

# Acquiring Project and Program Skills

Based on my experience and research in the field of project and program management, I have found there are at least forty-seven subject areas required to address the needs of projects and programs. I group these forty-seven subject areas into five skill sets. Why five skill sets? Because they coincide with what I know to be the general requirements for the various levels of projects and programs that one is likely to encounter. I have chosen the terms: Basic, Advanced, Expert, Specialty, and Principal to classify the levels.

As you read through the skill sets, you will see that the first line of each group defines what separates that level from the previous one. The skill sets coincide, to a degree, with those of the major organizations. But each organization has categorized these skills into different levels or groups for its own reasons. None is wrong. It's just that each has a different reason for creating different skill sets. The point of it all, though, is that it takes essentially the same skills to conduct a project or program no matter how you group the skills.

The skill sets presented here are *not* for the purpose of preparing you for some certification test in one of the organizations. For that, you need to follow the guidelines of the organization, precisely. My purpose is to establish the skill sets to be consistent with the requirements of the types of projects and programs you are likely to encounter in the real world.

As you read through the following skill sets you will find an introduction and a description together with a level of experience and the proficiency required for each level. The introduction presents the discriminators that separate the current level from the previous level. The

description provides the scope of activity involved with a position. The experience stipulates the experience necessary at the *prior level* to achieve entry to the current level. Proficiency shows the subjects that must be mastered, and at what level, in order to be proficient at the level under discussion.

The project- and program-level requirements are cumulative. Before attaining the Expert Level, a manager must have completed all the requirements for the Basic Level and the Advanced Level.

In each of the following skill set descriptions you will see a table labeled Basic Skill Set, Advanced Skill Set, and so on. The columns in these tables have the following meanings:

The far left column contains a number. That number is simply a reference number for the subject. Next is the subject title. Following that is a column containing a single letter: F, S, or C. These letters stand for firm, soft, or combination, and refer to the skill type of the subject. A firm task is one that is objective by nature and remains constant; it is not subject to interpretation. Some refer to the firm task as a “hard” task. I have chosen to call it firm to differentiate it from a “difficult” task. A soft task is one that uses some interpretation in its application. The “Skill Type” column is followed by the abbreviated definition of the subject. The definition is followed by three columns labeled: PMI, APM, and ICB, respectively. These columns show a reference to a PMI PMBOK paragraph that further defines the subject or the APM BOK that further defines the subject or the ICB element that further defines the subject.

Following each skill set table is a second table that relates each subject in that skill set to the proficiency level necessary for that subject. The top number refers to the reference number, and the bottom number refers to the proficiency required, using the following taxonomy:

1. The individual must be able to apply the Basic Skill Set and have a proficiency of the remaining subjects as indicated.
2. The individual must have a thorough understanding of the subjects indicated and be able to apply advanced knowledge, backed by appropriate experience, to the projects he or she is leading.
3. The individual must have an understanding of the subject area indicated and be able to apply expert knowledge, backed by appropriate experience, to the projects he or she is leading.

4. The individual must have an understanding of the subject area indicated and be able to apply advanced or expert knowledge, backed by appropriate experience, to the projects he or she is leading.
5. The individual at this level must be expert in all subjects. Many of the details of the subjects will be delegated to subordinates but this individual must approve the subject delegation and the resulting product.

Some subjects will mature or “top out” at some level and show that level for all the subject areas in all the skill sets. An example of this phenomenon is “Project Management Context.” It simply involves reading and applying knowledge of the subject. That’s all that’s necessary. The subject tops out at level 2.

To summarize the interaction of the two tables, let’s take one subject through from beginning to end.

Subject number “1” is the reference number. The subject is “Project Management Context.” The subject is a Firm “F” skill type. The subject is defined as “The context within which a project is conceived, issued, conducted, and accepted.” The definition of the subject can be enhanced or amplified by reading paragraph “2.0” of the PMI PMBOK, Topic “12” of the APM BOK, or Element “5” of the IPMA Competence Baseline. By adding the second table, we find that the basic level must have a thorough understanding of the subjects indicated and be able to apply an advanced level of knowledge, backed by appropriate experience, to the projects he or she is leading.

Now, let’s look at the actual skill sets.

## **Basic Skill Set**

Preparation for the Basic Skill Set involves a change of thinking from follower to leader and a knowledge of what projects are all about. Simply reading and understanding the literature I mention in the paragraphs that follow will provide the information needed for the Basic Skill Set. However, I recommend you also read the document shown under “Suggested Reading” for even more information.

### ***Description***

The basic-level manager will coordinate or supervise a single-disciplined task of low risk. The basic-level manager is responsible for applying the project management process (see Chapter 1) to ensure

that the technical task is accomplished within the cost and schedule parameters established for the project.

### ***Experience***

One month to six months.

