

When more than 90 percent of faculty members rate themselves as above-average teachers, and two-thirds rate themselves among the top quarter, the outlook for much improvement in teaching seems less than promising.

not *can*, but *will* college teaching be improved?

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Faculty development is “in” in higher education today. One indication of its importance is that we now hear debates about what it really should be called—staff or professional development (to remove the implication that faculty members alone need “development”), teaching/learning improvement (to suggest that teaching and learning occur together), instructional or educational services (to remove the threat of personal inadequacy), or some other euphemistic name with a special meaning to its sensitized inventor. Only when issues in higher education reach a certain level of awareness do these semantic battles begin—as witness the lengthy discussions about and proposed alternatives for such labels as “disadvantaged students” and “nontraditional education.” Perhaps, then, those interested in the improvement of undergraduate education can take comfort in the relatively recent semantic status accorded faculty development. It indicates that the issue has come of age in higher education: at least the subject, *is* being talked about, albeit cautiously.

Most people who are talking about it, however, assume that teaching *can* be improved and that since we are rational, progressive people, it *will* be improved. Neither is a foregone conclusion. Substantial numbers of educators are not certain that college teaching can be improved

—either because it is already quite good or because we don't know how to go about improving it. And probably fully as many people are not sure it will be improved—either because we can't teach old dogs new tricks or because the structure of higher education is impervious to change. My own position is that college teaching *can* be improved—both because improvement is desperately needed and because we do know how to do it—but I am less sanguine that it *will* be improved. It is to the latter issue that I wish to address this paper.

possibilities of improved teaching

At latest count, there were more than one thousand American colleges (two- and four-year) and universities that said they had either a program or a set of activities related to the improvement of teaching (Centra, 1976). Some are sophisticated programs, encompassing the broad range of personal, instructional, and organizational matters associated with the improvement of teaching, whereas others may be fairly simple, unidimensional approaches such as the creation of a media center or the provision of funds for instructional innovation. The great majority of these efforts have been initiated since 1970, and the national clamor for attention to teaching has brought forth federal recognition through funding priorities. For both the National Institute of Education (NIE) and the Fund for the Improvement of Post-secondary Education (FIPSE), the improvement of teaching and learning in postsecondary education is a target for R and D money.

Thus, people are betting their careers and increasingly scarce educational dollars that college instruction can be improved. At the same time, most faculty development programs are low-profile, don't-make-waves operations, feeling their way in waters ranging from mildly supportive to downright hostile. Such caution is probably well advised since, to my knowledge, faculty development has not seriously been tried before. Possibly in some bygone era there were efforts to change the form of college teaching in response to the invention of the printing press. If so, the efforts appear to have been lost in history. In the vast majority of colleges and universities, college teaching has not changed in any substantial way from the pre-print format of presenting information through lectures. As Clark Kerr (1976) aptly observes, "You could go back to the University of Bologna in the 12th century and feel more or less at home."

Whether faculty development represents a significant reform movement or just one more passing fad is not clear. There are basically three positions on the probability of significant change in the years im-

mediately ahead. One group, whom I shall call the *Reformers*, predicts that things will change for the better. A second group, here labeled the *Analysts*, asserts that things should change but that they probably won't. Yet a third group, which for want of a better term I shall call the *Educational Conservatives*, believes that the traditions of instruction in academe will stand firm against all pressures for change.

Since such blunt labels are a little out of tune with today's search for euphemisms, let me hasten to explain that these possibly pejorative phrases are shorthand phrases to convey a stance with respect to dramatic change in the instructional process. They refer to a position regarding the issue, not to a person or a personality. Many Educational Conservatives, for example, are political liberals. Nevertheless, for what they believe to be good reasons, they do not favor dramatic change in the instructional process—especially when devised or suggested by specialists in teaching and learning, as opposed to specialists in a discipline. Although the Reformers have written the most on the subject, the literature contains some articulate statements of all three positions. Let us look at some of the major arguments for each view.

the reformers

The Reformers hold that the movement to improve undergraduate instruction is under way and will succeed because they believe that (1) better teaching is needed, (2) most colleges are "tenured-in," and (3) the necessary knowledge to implement reform does exist.

