
CHAPTER 8

OBJECTIVES

PURPOSE OF OBJECTIVES

Your objectives specify the outcome of your project, the end product(s). When sponsors fund your projects, they are literally "buying" your objectives. That's why it is extremely important to specify your objectives clearly. More precisely, they should

1. Tell who
2. Is going to do what
3. When
4. How much
5. How it will be measured

For example, a proposal objective might be for the "Midwest Home Shelter Agency (who) to reduce the number of homeless (what) during the next 24 months (when) by 15 percent (how much) as noted in the Department of Social Welfare Homeless Survey Report (measurement)." Your objectives should be very specific in contrast to your goals—long-range benefits usually painted in broader brush strokes.

Your objectives section is the intellectual heart of the proposal. Here you indicate precisely what you intend to change through your project and what you would accept as proof of project success for your target population. Your objectives provide the yardstick you use to conduct your evaluation section; that is, if you write your objectives in precise, measurable terms, it is easy to write your proposal evaluation section because you know exactly what will be evaluated.

KEY QUESTIONS TO ANSWER

Here are some key questions to answer. Does your proposal

1. Clearly describe your project's objectives, hypotheses, and/or research questions?
2. Signal project's objectives without burying them in a morass of narrative?
3. Demonstrate that your objectives are important, significant, and timely?
4. Include objectives that comprehensively describe the intended outcomes of the project?
5. Include objectives that are well-written? Concise? Clear?
6. Demonstrate that your objectives flow logically from the statement of need and directly address the chosen problem?
7. State your objectives, hypotheses, or questions in a way that they can later be evaluated or tested?
8. Demonstrate why your project's outcome is appropriate and important to the sponsor?
9. Indicate that your project's hypotheses rest on sufficient evidence and are conceptually sound?
10. Justify that the project's outcomes are manageable and feasible?

EXAMPLES OF OBJECTIVES

Example 1

The following example of a goal and one objective (which had several subparts) is taken from a dem-

onstration project submitted to the U.S. Department of Education.

Goal. This program is designed to prepare parents to function independently and effectively in helping their children develop to their own potentials.

Objectives. The parents who participate in the program will be able to

- identify the education content in events that occur in the home
- structure sequential and cumulative instructional tasks in the home for the child
- observe the child and use checklists to monitor progress
- use available equipment and processes in the home to teach children specific skills
- use packaged materials prepared by the project or other agencies in teaching specific skills

Example 2

A counseling center proposal to the National Institutes of Mental Health, citing both goals and objectives.

1. **Goal:** To identify the special needs of underserved populations (minorities, commuter students, women, returning adult students, and handicapped), and to develop new programs to meet those needs.

Objective: To utilize paraprofessionals to assist in identifying and assessing needs of the target group through the Environmental Assessment Survey program and to develop new programs based on these needs.

2. **Goal:** To extend Counseling Center services to underserved target populations (minorities, commuter students, women, returning adult students, and handicapped).

Objective: To utilize paraprofessionals to conduct special orientation sessions for target populations, and to develop a slide/tape orientation to counseling services; to develop and conduct new structured groups to meet identified needs of these populations and to serve as liaison to professional staff and students in these groups.

3. **Goal:** To maintain the quality of Counseling Center services while experiencing an increased demand for those services.

Objective: To utilize paraprofessionals to assist in group programs, to serve as technicians in the area of biofeedback and stress management, to present Counseling Center orientations, and to provide individual study skills assistance.

4. **Goal:** To develop new educational materials for special focus programs.

Objective: To utilize paraprofessionals in the development of psychosocial dramas to be used to facilitate awareness in problem areas such as racial awareness and alcohol; in the development of *Helping Skills Training* manuals that can be used in training individuals in target groups, e.g., peer assistance programs; and in the development of self help manuals that can be provided to assist students in underserved populations who would not be willing to seek counseling services directly.

Example 3

A biology research proposal to a federal space agency, one that requests a continuation of prior support.

In this proposal our primary objective is to continue to study the effect of motor activity on disuse as well as its role in the recovery process. The studies described are designed to answer questions that surfaced as a result of our initial studies on disuse atrophy. Therefore, in this section we do not attempt a complete literature review (that can be found in our initial proposal), but rather present our current findings and selected results of others as they relate to this proposal. A detailed description of the experimental methods is contained in Part B of this proposal.

Example 4

A chemistry research proposal to the National Institutes of Health. The application form uses the language "Specific Aims" but means the same thing as "Objectives."

