomes a useful tool to track progress;
- corrects misperceptions about examination difficulty, length, etc.;
- helps students prepare for future examinations;



But something was missing...

That was how the PDAQ started...



And now for some theory...

THEORETICAL FRAMEWORK

importance of student self-assessment for:

- motivation;
- interest/personal responsibility;
- academic progress;
- and more... (Bollag 2006; Boud 1995; Tan 2008)

self-assessment and actual performance (Tan 2004)

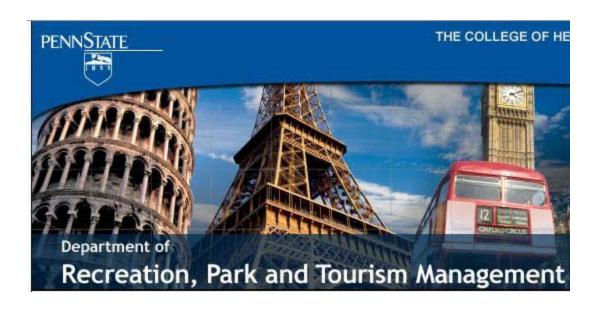
- not much literature exists;
- results seem to indicate a benefit for the students (higher motivation levels, more realistic expectations) and the instructors (improved course design, better evaluations);

- no relevant literature in leisure studies (to our knowledge);
- existing literature only concerned with course grade (similar to mid-semester evaluations);
- what is missing?



We needed help...

Schreyer Institute for Teaching Excellence



HOW DOES IT WORK?

Step 1:

The instructor(s) identify which variables are important that he/she wants feedback from the students about:

- perceived length of assignment;
- perceived difficulty of assignment;
- class attendance;
- perceived importance of assignment;
- student preparation for assignment;
- etc.

Step 2:

An assignment-specific PDAQ is constructed and pre-tested:

RPTM 101 Introduction to Recreation Services Spring 2010

Perceived Difficulty Assessment Questionnaire (PDAQ) - Quiz 1

Very Easy

Too Short

Very clear

Please help us increase the quality of the course by answering the following questions. Circle the appropriate answer. Answer as truthfully as possible. Participation is voluntary and confidential. Thank you.

Very

Unclear

Unclear

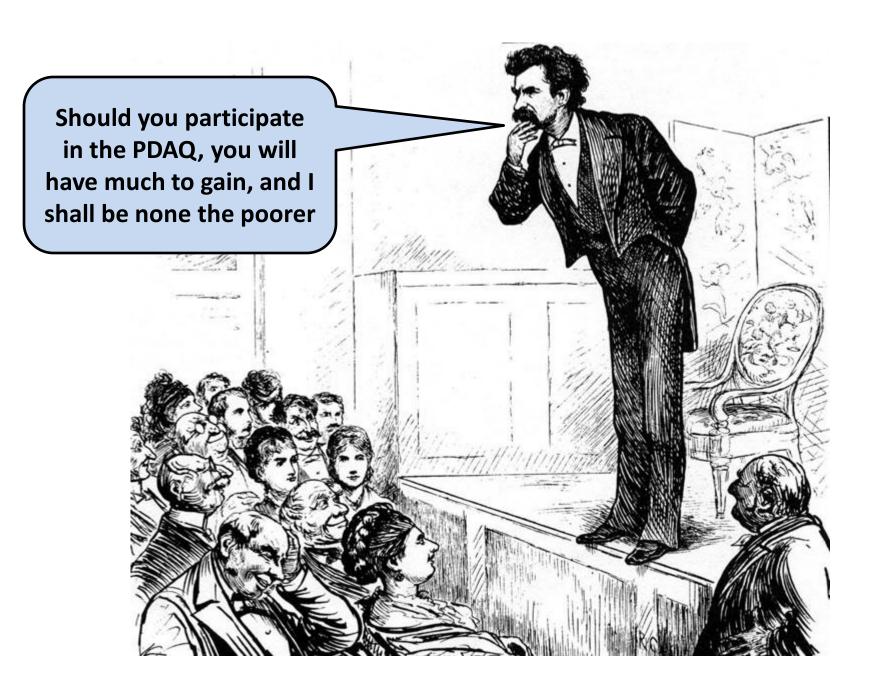
Clear

wer.	Answer as truthiu	illy as possible.	Participation is volun	itary and coniid	enuai. i nank yo
1.	How often did yo Once a week		per week for this segr ee a week	ment of the cou Three times a	
2.	Did you read the assigned readings for this segment of the class? Yes Partial No				
3.	Did you study for Alone	the quiz alone Partner	or with a partner or a Group	group? I did not study	for the quiz
4.	. Rate the quiz for:				
	Difficulty		Very Difficult	Difficult	Easy
	Length		Very Long	Long	Short

Clarity

<u>Step 3:</u>

Before the first assignment is given, instructor explains the purpose and function of the PDAQ to students and stresses that participation is voluntary and confidential (partial credit for participation can be given if desired):



Step 4:

The PDAQ is given along with the first assignment/examination – it is important that students complete it as soon as the assignment ends.