The Reformers recognize, first, that neither new students nor traditional students seem to be doing as well as the public thinks they should. New Students, that is, those who are entering postsecondary education under the egalitarian thrust of open admissions (Cross, 1971), have not learned and are not learning without the help of special programs that give individualized attention to both the emotional and academic needs of new kinds of college students. Though the Reformers are generally convinced that change in instruction probably will take place, they also worry, realistically, that the difficulties of training faculty members to implement new teaching approaches, combined with escalating financial problems, will encourage a return to the familiar higher education that served more limited and privileged segments of the population. The situation in the City University of New York may be a harbinger of things to come.

Meanwhile, the public is putting new pressures on colleges to do something about the education of so-called traditional students. Declining test scores on conventional measures of academic achieve-

ment and aptitude are now the subject of newspaper and TV editorials and national study commissions. The blame for this state of affairs is widely spread, ranging from “new-fangled” education methods in the schools, to parents who let kids watch television instead of reading, to tests that don’t measure relevant skills anymore, to inflated grades given by teachers with lowered expectations. Since most educational institutions give more attention to assessing the skills of *entering* than *exiting* students, it is easy for the educational pecking order to fault the teachers at the level just below the level of the speaker—and of course all previous levels. High schools blame elementary schools; community colleges blame high schools; four-year institutions blame community colleges; and now there are complaints from the graduate schools that college graduates can’t write. The advantage of the pecking order is that it permits every educator to recognize that something is seriously wrong, yet avoid any personal responsibility for righting it. In any event, the first argument of the Reformers is that reform *will* take place because it has to. The widespread concern of the public and the resultant pressures from the federal government, state legislatures, and trustees will keep the pressure on until progress is demonstrated.

The second argument of the Reformers derives from the lack of faculty mobility. Most colleges hired large numbers of teachers in the boom period of the 1960s. These faculty members are now tenured, and there will be few retirements until after the year 2000. Clearly, then, any improvement in instruction will result from hard work with present faculty members rather than from the much easier hiring of new faculty members to institute new ideas and new methods. The argument here is that governmental and educational administrators, reacting to public pressures for reform, will transfer these pressures to individual faculty members through devices such as the required evaluation of teaching and the recognition of good (or poor) teaching through revised promotion and tenure policies. Thus instructors, with a new lack of options in terms of other campuses or other job definitions, will shape up or suffer the consequences. In addition, institutions are making new commitments to help professors with their teaching by providing offices of instructional improvement and engaging in organizational development to encourage and support good teaching.

Finally, the Reformers believe that the new emphasis on faculty development will be real and lasting because there is now adequate knowledge and technology to effect the desired improvements. Although the research does not support the new technologies such

as computer-assisted instruction, computer-managed instruction, and television as substitutions for the classroom and the teacher, it has convincingly demonstrated that these technical aids, properly used, provide significant benefits (see Cross, 1976a). In addition to increasingly good knowledge of the uses of hardware, we have gained significant knowledge about software and instructional strategies. The learning theory and research supporting the concept of mastery learning, for example, have in the opinions of some, at least, the potential for creating an "instructional revolution" (Cross, 1976a, b). The demonstration that almost all students can perform significantly better in learning situations when given adequate time and appropriate help is a research finding of no small consequence in the extremely rapid spread of self-paced learning options and mastery learning (Cross, 1976a). The research evaluations of the increasingly popular college-level versions of individualized instruction such as the Personalized System of Instruction (PSI) or the Keller Plan are quite impressive with respect to student achievement and student acceptance (Kulik and Kulik, 1975; Sherman, 1974).

the analysts

The analysts generally agree that there is a need for change, but believe that it probably won't happen—at least not in this century. Clark Kerr (1976), one of the foremost leaders in American higher education, predicts that nothing much is going to happen until the turn of the century because the growth that stimulates reform will be lacking. He bases his prediction on historical analysis, which shows that reform in higher education has always occurred in periods of growth when new people and new institutions were able to implement new ideas.