### ***Subject Requirements***

Figure 6-1 contains the primary subjects that constitute the Basic Skill Set. Each subject is followed by an abbreviated definition. You can expand these abbreviated definitions and that fundamental knowledge by reading James Lewis's *Fundamentals of Project Management*. This book will give you insight to all the subjects you need to know to conduct a small project. You can also review the documents referenced in the appropriate paragraphs of the Project Management Institute's *Project Management Body of Knowledge (PMBOK)* under the column labeled PMI. Should you desire further amplification of the subjects, refer to the two far-right columns. The column labeled APM will refer you to the topics of the *APM Project Management Body of Knowledge (APM BOK)* and the column labeled ICB will refer you to the elements of the *IPMA Competence Baseline (ICB)*. You can find these documents referenced at "Suggested Reading" under the Advanced Skill Set.

### ***Proficiency Requirements***

Figure 6-2 contains the subjects, ordered by reference number (top row), and the proficiency requirements (bottom row) that the basic-level manager must achieve in order to operate efficiently at this level. Basic-level subjects are shown in bold.

### ***Proficiency Enhancements***

The world of project management is wide open to you at this point so you can leverage the basic-level subjects with any of the subjects in any of the levels that follow.

You can expand these abbreviated definitions and that fundamental knowledge by reading the *Fundamentals of Project Management*.

### ***Resources***

Without a doubt, the PMI's PMBOK provides all the subjects required for this level as well as the next. Read and understand the PMBOK

Figure 6-1. Basic-Level Skill Set.

No.	Subject	Skill Type	Abbreviated Definition	PMI	APM	ICB
1	Project Management Context	F	The context within which a project is conceived, issued, conducted, and accepted.	2.0	12	5
2	Project/Program Management Process	F	Management of the scope, cost, schedule, and quality of a specific task.	3.0	10 & 11	1
3	Work Content and Scope Management	F	Management of project content (deliverables).	5.0	30	13
4	Time Scheduling/ Phasing	F	Developing and applying the time necessary for accomplishment of individual activities and linking those activities to portray a project.	6.0	31	14
5	Budgeting & Cost Management	F	Defining project element “should cost” and managing activities to ensure those costs are controlled.	7.0	33	16
6	Project Implementation	F	Application of the project plan to the task at hand.	2.1.2	63	2
7	Project Close Out	F	The process of concluding a project, delivering the product to the customer and returning the resources to the enterprise. Also called “Hand-Over.”	12.6	65	11

Skill Type. Where: F = Firm; S = Soft; C = Combination of F and S.

Figure 6-2. Basic-Level proficiency requirements.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	

**Bold** numbers indicate Subject Areas and proficiency requirements specific to this level.

Proficiency requirements. Where: 1 = Understands; 2 = Applies Basic knowledge; 3 = Applies Advanced knowledge; 4 = Applies Expert knowledge; 5 = Delegates and controls.

(Project Management Institute, 2000) knowledge areas and meet the limited experience requirements to get ready for the basic level.

In *Fundamentals of Project Management*, James Lewis applies the knowledge areas of the PMBOK to real-world exercises. For example, his Chapter 6, “Scheduling Project Work,” applies to PMBOK knowledge area 6, “Time Management.” His Chapter 4, “Using the Work Breakdown Structure to Plan a Project,” is a combination of parts of PMBOK knowledge area 4, “Project Integration Management,” and PMBOK knowledge area 5, “Scope Management.” These two books should be read together. Any seminar listed in any of the skill sets will be great but none is necessary for this level.

### **Suggested Reading**

Dixon, Miles, ed. *APM Project Management Body of Knowledge*. Peterborough, U.K.: The Association for Project Management, 2000.

International Project Management Association. *IPMA Competence Baseline*. Monmouth, U.K.: International Project Management Association, 1999.

Lewis, James. *Fundamentals of Project Management*. New York: AMA-COM Books, 2001.

Project Management Institute. *PMI PMBOK*. Newtown Square, Penn.: Project Management Institute, 2000.

## **Advanced Skill Set**

In Figure 4-1, we saw that an advanced-level project manager must be able to lead both intermediate projects and large projects. These project types differ from the small project in the numbers of people involved, the complexity of the project, and the potential risk of the project. Therefore, the skill set of the advanced-level project manager must be expanded to include the skills necessary to accomplish these expanded tasks.

Projects with more team members will require more people-related subjects such as personnel management, organization (regarding the team organization), team building, and training. The larger and more complex projects need more attention to their composition and are subject to more changes than simpler projects. Therefore subjects such as project life cycle, organization (relating to product organization), configuration management, and change control must be added to the skills inventory. The control of risk is augmented by the subjects just mentioned as well as the use of a more rigorous control system such as earned value management.

