Impediments to Graduate Teaching Assistant's Effectiveness: An Attributional Analysis

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Most research about college and university teaching has dealt with student evaluations of teachers (e.g., Overall and Marsh, 1982) and with the effectiveness of specific instructional methods (e.g., Kulik, Kulik, & Cohen, 1980). Less is known about how members of the teaching professions themselves view the teaching-learning process.

A great deal of undergraduate teaching at colleges and universities is done by graduate teaching assistants (GTAs). The GTA experience is the only teaching experience most graduate students will have before becoming faculty members. This paper describes a study of how GTAs think about and approach teaching.

Attribution Theory

Attribution theory rests on the notion that people actively attempt to understand causes of certain events. For example. "Why did I get a D on this exam?" "Why doesn't Mary like me?" "Why did I get that promotion?" According to Weiner (1976, 1979), there are four categories of causal attribution: ability, effort, task difficulty, and luck. These attributions are perceived by individuals as a) either stable or unstable (likely or unlikely to change); b) either external or internal to the individual; and c) either controllable or not controllable by the individual.

Affective reactions and affective anticipations depend on how causes are perceived by the individual. Weiner mentions three areas that affective reactions influence: persistance of behavior, choice, and approach or avoidance of tasks and other people. For example, he hypothesizes that individuals who perceive a cause to be controllable and unstable (changeable) will probably try to alter the situation. On the other hand, individuals perceiving a cause as uncontrollable and stable are unlikely to attempt to change the situation. Thus, as Smith and Geis (1980) and Geis and Smith (1979) note, faculty members are more apt to change components of their teaching which they perceive to be unstable and within their control. If faculty members feel they have control over the component they may experience guilt and "devote time and energy to working on improving the

A Study of Graduate Teaching Assistants

Participants

We interviewed twenty-six GTAs from seven departments at a private midwestern research institution. GTAs from Mathematics, Chemistry, Political Science, English, Sociology, Philosophy, and Economics were asked, among other questions, to discuss what impeded their effectiveness as teachers. They were asked to rate each item mentioned on three six-point scales: stability, i.e., likely(0) or unlikely(6) to change; difficulty, i.e., easy(0) or hard(6) to change; and, controllablity, i.e., not under control(0) or under control(6) of the GTA.

Anticipated Results

We expected each impediment to be oriented to one of four areas: to the task of teaching, to students, to GTAs themselves, or to the supervising professor. We anticipated that GTAs with greater experience would mention different impediments and more impediments than GTAs with little or no experience. We also expected that GTAs within a particular department would mention similar impediments.

Finally, comparing professors' responses (Geis and Smith, 1979; Smith and Geis, 1980) GTA responses, we anticipated differences in the orientation of impediments due to faculty members' experience and teaching responsibilities.

Findings

Impediments to Teaching Effectiveness

GTAs mentioned twenty different impediments to their effectiveness as teachers. (A complete list appears in Table 1.) Two GTAs mentioned no impediments. These GTAs felt nothing impeded their effectiveness as teachers. As a Math GTA said, "I'm doing as well now [as a teacher] as I ever will."

The impediment most often mentioned was lack of time. Twelve of the twenty six GTAs (46%), at least one from each department, mentioned lack of time. For our respondents lack of time meant "not having enough time for class preparation" and "a lack of time to do my own classwork and the work necessary for teaching." Most GTAs viewed lack of time as a factor that was not in their control and was both difficult and unlikely to change (stable). For some GTAs having ample time was a vital component for being both a good graduate student and teacher. For example, one Philosophy GTA said, "If I had more time I could be a better teacher."

Lack of knowledge of subject matter was the impediment mentioned next most often. Of the six who mentioned this item, half were Chemistry GTAs and others were GTAs in Math, English, and Political science. By and large, these GTAs indicated that a better understanding of the subject matter would improve their teaching. Lack of knowledge was viewed as in control, easy and likely to change.

The third most often mentioned impediment was lack of experience as teachers. Four GTAs listed this impediment. Three of the four were GTAs in the English department (the other was a Math GTA). Those who mentioned this impediment felt that their