Specific Aims: Considerable attention has recently been focused on the use of phospholipid bilayer vesicles as a means for encapsulating and delivering antitumor agents to neoplastic cells. Although there have been some encouraging signs, the ultimate therapeutic value of this technique remains unclear. The basic premise underlying this proposal is that carriers of the type currently being examined have limited potential and that new ones need to be developed which are more stable and offer better control over drug delivery. Our immediate chemical objective is to synthesize and characterize four new classes of phospholipid carriers. One carrier is based on vesicles whose lipids contain two polar head groups, each of which is covalently attached to the terminal positions of a rigid hydrocarbon chain.

Based on close analogy with surfactant analogs recently described in the literature, these molecules should yield monolayer phospholipid vesicles. A second type of carrier is based on vesicles com-

prised of phospholipid dimers covalently coupled at the polar head group. The third and fourth classes of carriers we propose are polymerized forms of micelles and vesicles, and are termed, ultrastable micelles and ultrastable vesicles. Each of the above has been specifically designed to equip the drug delivery vehicle with (1) greater intrinsic stability, (2) slower and more controllable time-release action, (3) preferred endocytotic and adsorption modes of interaction with cells, and (4) greater targeting potential.

Example 5

A chemistry research proposal to the National Science Foundation. This writing approach uses questions as a technique for stating proposal objectives.

The chemistry of molecular oxygen compounds has been studied extensively. Yet a number of basic questions remain unanswered. This is particularly true for the electronic and vibrational spectra of these compounds. The questions we propose to address are

1. What is the range of $\nu(\text{O}_2)$ and its relationship with the $M-\text{O}_2$ (M : a metal) bond strength?
2. Does $\nu(\text{O}_2)$ reflect the effect of the axial and equatorial ligands?
3. Where are the $M-\text{O}_2$ CT bonds responsible for the enhancement of $\nu(\text{O}_2)$ and $\nu(\text{MO})$ in resonance Raman spectroscopy?
4. Is it possible to prepare novel symmetrical, side-on adducts with large ligands such as metalloporphyrins?

The objectives of our systematic spectroscopic study are to examine the effects of molecular oxygen adducts on a number of $\text{CO}(\text{II})$ chelates. The techniques employed include UV-visible, enforced, resonance Raman, and $\text{C}-13$ NMR spectroscopy.

Beyond the use of questions, note the last two sentences as a transitional bridge to the methodology section. This approach provides continuity in a proposal which flows smoothly between sections.

Example 6

Study carefully the grant guidelines for they will sometimes specify the goals that you must address, as the following solicitation for proposals dealing with severely handicapped children shows. Often these statements are best regarded as broad goal statements. As a proposal writer, you could expand this into specific objectives for each goal.

1. Develop new approaches for delivery of integrated educational services, which includes providing severely handicapped children who are currently being served in segregated environments with special educational and related services in programs at facilities with nonhandicapped children.
2. Demonstrate the delivery of curricula relevant to education in integrated settings including the teaching of social integration skills, community reference skills, and employment skills.
3. Identify resources available in the state to provide the needed services to the severely handicapped children and youth.

Example 7

Health objectives from a cholesterol education program. Notice how the objectives are categorized for different populations.

The long range objectives of the programs are

Health Professionals:

To increase awareness among health professionals that elevated blood cholesterol is a cause of coronary heart disease, and that reducing elevated blood cholesterol levels will contribute to the reduction of coronary heart disease risk.

To improve the knowledge, attitudes, and skills of health professionals to identify and intervene with patients who have elevated blood cholesterol, and to provide guidelines regarding methods and approaches to use in detection, treatment, and follow-up of patients.

To increase the awareness and understanding of health professionals regarding the major role that diet plays in reducing elevated blood cholesterol.

Public/Patient:

To increase awareness that elevated blood cholesterol is a cause of coronary heart disease, and that reducing elevated blood cholesterol levels will contribute to the reduction of coronary heart disease risk.

To increase the proportion of Americans who have reduced their dietary intake of total fat, saturated fat, and cholesterol as part of a nutritionally adequate diet.

To increase the proportion of Americans who have their blood cholesterol measured.

Community:

To increase coordination, communication, and collaboration in blood cholesterol control

among community, professional, industry, and government organizations.

To increase awareness and knowledge among students, especially those in primary and secondary schools, with respect to blood cholesterol and cardiovascular risk factors in general.