The advanced level is the point at which the individual manager’s persona begins to emerge. The AIPM, APM, aspm, and the IPMA in-

clude this fact in their certification process. They call it “attitude.” But, because the current street jargon defines “attitude” as a negative attribute, I have chosen to use Jung’s term “persona.” Persona comes from the Greek actor’s vocabulary and means how one is perceived. Believe me, how you are perceived is 90 percent of life, maybe even more. It’s not just an act, though, it has a purpose, such as being able to smile when you really want to tear out someone’s windpipe. This action would not solve the problem, would be detrimental to the performance of the project, and certainly would not do his windpipe any good. How you handle this kind of situation constitutes your persona and how you are perceived. The two ends of the persona spectrum can be referred to as the “Raging Bull” and “Cool Hand Luke.”

### ***Description***

The advanced-level project manager will lead a multidisciplinary team to achieve a task of moderate risk and moderate complexity. In addition to cost, schedule, and scope management, the advanced project manager now has the responsibility for selecting team members and ensuring that they understand the project and its objectives. The advanced-level project manager will interpret the task requirements, and create, implement, and manage a complex project plan that ensures that all requirements are met and all deliverables accrue to the customer at the proper times with appropriate quality.

### ***Experience***

One to three years, depending on the complexity of the project.

### ***Subject Requirements***

Figure 6-3 contains the subjects that constitute the advanced-level skill set. Each subject is followed by an abbreviated definition. The abbreviated definitions can be expanded by reviewing the documents referenced in the columns headed PMI, APM, and ICB. PMI refers to the Project Management Institute’s *Project Management Body of Knowledge (PMBOK)*. APM refers to the topics of the *APM Project Management Body of Knowledge (APM BOK)*. ICB refers to the elements of the *IPMA Competence Baseline (ICB)*.

### ***Proficiency Requirements***

Figure 6-4 contains the subjects, ordered by reference number (top row), and the proficiency requirements (bottom row) that the advanced-

*(text continues on page 56)*



Figure 6-3. Advanced-Level Skill Set.

Ref. No.	Subject	Skill	Abbreviated Definition	PMI	APM	ICB
8	Project Success Criteria	C	The objective factors that define project success.	—	20	9
9	Strategy/Project Management Planning	C	The process of developing a project plan that is consistent with enterprise and customer requirements.	4.0	21	4 & 8
10	Communication	C	Two-way oral, written, or graphic interchange of data between people and/or machines.	10.0	70	25
11	Resource Management	F	Definition and control of the facilities, finances, equipment, and real estate in support of a project.	7.1	32	15
12	Change Control	F	Management of changes to <i>project</i> content.	4.3	34 & 41	17
13	Information Management	F	Management of the flow of information into, within, and out of the project.	10.0	36	21 & 29
14	Structures	F	Organization of project activities to show relationships between the elements of the activities, such as a Work Breakdown Structure (WBS).	2.3, 5.3 & 9.1.3	30 & 66	12
15	Configuration Management	F	Management of changes to the <i>product</i> baseline.	4.3.2.2	46	17 & 37

(continues)

Figure 6-3. (Continued).

Ref. No.	Subject	Skill	Abbreviated Definition	PMI	APM	ICB
16	Project Life Cycle Design & Management	F	Determination of the lifecycle a project is to have and then developing a plan to ensure accomplishment.	2.1	40, 60 & 61	6 & 10
17	Procurements & Subcontracts	F	The processes of buying products and services from other entities.	12.0	53	27
18	Earned Value Management	F	A process that assigns value to events. The predetermined value is then awarded to the performer whenever the event is completed.	4.1.4	35	19
19	Organization	C	A structured relationship between the people of the project at a particular moment in time.	23.3	66 & 67	22 & 33
20	Risk Management	C	Identification and control of risks that could affect the project.	11.0	23	18
21	Quality Management	C	Management of the quality processes of a project.	8.0	24	28
22	Personnel Management	C	Evaluating personnel needs, the recruiting and assignment of personnel, and the evaluation of the performance of those personnel.	9.0	75	35
23	Team Building/ Teamwork	C	Processes by which people work together for the common good of the project rather than individual desires.	9.3	71	23
24	Training	C	Exposing individuals to selected, <i>project-related</i> courses.	9.3.5	75	35 & 36

Skill Type. Where: F = Firm; S = Soft; C = Combination of F and S.

Figure 6-4. Advanced-Level proficiency requirements.

1	2	3	4	5	6	7	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
3	2	3	2	3	3	3	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>5</b>
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	3	—	—	—	—	

**Bold** numbers indicate Subject Areas and proficiency requirements specific to this level.

Proficiency requirements. Where: 1 = Understands; 2 = Applies Basic knowledge; 3 = Applies Advanced knowledge; 4 = Applies Expert knowledge; 5 = Delegates and controls.

level manager must achieve in order to operate efficiently at this level. Advanced-level subjects are shown in bold.

### ***Proficiency Enhancement Resources***

Now, it's time for you to broaden your effectiveness and work on your persona. The time-honored book *The 7 Habits of Highly Effective People* by Stephen R. Covey is a good place to start. It is a break from the regimen of book after book of the "Firm" subjects to a look at the personal habits by which others judge you. The book presents explanations of "Dependence" and the transition to "Independence" and then to "Interdependence." This book introduced the concepts of teamwork and synergy. And its ideas are just as effective today as the day it was written.