Table 1. Impediments to Teaching Mentioned by GTAs

											Attributions ³								
		=26)		=4) (n=5) ry (n=5) (n=4) ohy (n=2)			<u>=</u>	Ë	y (n=5)	Stable				Diffi- cult			Contr- ollable		
Impediments		Total (n=26)		Math (n=	Chemistry	Poli Sci	Philosophy	Есопош	Sociology	Low	Medium ²	High		Madium	Lich	nigin	Low	Medium	High
Lack of Time (TT1)		12		1	2 3	2	1	2	1	1	1	9	-	1	2	9	9	2	
Knowledge of Material (TT)		6		1	1 3	1		ĺ	1	6			ĺ	4	2	1	6		
More Experience (TT)		4		1	3					3		}		1	-	2	2	1	İ
Personality (SE)		3	Н	2	1	1			-	1	1	1	-	1	1	2	1	1	1
Class Size (TT)		3			1	П		2		1			1	1		1	3		
Relax When Teaching (SE)		2			1 1		1		1	2				1	1	-		2	ĺ
Layout of Classroom (TT)		2			1	Ш		1	1	1			-	1				1	ĺ
Ability To Think On Feet (SE)		2			1		1			1		- {	-	1					1
No Control Over Material (TT)		2		ł	1	1						2				2	1		1
Meeting Students' Needs (ST)		2			1	1				2					1	1		1	1
Students Poorly Prepared (ST)		2	$ \ $		1			1		1					ĺ	1	1	1	
Problem Students (ST)		2			1			1			1	İ			1				1
No Direction From Prof. (SP)		2							2	П		2			İ	2	1	1	
Knowing Too Much (SE)		1		1		$ \ $		-			1					1			1
Motivating Students (ST)		1		1		$ \ $				1					1				1
Poor Planning (TT)		1	ĺ	1	1				1	1					1		1		1
Familiarity With Students (ST)		1		-	1					1					1		}		1
Structure of Lab(TT)		1			1		1			$ \ $			1		ĺ				
Time of Day Class Meets (TT)		1				$ \ $	Į	1	1		- 1	ŀ	Ì			İ	1		
Poor Presentation (TT)		1					ĺ	1			-					1		ĺ	1
1 TT-task of teaching	2 Law=0-2.5					3	3 Not all respondents rated												
ST-student	Medium=2,5-3,5						each impdeiment on all												
SE-self	High=3.5-6							attributions and so the											
SP-supervising professor									number of responses varies.										

experience level was going to change, although it was something they did not control. No other impediments were listed by more than three GTAs(see Table 1).

Orientation of Impediments

As expected, impediments could be categorized in terms of their orientation toward the task of teaching, toward students, toward supervising professors, or toward the GTA(self). GTAs most often mentioned impediments which were oriented to the task of teaching; e.g., lack of time for teaching, more teaching experience, and increased knowledge of the subject matter (about fifty percent of all those mentioned). Impediments oriented to self and students were mentioned by GTAs about half as often at those concerned with the task of teaching. Least frequent were impediments having to do with the supervising professor. (Each impediment is coded by orientation in Table 1.)

Impediments by Field

We assumed that GTAs within departments would have similar experiences and would list many of the same impediments. Greatest agreement within department occurred regarding lack of time, which was mentioned by most GTAs in Math, English, Chemistry, Political Science, and Economics. Regarding knowledge of material, agreement within department was found among Chemistry GTAs. English GTAs agree regarding more teaching experience. Other than the above, there was little agreement within departments.

Impediments by Experience

We found little difference in the types of impediments mentioned by GTAs across levels of experience. More experienced GTAs differed from others only in that they provided a longer and more varied list of impediments.

English GTAs, the most experienced in the sample, mentioned the need for additional teaching experience more often than did others. It is interesting that having had some experience seems to make salient the need for more experience.

Dicussion

Attributional Analysis .

GTAs mentioned several impediments which were out of their control, stable (not likely to change), and difficult to change. (See summary ratings in Table 1.) These include lack of time, lack of control over material presented, and lack of direction from supervising professor. Each of these, according to GTAs, were controlled by supervising professors or other faculty members. They were also seen as hard to change. Attribution theory predicts that GTAs will attempt little change in these areas.

GTAs also mentioned impediments which were in their control, likely to change, and easy to change. These include knowledge of material, ability to think on feet, ability to motivate students, planning, and determining the degree of familiarity with students. Attribution theory predicts that GTAs will attempt change in these areas.

Comparison with Professors

We can now compare these results with Smith and Geis' study of professors. Smith and Geis (1980) and Geis and Smith(1979) found when professors discussed pedagogy they centered on themselves and their subject matter. Likewise, our GTAs discussed impediments related to themselves and to teaching tasks. Both professors and GTAs were primarily concerned with the lack of time for teaching and research.

A major difference between GTAs and prosessors was GTAs' empathy with undergraduates. One fourth of the impediments mentioned by GTAs were oriented towards students; about one third of the GTAs mentioned at least one student-oriented impediment. Geis and Smith, on the other hand, report, "Some professors focus solely on themselves in the teaching/learning process. They repeatedly discuss what they do in class with no reference to students." (1979, p. 8)

Smith and Geis also report that professors most often mentioned impediments which they saw as out of their control and unlikely to change. GTAs reported some impediments as out of their control and unlikly to change, but nearly half were considered in control and likely to change.

Conclusions and Implications

- 1) We found as much similarity in GTA responses across departments as within departments. If replicated with larger numbers, this implies that some GTA needs can be met through university-wide programs.
- 2) An overriding impediment to teaching effectiveness is lack of time. This may in turn be the major impediment for GTAs to attend seminars about teaching. GTAs may be no more likely than professors to attend, unless it can be shown that the seminars will help them become more efficient.
- 3) A number of impediments were rated as controllable and easy to change. Programs for GTAs may find it most effective to direct their energies towards these areas.
- 4) Some impediments were rated as uncontrollable and hard to change. Seminars aimed at understanding the development of these perceptions by GTAs may help them see the impediment as more controllable and changeable.
- 5) The interviewing process is itself an intervention. Documenting GTAs' perceived impediments on a campus not only provides useful information for designing programs but also demonstrates concern for GTAs and their teaching.

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