To increase worksite activities to reduce elevated blood cholesterol levels.

Example 8

The National Hemophilia Foundation recently published a series of goals and objectives. One example follows:

Goal: Modern care for all persons affected by hemophilia, related bleeding disorders, and complications of those disorders or their treatment, including HIV infection.

Objective 1: By 1990, 90 percent of the identified persons with hemophilia at risk of HIV infection enrolled in comprehensive care programs will be tested for HIV status with appropriate pre- and post-test counselling, with maximum consideration to confidentiality.

Objective 2: By 1991, 80 percent of persons with hemophilia, all their identified sexual partners, and their families will be provided with comprehensive risk reduction information and psychosocial counseling and support.

Objective 3: By 1991, hemophilia treatment centers will provide or facilitate all hemophilia and HIV-related medical and psychosocial care to sexual partners and offspring of persons with hemophilia, with consideration given to their independent needs.

Objective 4: By 1991, 90 percent of persons identified with severe hemophilia will have access to medically supervised home therapy.

Objective 5: By 1991, the evaluation and full development of a virus-free, non-thrombogenic factor IX product will be complete and available.

Objective 6: By 1991, FDA-approved virus-free vWD products will be available.

Objective 7: By 1991, FDA-approved recombinant factor VIII products will be available.

Example 9

This example includes a statement of goals and objectives, both preceded by some orienting comments for the reader.

Three goal statements provide an overall conceptual orientation to the ultimate purposes of this proposal to establish a major bioethics center. The objectives describe more specific, intermediate, measurable accomplishments. Objectives are in-

cluded for three target populations: (1) the clinicians who are responsible for making ethical patient-management decisions, (2) the educators who bear local responsibility for the continuing medical education of the clinicians, and (3) the administrators who bear the responsibility of providing educational support programs for the clinicians. It is recognized that these roles are not always discrete; that is, any individual can serve more than one role within the medical system. Nevertheless, these roles have been trichotomized here for purposes of proposal discussion while recognizing that each area of emphasis exists along a continuum. Ultimately, of course, the real beneficiary is the individual patient.

GOAL 1: TO SERVE AS STAFF FOR THE HOSPITAL BIOETHICS COMMITTEE.

1. **Clinical Objectives**
 - a. To review hospital policy concerning clinical ethical issues
 - b. To draft hospital policy statements concerning clinical ethical issues
2. **Educational Objectives**
 - a. To serve as resource staff for hospital bioethics meetings
 - b. To prepare clinical position papers
3. **Administrative Objectives**
 - a. To coordinate subcommittees
 - b. To arrange speakers

GOAL 2: TO PROVIDE NATIONWIDE COORDINATION OF CLINICAL ETHICS PROGRAMS WITHIN ENTIRE HOSPITAL SYSTEM

1. **Clinical Objectives**
 - a. To provide clinical consultations
 - b. To serve as a consultant to ethics committees
2. **Educational Objectives**
 - a. To define positions on policy issues
 - b. To produce a National Clinical Ethics Newsletter
3. **Administrative Objectives**
 - a. To serve as a single point of contact for nationwide clinical ethics programs
 - b. To coordinate a national network of clinical ethics programs

GOAL 3: TO ESTABLISH ETHICS EDUCATION PROGRAMS IN COOPERATION WITH THE OFFICE OF ACADEMIC AFFAIRS

1. **Clinical Objectives**
 - a. To increase clinical sensitivity to ethical issues
 - b. To increase consideration of ethical issues in overall patient management

2. Educational Objectives
 - a. To establish a Clinical Ethics Core Curriculum
 - b. To implement the core curriculum throughout the medical system
3. Administrative Objectives
 - a. To assist central administrators in their development of ethics educational programs
 - b. To arrange and hold teleconferences

WRITING TIPS FOR OBJECTIVES

1. List your specific objectives in no more than one or two sentences each in approximate order of importance.

2. List your specific objectives in expected chronological order of achievement if you are submitting a phased proposal.
3. Don't confuse your objectives (ends) with your methods (means). A good objective emphasizes what will be done and when it will be done, whereas a method will explain why or how it will be done.
4. Include goal (ultimate) and objectives (immediate) statements.
5. This section doesn't need to be long, often one-half page.
6. Use action verbs. In Exhibit 28, there are over 400 action verbs to get you started.