If we are going to wait for another period of growth to stimulate reform, however, we may be waiting a long time, because our greatest expansion has resulted from adding new clientele to the college population, not from an increase in the birth rate. The first great reform, the land-grant movement, added the children of farmers and factory workers to the college-going population, and the second great reform opened the doors of the community colleges to almost everyone. So higher education may now have run out of new students to recruit. It is hard to think of any segment of the population that has not now been considered in the egalitarian thrust to expand higher education. We will probably need to entertain totally new models for change as educa-

tion moves into the no-growth era. And that means that we will have to give up the easy route of bringing in new people to do new things. We may have to learn how to teach old dogs new tricks. Nevertheless, the fact remains that Kerr and other analysts who look at historical trends are probably quite right in their assertion that change without growth is going to be very difficult—so difficult that Kerr simply concludes that “the period ahead of us now is not going to provide many opportunities for reform.”

A critical implication of Kerr’s analysis is that growth attracts money and money is essential for reform. The commitment of the society to provide access to more of its members in the 1950s brought forth the huge public expenditures necessary to establish the community colleges. Thus not only did education have the new people and new missions to stimulate new ideas, it had the money to implement reforms. Presumably, if society or institutions feel strongly enough about the need for instructional improvement, the money will be forthcoming. It is rather clear at the present time, however, that educational improvement is not the top priority of state and federal governments. In short, the Analysts seem to have good reasons, based on experience, for their pessimism about significant educational improvement in this century.

the educational conservatives

In the minds of this third group, the traditions of college teaching will withstand the present assault of faculty development. In discussing this view, I wish I had a nice euphemism, since few academics like to be called conservatives. But it is probably not unfair to say that most academics are *educational* conservatives. While straining at the barriers to change other social institutions, academicians are notoriously slow to change their own institutions. Kerr (1976) remarks that “of all the institutions of society, none has changed as little over the centuries as has higher education.” Either higher education found the right answers early, or there is a powerful streak of educational conservatism in the academy.

An article by Martin Trow (1976) can be used to illustrate the position of the Conservatives. Trow concludes that the practice of academics should be left to the academicians, who in his opinion justifiably regard reformers from outside their academic disciplines with “suspicion and even hostility” (p. 20). In near-reactionary language, Trow then asserts that the highest quality teaching is likely to be car-

ried on by people and departments who have managed to “insulate themselves from the noise and turmoil of university politics and academic reform” (p. 21)—a rather interesting pairing of the disruptive forces in academe.

Unlike Kerr, who sees extremely slow change in higher education, Trow points to great changes taking place. He complains that the “university is widely attacked as conservative, resistant to change, deeply committed to traditional forms and practices [while] at the same time we have seen an enormous explosion of knowledge in all areas of scholarly and scientific life over the past several decades” (p. 20). While that is undeniably true, it may only point up the inconsistency between the roles of radical scholar and conservative professor. Scholars, operating at the cutting edge of changing knowledge in their disciplines, are willing and eager to bring change into the lives of others, but for themselves they prefer the tried—if not always the true.

Speaking directly to the issue of instructional reform, Trow advances the thesis that reform is most likely where academic departments are weakest—for example, in community colleges and institutions of continuing education. He writes that “innovations in the organization and forms of instruction are linked to successful attacks on academic authority.” Thus, it is strong departments that are “able to resist academic innovation.” Trow’s conclusion is somewhat tautological because of his conviction that if academic innovation wins the “attack on academic authority,” the department is, by definition, weak. Nevertheless, Trow speaks for large numbers of university professors who feel that the departmental structure is unfairly and unwisely criticized as an impediment to change.

Personally, I do not believe that instructional innovation makes its way only into weak departmental structures. I think that truly strong departments will learn to use the best research and development efforts of colleagues who are working to advance knowledge and practice in the academic specialty of teaching and learning. Indeed, I am struck with the number of strong departments of physics, psychology, and engineering that are implementing PSI courses and doing research and development on the effectiveness of their teaching.

It is all well and good for the Reformers, Analysts, and Educational Conservatives to discuss the issues surrounding instructional innovation among themselves. But ultimately, it is the attitudes and responses of the teaching faculty that will determine whether instruction actually improves.

evidence of faculty attitudes

In 1975 the opportunity presented itself for me to spend a year at the University of Nebraska, observing and analyzing the reactions of a fairly typical university faculty to increasing pressures to give more attention to the quality of undergraduate instruction. The five-year plan for the university, adopted by the board of regents in 1974, contains a recommendation that the university “must continue to expand and improve its knowledge of the teaching/learning process, and must utilize this knowledge in the improvement of its teaching programs, both on- and off-campus, with particular emphasis at the undergraduate level.”