Ken Blanchard wrote the original *The One-Minute Manager* in 1981 and updated the book in 1999. Its three principles are as relevant now as they were then. However, the book has been further updated for the times in his newer book *Leadership and the One-Minute Manager*. In this book, Blanchard talks about the one-minute manager and situational leadership attuned to today's strategies. It is likely we will cycle back through all those strategies in the near future.

*Gung Ho!* expands the management techniques of *The One-Minute Manager* to include the concept of energizing and empowering the modern employee.

In his book, *The AMA Handbook of Project Management*, Dr. Paul C. Dinsmore pulls together the talents of forty-one respected practitioners of project management to contribute their expertise, each in a selected subject. The book covers the subjects you would expect, such as start-up, structure and organizations, teamwork, and quality, and also covers such subjects as research and development projects, new products, and cross-cultural projects. It will have a place on your project management bookshelf for years to come.

In his book *Introduction to Simulation and Risk Analysis*, James R. Evans uses the Excel spreadsheet as a teaching and operational tool to illustrate simulation modeling concepts and analysis of results. Excel is a tool common to almost every office software set and can be used in direct support of your project.

Tom Harris wrote *I'm OK, You're OK* during the Transactional Analysis phase of management techniques. This little book contains some basic people-to-people relationships that are almost immediately recog-

nizable but heretofore didn't have names. The book became the starting point for several comedic spin-offs (*I'm OK, But I Don't Know About You*), but nevertheless it has a lot to say.

Written for both team leaders and executives, Glen M. Parker's *Cross-Functional Teams* provides checklists and sample training programs to help establish effective teams. His data is based on his consulting experiences with many large and medium businesses and will help you in your search for the right training courses for your projects.

The following seminars and subject areas are recommended for this level.

The PMI seminar "Contracting and Procurement Management" covers the procurement process from start to negotiation and award, then through performance and completion for project managers to understand their roles as well as the roles of procurement personnel.

The PMI "Risk Management" workshop uses an array of practical management tools to build risk models for standard risk identification, quantification, qualification, response development, and risk control. The idea is to establish a common approach that can be used for all projects, not just one.

The AMA seminar "Effective Project Leadership: Building High Commitment Through Superior Communication" covers not only basic communication but the specifics of team dynamics and conflict management as well. The seminar covers communicating during project planning, implementation and closure and the "nits and grits" of running effective meetings, what to do when crisis hits, performance reporting, and building commitment to the project.

### **Suggested Reading**

Allen, David. *Getting Things Done: The Art of Stress Free Productivity*. New York: Penguin, 2003.

Australian National Training Authority Standards and Curriculum Council. *National Competency Standards for Project Management*. Volumes 1, 2, and 3. QLD, Australia: Yeronga, 1996.<sup>1</sup>

Blanchard, Ken. *Gung Ho!* New York: William Morrow, 1997.

———. *The One-Minute Manager*. New York: William Morrow, 1999.

Blanchard, Kenneth, et al. *Leadership and the One-Minute Manager*. New York: William Morrow, 2001.

Christopher, William F., ed. *Handbook for Productivity Measurement and Improvement*. New York: Productivity Press, 1993.

Covey, Stephen R. *The 7 Habits of Highly Effective People*. New York: Simon and Schuster, 1990.

Dinsmore, Paul C. *AMA Handbook of Project Management*. New York: AMACOM Books, 1993.

Dixon, Miles, ed. *APM Project Management Body of Knowledge*. Peterborough, U.K.: Association for Project Management, 2000.<sup>2</sup>

Evans, James R., and David L. Olson. *Introduction to Simulation and Risk Analysis*. Upper Saddle River, N.J.: Prentice Hall, 1998.

Harris, Thomas A. *I'm OK, You're OK*. New York: Avon Books, 1996. International Project Management Association. *IPMA Competence Baseline*, Monmouth. U.K.: International Project Management Association, 1999.<sup>3</sup>

MacKenzie, R. Alec. *The Time Trap: The Classic Book on Time Management, 3<sup>rd</sup> Edition*. New York: AMACOM Books, 1997.

Parker, Glen M. *Cross-Functional Teams*. San Francisco: Jossey Bass, 2003.

Project Management Institute. *PMI PMBOK*. Newtown Square, Penn.: Project Management Institute, 2000.<sup>4</sup>

### **Seminar Contacts**

#### *Contracting and Procurement Management*

PMI SeminarsWorld Registration

P.O. Box 2686

Des Plaines, IL 60018 USA

For a summary of the seminar, see:

[http://www.pmi.org/prod/groups/public/documents/info/pdc\\_sw\\_reginfo.asp](http://www.pmi.org/prod/groups/public/documents/info/pdc_sw_reginfo.asp)

#### *Risk Management*

Mailing address same as above.