<u>Step 5:</u>

PDAQ data is compiled, analyzed, and discussed between the instructor(s) and the teaching assistant(s):



Step 6:

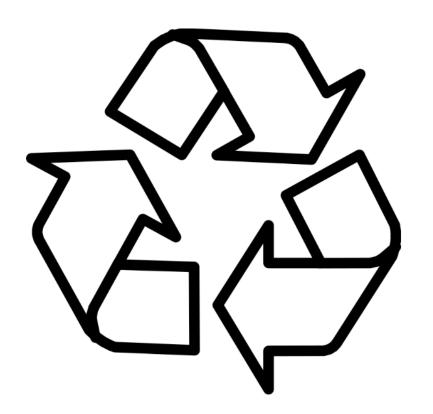
PDAQ data is communicated back to the students, in two distinct ways:

IN CLASS	INVIDUALLY VIA VLEs (e.g., ANGEL)
Class average vs. Class perceptions of average	Individual performance vs. Individual perceived performance (i.e., PDAQ scores)

"Now I would like to take two or three minutes to give you some feedback on the PDAQ scores. Those are the questions that you guys were so kind to answer after the quiz/exam/assignment. First I would like to thank you for answering them. They are of great help to us in making this a better course and design better exams, quizzes, and so on. Please provide as much detail as you can and if there is something that you would like to see addressed that's not there, please let us know. I will remind you again that the results are absolutely confidential. Anyhow, here are the questions [show slide with blank questionnaire]. And here are your responses [show slide with expected grades]. And here are the actual scores [show slide with actual grades]. As you can see, there are a few differences/similarities [talk for 1-2 min about what the data shows]. Would you guys like to ask any questions? Do you have any comments? [address questions if any]. Again, I would like to thank you for your help."

Step 7:

PDAQ data and student feedback is incorporated in the next assignment/examination, and the cycle starts again (steps 1-7).





CASE STUDY - RPTM 120

Background Information

- Class size: ~120
- Class:
 - General Education course
 - Introduces students to role of leisure in their life
 - Assignments:
 - Time Diary
 - Class Exercises
 - Response Papers
 - Extra credit PDAQ (5% of the total grade)



PDAQ Information on Syllabus

The Perceived Difficulty Assessment Questionnaire (PDAQ) has its origins in the question instructors often ask students upon completion of a given exercise, "How did it go?"

By doing so the instructor is requesting immediate feedback from students upon completion of the exercise. Unfortunately, we found that not only is it impractical to ask every student individually for feedback on an exercise, especially in large classes, but also that we tend to obtain fairly bland responses (e.g., "Okay", "Good", "Soso"). Therefore, in an effort to improve the quality of our teaching through the inclusion of self-assessment measures, this project will implement, assess, and disseminate an innovative measure of student self-assessment, the PDAQ. PDAQ's will be administered after submission of the Time Diary (2 points of extra credit) and after each exam (1 point of extra credit for each of the 3 exams), for a total of 4 PDAQ's and 5 extra credit points.

Reminders about PDAQ

- Students were reminded about PDAQ via both ANGEL email and an announcement slide in class
- On the day of PDAQ, the instructor introduced the process and value of PDAQ to the students
- Questions were solicited from students before implementation



PDAQ: Heads-up

- Instructors can select components of the course to be surveyed: exam/test, project, assignment, etc
- Think through what you want to ask & what questions are relevant to the course
- Design & pilot test
- Example of an actual PDAQ

How we conducted the PDAQ

- Hand out the questionnaire at the beginning of class
- Fill it out upon completion of an exam
- Hand it back to TA/RA at the end of class
- TA/RA entered responses & performed analysis
- Instructors only know aggregated results, do not see individual submissions
- Compile result slides to show to the class

Example: presentation of PDAQ results to students

Listen up!