Faculty members at hundreds of colleges and universities throughout the country would feel quite at home with the issues concerning the faculty at Nebraska. It is in most respects a thoroughly typical university—drawing its faculty from the traditions of academe, but now experiencing hard pressures for change, even in what is perceived to be a politically conservative state. Indeed, in one sense the pressures on the Nebraska faculty may be greater than those on the Berkeley faculty, of which Martin Trow is a member. While the San Francisco Bay Area has a much higher concentration of “activists” than Lincoln, the University of California is protected from extensive public pressure for the improvement of undergraduate instruction. In the first place, undergraduates at Berkeley are limited to the academically gifted, the top 12.5 percent of the high school graduates (though small numbers of “special admissions” students are admitted in the interests of equal opportunity), whereas Nebraska is, ostensibly at least, an open-admissions institution. Second, the settings of the two universities are quite different. Whereas the University of California is by legislation primarily a graduate and research university surrounded by a complex of exceptionally well-developed community colleges and state colleges, the University of Nebraska stands virtually alone as the public quality teaching institution in the state, flanked by a poorly developed system of state and community colleges. Thus, the University of Nebraska may well be under more “real” pressure to improve its undergraduate teaching than the University of California.

In any event, my year at Nebraska offered a chance to examine first hand the hypothesis of the Analysts that change in higher education occurs only through introducing new institutions and new people. As with four-year institutions everywhere, Nebraska is fairly well saturated with tenured faculty members. Thus, if change occurs

among the existing faculty, the hypothesis will not be supported. How receptive are professors at Nebraska to change in the instructional process? To assess present attitudes, I mailed a ninety-seven-item questionnaire* to a randomly selected sample of roughly half of the faculty on the three campuses—the Lincoln campus, the urban campus at Omaha, and the Medical College in Omaha. A total of 706 responses were received (68 percent). Since some recipients did not hold teaching appointments or were for other reasons unable or unwilling to participate in the survey, this report is based on 596 completed questionnaires—57 percent of the original sample, or approximately 29 percent of the faculty of the three campuses combined.

The questionnaire responses give some insights into how a fairly typical faculty feels about the pressures for increased attention to undergraduate teaching. In this article, I have organized these responses to address some of the issues raised by the Reformers, the Analysts, and the Educational Conservatives. How important is teaching to the mission of the university? Is there a need to improve undergraduate instruction? How well informed are faculty regarding recent advances in teaching and learning? Is there “suspicion and hostility” about academic innovations designed outside departmental structures? What acceptable steps can be taken toward the reform of undergraduate instruction?

The answer to the first question seems to be, “Quite important.” At the University of Nebraska, at least, there is evidence of dissatisfaction with what many perceive to be an overemphasis on research. While 43 percent of the respondents subscribe to the conventional equal priorities for teaching, research, and service, 24 percent assign teaching the top priority and only 3 percent give research first priority; 27 percent think research and teaching should have equal status. Thus, 94 percent of the respondents express the opinion that teaching should be at least as important as research to the university. Furthermore, more than two-thirds of the faculty profess a greater personal interest in teaching than in research, and 48 percent say they get *more* satisfaction from teaching than from other aspects of their work, while another 43 percent find teaching *as* satisfying as their own research and study. There seems little doubt that teaching is perceived as an important and satisfying part of the job of a university professor.

Does teaching need improvement? On this question the faculty members reveal what may as well be starkly labeled smug self-

*Appreciation is expressed to Stanley Mazur-Hart and Thomas Kess, research assistants, for their assistance with all phases of the project. For a report of the study as well as questionnaire items and responses, see Cross, 1976c.

satisfaction. An amazing 94 percent rate themselves as above-average teachers, and 68 percent rank themselves in the top quarter on teaching performance. Though they are not quite as pleased with their colleagues as with themselves, 60 percent are satisfied with the quality of undergraduate instruction in their department; only 5 percent are dissatisfied most of the time. Since the literature on change indicates that people are willing to change only when they experience substantial pressure to do so or much dissatisfaction with the way things are, the general contentment of the Nebraska professors with the quality of their teaching does not bode well for the Reformers' position. The dissatisfaction of those pressing for reform would have to be communicated much more convincingly to the faculty than is now the case if reform were to take place on any large scale.