For a summary of the seminar, see:

[http://www.pmi.org/prod/groups/public/documents/info/pdc\\_sw\\_td\\_risk.asp](http://www.pmi.org/prod/groups/public/documents/info/pdc_sw_td_risk.asp)

#### *Effective Project Leadership: Building High Commitment Through Superior Communication—Seminar #6585-XNET*

American Management Association

1601 Broadway New York, NY 10019

Phone: 212 586-8100

Fax: 212 903-8168

Customer Service: 800 262-9699

For a summary of the seminar, see:

<http://www.amanet.org/seminars/cmd2/6585.htm>

### **Expert Skill Set**

The principal difference between the Advanced Skill Set and the Expert Skill Set is that at the expert level, the manager is involved with cus-

tomers outside the enterprise under the aegis of a legal contract that binds the enterprise to the performance of the program. The expert-level manager must now add business and contractual subjects to his or her skills inventory. In many cases this also includes sales techniques and proposal preparation. Now that you are interfacing with a customer from outside the company, you should be more precise in handling your customer, not only from a profit standpoint but from a follow-on business standpoint as well.

### ***Description***

The expert-level manager leads programs of moderate to high risk and complexity and may be involved in several programs simultaneously. The expert-level manager is responsible for program budget and schedule as well as program technical performance. The expert-level manager leads an interdisciplinary staff and team. The expert-level manager is responsible for profit or loss. The expert-level manager is the primary customer contact, is responsible for customer satisfaction, and may be responsible for follow-on business. Follow-on business activity may involve writing and managing proposals, arranging for partnerships and teammates, and negotiating or leading the negotiating team.

### ***Experience***

Two to five years, depending on complexity.

### ***Subject Requirements***

Figure 6-5 contains the subjects that constitute the expert skill set. Each subject is followed by an abbreviated definition. The abbreviated definitions can be expanded by reviewing the documents referenced in the columns headed PMI, APM, and ICB. PMI refers to the Project Management Institute's *Project Management Body of Knowledge (PMBOK)*. APM refers to the topics of the *APM Project Management Body of Knowledge (APM BOK)*. ICB refers to the elements of the *IPMA Competence Baseline (ICB)*.

### ***Proficiency Requirements***

Figure 6-6 contains the subjects, ordered by reference number (top row), and the proficiency requirements (bottom row) that the expert-level manager must achieve in order to operate efficiently at this level. Expert-level subjects are shown in bold.

*(text continues on page 64)*

Figure 6-5. Expert-Level Skill Set.

Ref. No.	Subject	Skill	Abbreviated Definition	PMI	APM	ICB
25	Financial Management	F	The evaluation and assignment of resources to a project as opposed to the assignment of those resources to alternatives.	12.5	52	42
26	Metrics (TPM)	F	Objective values applied to certain factors and accomplishments.	8.1.3.2	21	19
27	Value Management	F	Assessing project value in terms of resource utilization (Go/No-Go).	5.1.1.3	44	20
28	Health, Safety, Security & Environment	F	Considerations of the health, safety, security, and environment for the <i>project</i> .	5.1.3.3	25	40
29	Business Considerations	C	How this project fits in the overall business plan of the enterprise and how it will contribute to future business. Uses the elements of the project success criteria.	1.2	50	34
30	Design & Development	C	Establishing key management “Go/No Go” gates in the design and development processes.	2.1.1	22, 60 & 62	7, 38 & 39



31	Legal Considerations	C	The ability to recognize a situation outside the norm that will require specialized assistance, such as labor, commercial, or international law.	1.4, 5.5.2, 11.2.1.3 & 12.4	54	41
32	Technology Management	C	An enterprise-level plan that predicts new technologies and follows their direction of growth. Used by the project to ensure that “on-ramps” or accommodations are made to implement predictions.	2.1	43	12
33	Estimating	C	A process of assigning approximate value, based on like activities, to a projected activity.	7.2.2.1	42	15 & 16
34	Prototyping	C	Developing a living model that reflects the characteristics of the product to be delivered.	11.5.2.3	45	31
35	Handoff	C	The transfer of a requirement from one functional organization (marketing) to another (programs).	—	—	—
36	Customer Relations/ Satisfaction	S	Documents the needs and wants of the project customer and establishes a periodic evaluation of performance in meeting those needs and wants.	8.0	—	—

(continues)

Figure 6-5. (Continued).

Ref. No.	Subject	Skill	Abbreviated Definition	PMI	APM	ICB
37	Teaming & Partnering	S	A strategic or tactical alliance with another enterprise for a specific purpose.	2.3	53	27
38	Marketing & Sales	S	That part of the permanent organization chartered to sell product and ideas between the enterprise and its customers.	1.4	51	38
39	Proposals	S	A process that generates an offer to do business that usually consists of scope, schedule and cost/ price, and approach.	12.3	—	—
40	Negotiation	S	A discussion in which there is ultimately agreement on the outcome of the subject of the discussion.	2.4.3	74	32
41	Conflict Management	S	Mediating a dispute to a positive conclusion before it becomes disruptive.	2.4	73	26
42	Social Sensitivity	S	Acting, speaking, and writing in a manner that is considerate of the needs of others.	2.5	50	9
43	Management Relations/ Satisfaction	S	Establishing and satisfying project goals between enterprise management and project management.	2.2	—	—

Skill Type. Where: F = Firm; S = Soft; C = Combination of F and S.