Grade you expect to receive for the exam:

On PDAQ, if you circled	On ANGEL, it shows
A	4
В	3
C	2
D	1
F	0

Your Answers (1)

	Questions	Choices	% students who chose this answer	#students who chose this answer
	How often did you	Once a week	1.7%	2
	attend class per week for this	Twice a week	15.3%	18
Property of	segment of course?	Three times a week	80.5%	95
	Did you read the	Yes	0%	0
	for this segment of course?	Partial	53.4%	63
		No	44.1%	52
	Did you study for the exam alone or with a partner or a group?	Alone	78.8%	93
		Partner	15.3%	18
		Group	1.7%	2
		I did not study for the quiz	0.8%	1

Your Answers (2): Rate the Exam

Questions	Choices	% students who chose this answer	#students who chose this answer
	Very difficult	3.4%	4
Difficulty	Difficult	57.6%	68
Difficulty	Easy	35.6%	42
	Very easy	1.7%	2
	Very long	4.2%	5
Longth	Long	65.3%	77
Length	Short	29.7%	35
	Very short	0%	0
	Very unclear	0.8%	1
Clarity	Unclear	12.7%	15
Clarity	Clear	70.3%	83
	Very clear	15.3%	18
	Very complex	0.8%	1
Complexity	Complex	50.0%	59
Complexity	Simple	48.3%	57
	Very simple	0.8%	1

Your Answers (3)

	Questions	Choices	% students who chose this answer	#students who chose this answer
16		Very helpful	10.2%	12
	Helpfulness of	Helpful	52.5%	62
	TEXT material in studying for the exam	Unhelpful	27.1%	32
		Very unhelpful	5.1%	6
	Helpfulness of CLASS material in studying for the exam	Very helpful	61.9%	73
		Helpful	33.9%	40
		Unhelpful	2.5%	3
The second		Very unhelpful	0.8%	1

Your Answers (4)

Questions	Choices	#students who chose this answer	% students who chose this answer
	Less than 1 hour	7	5.9%
How long did	1-2 hours	36	30.5%
you study for	3-4 hours	59	50.0%
the exam?	5-6 hours	12	10.2%
	Over 6 hours	2	1.7%
Were you	Yes	75	63.6%
multi-tasking	No	42	35.6%
while studying for the exam?	I did not study for the quiz	1	0.8%
	Α	23	19.5%
What grade do you expect to receive from the exam?	В	61	51.7%
	С	29	24.6%
	D	0	0%
	F	0	0%

Contrast

		% students who EXPECTED to receive this grade	% students who ACTUALLY received this grade
Grade	Α	19.5%	13.4%
	В	51.7%	32.8%
	С	24.6%	38.7%
	D	0%	12.6%
	F	0%	2.5%

Example key points emphasized based on PDAQ results

- Student empowerment:
 - Multi-tasking
 - Attending class
 - Reading the textbook
 - Study time
- Tool to encourage students to try harder
- Educational tool for the faculty: know strengths & weaknesses of the course → Make improvements

TESTIMONIES

QUESTIONS/COMMENTS?

reading suggestions

- **Angelo, T. A & Cross, K. P. (1993).** *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.
- **Bollag, B. (2006, October 27).** Making an art form of assessment. *The Chronicle of Higher Education, 53*(10), P. A.8.
- **Boud, D. (1995).** *Enhancing student learning through self-assessment.* New York: Routledge.
- **Falchikov, N. & Boud, D. (1989).** Student self-assessment in higher education: A meta-analysis. *Review of Educational Research, 59*(4), 395-430.
- **Obenour, W. L., Lengfelder, J. & Cuneen, J. (2005).** Body of knowledge for a tourism curricula: Revisited. *Schole: A Journal of Leisure Studies & Recreation Education, 20,* 43-60.
- **Ribeiro, N. F., & Yarnal, C. M. (2010).** The Perceived Difficulty Assessment Questionnaire (PDAQ): Methodology and applications for leisure educators and practitioners. *Schole: A Journal of Leisure Studies and Recreation Education, 25,* 111-115.
- **Russell, R. V. & Kovacs, A. (2006).** Assessing the college classroom with unobtrusive measures. *Schole: A Journal of Leisure Studies & Recreation Education, 21,* 114-122.
- **Rust, C., Price, M., & O'Donovan, B. (2003).** Improving students' learning by developing their understanding of assessment criteria and processes. *Assessment & Evaluation in Higher Education, 28*(2), 148-164.
- **Tan, K. H. (2008).** Qualitatively new ways of experiencing student self-assessment. *Higher Education Research & Development, 27*(1), 15-29.
- **Tan, K. H. (2004).** Does student self-assessment empower or discipline students? *Assessment & Evaluation in Higher Education, 29*(6), 651-662.
- **Thapa, B. (2001).** Environmental concern: A comparative analysis between students in Recreation and Park Management programs and other departments. *Environmental Education Research, 7*(1), 39-53.