There are several possible ways to make the faculty less self-satisfied with their teaching. One is to devise an evaluation scheme that would be convincing to faculty members—or perhaps to the Reformers. Either the teachers have to be shown that they are not as effective as they think they are, or the Reformers have to be shown that faculty members are better instructors than the Reformers think they are. The use of student evaluations of teaching is now widespread and rather well-accepted by faculties (Ladd and Lipset, 1976). But so far there is no indication in the Nebraska data, at least, that student ratings are likely to bring about much improvement. In the first place, students are notoriously generous raters. Hildebrand (1972) reports that typically the “average” teacher receives a rating of approximately 5.5 on a 7-point scale. Students seem to feel no need to grade their professors on the bell-shaped curve which is supported by so many of their teachers. Beyond that, faculty members, at the University of Nebraska at least, do not perceive student ratings as particularly helpful.* Only about one-third of the faculty rate them extremely or quite important in improving their performance as a teacher. Furthermore, although department chairpersons and deans assured me that student ratings are considered in promotion and tenure decisions, most faculty members do not perceive student ratings as highly important contributors to such decisions in their departments. Publications (both their number and quality) and reputation with colleagues and departmental chairpersons are perceived as far more important to career advancement

*In my opinion, the student rating forms at Nebraska are not very adequate. Some have been “put together by a committee.” Most have never been subjected to even the most elementary reliability and validity checks. The use of more sophisticated instruments could change faculty perceptions of their usefulness considerably.

than student ratings. The publication of student ratings may have some impact on students' choices and on faculty reputations, but such publications are usually student-produced, frequently lacking credibility in the eyes of the faculty and of some students. Better instruments, more sophisticated student evaluators, more care in the collection and reporting of data would help to improve the usefulness and helpfulness of student evaluations.

An evaluation scheme that has been much talked about but little practiced is peer evaluation through class visitation. But faculty members at Nebraska are generally opposed to that idea. Despite their apparent self-confidence as teachers, only 28 percent would be very willing to have their colleagues visit their classes, and 42 percent would be quite hesitant or would object. Indeed, the questionnaire responses indicate that there is no common method for evaluating teaching to which even half of the faculty would be "very willing" to subject themselves. The most acceptable is peer evaluation of class materials; 47 percent of the respondents endorse it and another 35 percent are willing to consider it. There seems little doubt that good and credible evaluation is important to the goal of improving instruction; equally clear are the resistance to assessment and the lack of agreement about it. Evaluators have made progress in recent years, but much remains to be done in refining the methods and in selling faculties on the importance of orderly and fair evaluative procedures.

Another way to increase the pressures for attention to teaching is to change the reward system. Faculty members at Nebraska, like those at most other universities, know that the route to promotion is paved with publications, and regental and other official statements about the importance of teaching will have little impact until goals and rewards are directly related.

Of the nine possible criteria for promotion listed in the questionnaire, the number of publications is considered as actually, if not ideally, the most important: two-thirds of the faculty rate it extremely or quite important to promotion in their department. But of the twenty-one suggestions offered in the questionnaire for improving instruction, the overwhelming first choice is "an unambiguous commitment to recognize good teaching at the same level as good research, with salary and promotion." Eighty-one percent consider this change in the reward system extremely or very important to better teaching. Yet despite its apparent popularity, such an "unambiguous commitment" at Nebraska would be very difficult to implement.

If the university were to make such a commitment, a periodic

review of teaching performance based on some agreed-upon evaluative criteria would be necessary, and neither the agreement nor the review seems likely in the immediate future. Although more than half (55 percent) of the faculty members think a periodic assessment of teaching performance is extremely or very important to improving instruction, it doesn't rank as high as less threatening measures such as provision of better equipment and facilities (62 percent), smaller classes (60 percent), grants to encourage innovation (59 percent), reduced class load (58 percent), or released time (57 percent). Moreover, it is a safe guess that if "periodic review" were to become a concrete proposal, opposition would be greater than that elicited by a hypothetical question on a survey. And still remaining is the more fundamental problem of the criteria for judging performance. Sixty-nine percent of the Nebraska faculty think that "it is difficult to reward good teaching because members of the academic community disagree on the identification of effective teachers." Yet the research that has been done on this question is reasonably consistent in showing that students, faculty members, and administrators agree rather well on their ratings of teachers (Maslow and Zimmerman, 1956; Blackburn and Clark, 1975; Hildebrand, Wilson, and Dienst, 1971). Nor is the personal experience of most people so divergent from the research that findings should be so difficult to accept. Certainly every campus has its examples of teachers who are universally admired and respected and those who are perceived by almost everyone as "dead wood." A recognition of the ends of the continuum at least could be taken into account in the reward system of the university *if* the faculty wished to do so. The Educational Conservative, of course, does not wish to change the reward structure of the university. Thus, Martin Trow (1976, p. 22) recommends that universities go ahead and assign teaching to professors who have achieved tenure and who are "no longer working at the research frontier of their discipline" and to young people who "are temperamentally drawn to the undergraduates" and don't care about promotion.