Figure 6-6. Expert-Level proficiency requirements.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	5
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>	<b>41</b>	<b>42</b>	<b>43</b>	44	45	46	47	
4	4	4	5	3	3	2	2	3	3	4	4	4	4	4	4	3	3	4	4	2	—	1	

**Bold** numbers indicate Subject Areas and proficiency requirements specific to this level.

Proficiency requirements. Where: 1 = Understands; 2 = Applies Basic knowledge; 3 = Applies Advanced knowledge; 4 = Applies Expert knowledge; 5 = Delegates and controls.

## ***Proficiency Enhancement***

In addition to achieving the specific proficiency requirements shown in Figure 6-6 you can leverage your proficiency at the expert level by reading the following books and attending the following seminars.

## ***Resources***

Change your customers from simply being satisfied customers into *Raving Fans* by using Ken Blanchard's ideas that teach how to define a vision, to learn what a customer really wants, and to institute constant, effective customer-centered systems.

Use my *Blueprint for Project Recovery* to recover from a problem on your project or program, or to control the planning so you don't have issues to recover from.

How you handle change is really the subject of Spencer Johnson's *Who Moved My Cheese?* Just about the time you have the "cheese" (rewards) figured out, someone moves them. The concepts are applicable to the business world and to one's personal life.

Just mention "risk" and watch the eyeballs of the project manager snap. Risk is inherent to all projects and compounds exponentially as projects become more and more complex. In *Identifying and Managing Project Risk*, Tom Kendrick addresses risk from an overall project standpoint and provides a base from which you can move to your specialty. It appears to me that risk is the most addressed subject in the project management list of subjects. Every month, articles about risk appear in all the periodicals. Software has even been developed to assist the project manager in identifying and controlling risk. Still in all, risk exists in every project and must be controlled, and this is a good place to start.

Even though the book is titled for small business, *Successful Proposal Strategies for Small Business* by Robert Frey provides insight to proposal strategies for almost all sizes of companies and most of the agencies you can think of from concept to printing.

*Managing the Project Team* is Vijay Verma's third volume in "The Human Aspects of Project Management Series" and covers team dynamics, inspiring performance, and creating self-motivating project teams.

At this point in your project management career, you should have covered just about all of the "Firm" subjects. Now is the time to add depth to the firm subjects, concentrate on the "Soft" subjects and to work on your persona. Most of the seminars recommended at this level are a combination of subject areas (that is, not single subjects) and lean more to the human or people side of the business.

*Team Training.* There are many approaches to team training but *Agreements for Excellence* uses a “contract” or “agreement” between team members as the basis for understanding what is needed by who and when. Each team member “signs up” to provide certain products to others at certain times. There are usually surprises in every project when people find out they are supposed to provide a product they didn’t even know about before. I use *Agreements for Excellence*, presented by qualified facilitators, in all my team training seminars.

*Contract Types Workshop.* If a contract with an outside agency is part of your task, you need to understand the different types of contracts and what each means to you, to the customer, and to the company. Nearly all of the project management graduate curricula (see Chapter 7) offer courses in contract types, and that’s a good starting point for information. There are some nuances of contract types that are industry-specific. For instance, a cost-plus contract in construction is not the same as a cost-plus contract with the federal government, so you need to select the course that supports the industry you are in. Further, the fee aspects (profit) of some contracts such as fixed fee (FF), award fee (AF), and incentive fee (IF) can be particularly complex and will require detailed knowledge of the award or incentive factors. These details are usually spelled out in the specific contract under which you will be working.

*Defective Pricing.* Defective pricing falls under the general heading of fraud, waste, and abuse. Requirements for project managers to be exposed to the definitions and penalties for defective pricing was begun by the U.S. federal government in the 1960s. Many other organizations have made this a requirement as well. These seminars are usually developed by companies around their pricing practices.

*Negotiating.* Since 1968, *Effective Negotiating* has been the standard for negotiating strategies and techniques. In his *Effective Negotiating* seminar, Dr. Chester L. Karrass states: “They get what they want by negotiating better deals for both parties.”<sup>5</sup> This is the basis for win-win negotiations.

*Proposals.* New business, and, by association, proposals, are the life-blood of any company. There are many, many proposal types, but the proposal must match the requirements. You don’t want to write a book when one page will do, and you don’t want to submit one page when a full-blown proposal is required. Usually, the training department will select a proposal seminar, so proposals will be standardized throughout the company. If you are in commercial business, *Writing Commercial Proposals* is a good seminar. If you are in the government business, *Managing Winning Proposals* is the appropriate seminar. Both are offered by Shipley Associates.