Exhibit 28: Action Verbs.

abbreviate	abstract	accept	dispute	dissect	distill
accumulate	acquire	adapt	distinguish	divide	dot
adopt	advocate	alphabetize	draft	draw	dream up
alter	analyze	anticipate	drill	edit	editorialize
apply	appraise	approximate	empathize	encircle	encode
arch	argue	arrange	enjoy	envisage	epitomize
ask	assay	assemble	esteem	establish	estimate
assess	assist	associate	evaluate	evolve	examine
associate	assume	attempt	execute	expand	explain
attend	bat	become aware of	explode	express	extract
believe	bend	berate	extrapolate	fabricate	fashion
bisect	blend	bother	fill in	find	fix
break down	brief	brush	flex	fold	follow
build	calculate	cancel	forecast	form	formulate
carve	catalogue	catch	gather	generalize	generate
categorize	challenge	change	get	give	give meaning to
chase	check	chisel	grab	grade	grasp
choose	circle	cite	grip	group	guide
classify	climb	clutch	hammer	hate	heat
color	combine	compare	hit	hold	hop
compile	complete	conceive	hunt	hypothesize	identify
comprehend	compute	concoct	illustrate	imagine	impart
conceptualize	conclude	console	implode	improve	include
convince	conduct	contrast	increase	induct	indicate
construct	consult	coordinate	infer	inform	initiate
convert	convict	cover	insert	integrate	interpret
copy	count	create	inveigle	invent	investigate
craft	crawl	cut	involve	isolate	join
criticize	cross out	decide	judge	jump	kick
dab	date	deduce	knock	label	lean
decode	decrease	delete	leap	leave out	lengthen
defend	define	depict	let	letter	lift
delimit	demonstrate	designate	light	limit	link
describe	design	develop	list	live	locate
detect	determine	differentiate	make	march	mark
devise	diagram	discover	match	measure	melt
digest	disassemble	disprove	mix	model	modify
discriminate	display		mold	monitor	motivate

Exhibit 28: Action Verbs (continued).

nail	name	nod	ride	roll	rule
note	number	obey	run	sand	saw
object	observe	obtain	say	scheme	scrape
offer	omit	order	sculpt	see	seek
organize	originate	paint	select	sense	separate
pair	pantomime	paraphrase	sequence	shake	shorten
participate	paste	pattern	show	simplify	simulate
perceive	permit	preserve	sit	skate	sketch
persist	pick	picture	ski	skip	slide
piece together	pin	pitch	smooth	solve	somersault
place	place together	plain	sort	specify	speed
plan	pluck	point	spell	squeeze	stamp
polish	portray	position	stand	start	state
pour	praise	predict	step	stick	stimulate
prepare	press	print	stir	stop	strategize
problem solve	produce	project	strengthen	stretch	structure
promote	pronounce	propose	submit	substitute	suggest
prove	provide	publicize	summarize	support	sustain
pull	punch	push	swat	swim	swing
put	put together	qualify	sympathize	synthesize	systematize
quantify	query	question	take	take apart	tally
quote	rank	rate	tap	tell	test
reach	ream	rearrange	theorize	think	tolerate
recall	recapitulate	recite	toss	touch	trace
recognize	recombine	recommend	transfer	transform	translate
reconstruct	record	rectify	transpose	trim	twist
reduce	regroup	reject	type	uncover	underline
relate	remember	remove	understand	unite	use
rename	render	reorder	value	verbalize	verify
reorganize	repeat	rephrase	view	volunteer	walk
replace	report	represent	watch	wave	weigh
reproduce	reset	restate	wiggle	wipe	wrap
restructure	retell	return	write		
revive	reword	rewrite			

Use these action verbs in the infinitive form (to + verb) to start writing your objectives. Complete the action and express it in measurable terms.

REJECTION REASONS

Here are common rejection reasons that were noted in reviewers critiques of proposals that were not funded.

1. The project outcomes are of limited significance.
2. The project outcomes are nebulous, diffuse, or unclear.
3. The investigator proposes to undertake more than the methods and/or budget allow.
4. The objectives are more like global purposes than specific, measurable, achievable activities.
5. The realism of some objectives is questionable.
6. "Some of the objectives are confusing, non-specific, not measurable, and clearly not appropriate to the purpose of the grant.
7. Objectives are general and stated as "activities"—thus nonmeasurable. It is unclear how activities will relate to the professions involved.
8. Project objectives are vague, nonspecific, and difficult to measure. No targets set in terms of faculty reached, trainees enrolled, disciplines involved.