little likelihood of significant reform

Underlying what surely comes through in the Nebraska data as a pessimistic, if not hostile, environment for instructional reform is the widely shared feeling well articulated by Trow that "academic innovation" has been and is a passing fad and that there is no substantive knowledge about how to improve the teaching-learning process. That feeling is revealed when the Nebraska faculty is asked for its recom-

mendations about what should be done to improve teaching. If the most popular of the twenty-one recommendations suggested in the questionnaire are contrasted with the least popular, it is clear that faculty members revert to the old standbys of clear rewards, smaller classes, reduced class loads, better facilities, and released time as the most effective ways to improve teaching. These five recommendations were selected by from 57 to 81 percent of the faculty as extremely or very important. At the low end of the scale, considered very important by only 24 to 32 percent of the faculty, were such things as on-campus seminars on teaching, workshops run by experts in teaching and learning, required training for new faculty members, and the publication of a newsletter about teaching innovations. Clearly, one must conclude that faculty members do not feel it is important for them to inform themselves about new knowledge in the area of teaching and learning. They seem to feel that they already know how to be effective teachers given the necessary time, equipment, support, and so on.

There may be another factor at work, too, in these findings. The favored suggestions almost always involve something that "someone else" should do about teaching, whereas the unpopular suggestions involve commitments of time and energy from faculty members themselves. Like anyone else, a professor may simply prefer actions that make life easier rather than more difficult. Whichever interpretation is given to the findings, it seems clear that the Reformers have a lot more work to do to convince faculty members of the need for new learning and of the satisfaction to be derived from giving time and energy to academic innovation.

Most encouraging is the finding that 57 percent of the Nebraska faculty do agree that "innovation is necessary for the improvement of teaching." On the other hand, they are not well informed about teaching innovations. To take an example, although good Keller-plan courses exist in strong academic departments at Nebraska, and they affect large numbers of students, 55 percent of the faculty confess they "never heard of" this increasingly popular approach to teaching. And hard as it is to believe, 7 percent say they have never heard of computer-assisted instruction or interdisciplinary studies. Many, if not most, faculty members do little professional reading outside of their discipline. Increasing numbers do seem to be reading journalistic treatments of educational issues such as *The Chronicle for Higher Education* and *Change*, and the academic disciplines themselves are taking more leadership in publishing special journals or articles related to teaching in the disciplines. But it is still hard to get educational information and research into the

hands of faculty members. Nebraska, like other universities, has its full share of scholars, eloquent in their own fields, writing uninformed articles on issues in higher education without any awareness at all that research exists to refute or support their "personal experiences" and "wise observations."

alternatives to waiting for 2001

The data of the Nebraska questionnaire, supplemented by my conversations and interviews with members of the faculty, indicate to me that the future of instructional reform at the University of Nebraska lies somewhere between the predictions of the Analysts and the Reformers with substantial resistance from the Educational Conservatives. There is much dissatisfaction with the recognition presently accorded good teaching. Faculty members enjoy teaching and derive personal satisfaction from it. They recognize its importance in the mission of the university and believe that experimentation and innovation are necessary. On the other hand, they are not very well informed about knowledge related to the evaluation of teaching, student learning, or instructional innovation, and, worse yet, they seem reluctant to learn. It may take a new generation of college teachers arriving on the heels of retirements after the year 2000 to implement new approaches to teaching and learning. If, however, good research on the issues can be applied and disseminated by patient faculty development specialists working with those who do wish to learn, the tide may turn substantially in the direction of the Reformers.

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