### Suggested Reading

Blanchard, Ken. *Raving Fans*. New York: William Morrow, 1993.

Blanchard, Kenneth, and Spencer Johnson. *The One-Minute Manager*. New York: William Morrow, 1999.

Cagle, Ronald B. *Blueprint for Project Recovery*. New York: AMACOM Books, 2003.

Frey, Robert. *Successful Proposal Strategies for Small Business: Using Knowledge Management to Win Government, Private-Sector, and International Contracts, 3<sup>rd</sup> Edition*. Boston: Artech House Publishers, 2002.

Humphrey, Watt S. *Managing Technical People*. Boston: Addison-Wesley, 1996.

Johnson, Spencer. *Who Moved My Cheese?* New York: Putnam Books, 1998.

Kendrick, Tom. *Identifying and Managing Project Risk: Essential Tools for Failure-Proofing Your Project*. New York: AMACOM Books, 2003.

Verma, Vijay, K. *Managing the Project Team the Human Aspects of Project Management*. Newtown Square, Penn.: Project Management Institute, 1997.

### Seminar Contacts

#### *Agreements for Excellence*

Created by and offered through:

IMPAQ Organizational Improvement Systems, East Coast Division

45 Museum Street, Suite C

Cambridge, MA, 02138

Phone: 617 354-5062

#### *Effective Negotiating seminar*

Karrass Corporation

8370 Wilshire Blvd.

Beverly Hills, CA 90211-USA

Phone: 323 951-7500

E-mail: [mail@karrass.com](mailto:mail@karrass.com)

Web site: [www.karrass.com](http://www.karrass.com)

#### *Writing Commercial Proposals and Managing Winning Proposals*

Shiplely Associates

Corporate Headquarters

653 North Main St.

Farmington, UT 84025

Phone: 888 772-9467 or 801 451-2323

Fax: 801 451-4660

Web site: [www.shiplelywins.com](http://www.shiplelywins.com)

### Specialty Skill Set

The specialty project manager is an advanced-level manager or an expert-level manager with an added specialization in a specific area. Specialty projects may include new technology or new product develop-

ment and may be international in scope or application. Specialty projects or programs may be “virtual” and may encompass several locations, including overseas locations.

### ***Description***

The specialist-level manager leads projects or programs of moderate to high risk and complexity, manages an interdisciplinary staff, and may be involved in several projects or programs simultaneously. The specialist-level manager is responsible for project or program budget, schedule, and technical performance. The specialist-level manager usually acts as primary customer contact, is responsible for customer satisfaction, and may be responsible for follow-on business.

### ***Experience***

Five to ten years.

### ***Subject Requirements***

Figure 6-7 contains the subjects that constitute the specialty-level skill set. Each subject is followed by an abbreviated definition. Specialty-level subject areas include specific areas of interest or responsibility, such as leading virtual teams, conducting international business, working with AID (Agency for International Development), and so on, but in truth, there is no end to the category of specialties.

### ***Proficiency Requirements***

Figure 6-8 contains the proficiency requirements of the specialist-level subjects, by reference number (top row), and the proficiency requirements (bottom row), that the specialist-level manager must achieve in order to operate efficiently at this level. Primary subjects are shown in bold.

### ***Proficiency Enhancement***

Because the specialty area is so broad, you will see an admixture of subjects presented here. In truth, these subjects need to be whatever you need to support your specialty. That’s not a cop-out, it’s just reality, and when you reach this level, you will have no difficulty “filling in the blanks.”

### ***Resources***

*How to Negotiate Anything with Anyone, Anywhere Around the World* by Frank L. Acuff presents in-depth information for international negotiat-

*(text continues on page 70)*

**Figure 6-7. Specialist-Level Skill Set.**

No.	Subject	Skill Type	Abbreviated Definition	PMI	APM	ICB
44	Specialties	C	Numerous categories of specialty subjects, such as international business, AID business, Foreign Military Sales, and virtual programs.	—	—	—

Skill Type. Where: F = Firm; S = Soft; C = Combination of F and S.



**Figure 6-8. Specialist-Level proficiency requirements.**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	5
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	<b>44</b>	45	46	47	
4	4	4	5	3	3	3	3	3	3	4	4	4	4	4	4	3	3	4	<b>4</b>	2	—	2	

**Bold** numbers indicate Subject Areas and proficiency requirements specific to this level.

Proficiency requirements. Where: 1 = Understands; 2 = Applies Basic knowledge; 3 = Applies Advanced knowledge; 4 = Applies Expert knowledge; 5 = Delegates and controls.

ing. The author separates the world into six regions consisting of forty-one countries and calls for different negotiating methods with each one. A “Fast-Fact Summary” is provided for each nation allowing the reader to quickly grasp the uniqueness of that country.

Aligned to conducting business around the globe, *The Distance Manager* by Kimball Fisher covers the main topics that a project manager must consider when using virtual teams through discussion of using e-mail, teleconferencing, and videoconferencing for maximum effectiveness; of mastering the people skills required to manage from a distance, of virtual team building, and of strategies for managing multiple locations.

Written more like a white paper than a book, Martha Haywood’s *Managing Virtual Teams* nevertheless asks, and answers, all the right questions. For instance: What are the four key principles for effectively communicating at a distance? And, questions near and dear to the heart of all project managers: How do I know they are really working? How do I know they are working on the right things?

The selection of specialty seminars will be directed by the character of the specialty and will be numerous.

### **Suggested Reading**

Acuff, Frank L. *How to Negotiate Anything with Anyone, Anywhere Around the World (Expanded Edition)*. New York: AMACOM Books, 1997.

Fisher, Kimball, and Mareen Duncan Fisher. *The Distance Manager: A Hands-On Guide to Managing Off-Site Employees and Virtual Teams*. New York: McGraw-Hill, 2000.

Haywood, Martha. *Managing Virtual Teams*. Boston: Artech House Publishers, 1998.

## **Principal Skill Set**

The principal-level manager must be able to handle any project or program the enterprise has or will have. The task of the principal-level manager is entirely management-oriented; however, the principal-level manager must have an understanding of all the technical disciplines necessary to perform the project or program to ensure that it is on track. The task of the principal-level manager is strategic insofar as the program and the business area are concerned, and it is tactical insofar as the day-to-day activities are concerned. The detailed, day-to-day activities will be performed by staff specialists.

### **Description**

The principal-level manager leads very complex and high-risk projects and programs. The principal-level manager oversees budget and schedules and directs an interdisciplinary staff. He or she has primary responsibility for program growth, including new technology. The principal-level manager is the primary customer contact and is responsible for customer satisfaction. Programs will likely include new technology and may include new product development. Programs may be international in scope or application. Portions of the projects or programs may be “virtual” and encompass several locations, including overseas locations. The principal-level manager is responsible for profit or loss. The principal-level manager will be responsible for follow-on business and may be responsible for new business. The principal-level manager will likely direct the marketing of the follow-on or new business activity.

### **Experience**

More than ten years.

### **Subject Requirements**

Figure 6-9 contains the subjects that constitute the Principal Skill Set. Each subject is followed by an abbreviated definition. As you can see, these subjects are beyond the scope of the Project Management Institute’s *Project Management Body of Knowledge (PMBOK)*, the topics of the *APM Project Management Body of Knowledge (APM BOK)*, and the elements of the *IPMA Competence Baseline (ICB)* under the column labeled ICB. Note that the subject areas are purposely broad.

### **Proficiency Requirements**

Figure 6-10 contains the proficiency requirements of the principal subjects, by reference number (top row), and the proficiency requirements (bottom row), that the principal-level manager must achieve in order to operate efficiently at this level. Principal subjects are shown in bold.

### **Proficiency Enhancement**

In addition to achieving the specific proficiency requirements shown in Figure 6-10, you can leverage your proficiency at the expert level by reading the following books and attending the following seminars.

*(text continues on page 74)*

Figure 6-9. Principal-Level Skill Set.

No.	Subject	Skill Type	Abbreviated Definition	PMI	APM	ICB
45	Strategic Planning and Positioning	C	Developing and implementing the strategy for long-term positioning of the project, the program, and the enterprise. Includes cultural changes and continuous improvement.	—	—	—
46	Project Management Process implementation	C	The research and application of the Project Management Process to the needs of the enterprise.	—	—	—
47	Leading-Edge Ideas	S	Ideas put forth by management and technical sources specializing in forward thinking. Knowledge Management.	—	—	—

Skill Type. Where: F = Firm; S = Soft; C = Combination of F and S.

**Figure 6-10. Principal-Level proficiency requirements.**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
4	4	4	5	5	4	4	4	4	4	4	5	5	5	5	5	5	5	4	4	5	5	5	5
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	<b>45</b>	<b>46</b>	<b>47</b>	
4	5	4	4	4	4	4	4	5	5	4	4	4	4	4	4	4	4	4	5	<b>4</b>	<b>4</b>	<b>4</b>	

**Bold** numbers indicate Subject Areas and proficiency requirements specific to this level.

Proficiency requirements. Where: 1 = Understands; 2 = Applies Basic knowledge; 3 = Applies Advanced knowledge; 4 = Applies Expert knowledge; 5 = Delegates and controls.

## Resources

The project office is not only a way to conduct projects, it is also a way to conduct business. In their book *Creating the Project Office: A Manager's Guide to Leading Organizational Change*, Randall Englund, Robert Graham, and Paul Dinsmore suggest that the project office leads to better products, and can lead to organizational change by transforming the organization from function-based to project-based.

The authors interviewed over 150 CEOs to get the inside dope on how they run their companies. In *Maximum Leadership*, Charles Farkas and Phillippe DeBacker share the results of their interviews in five strategies for success.

Where do we stand with regard to others in our business? H. James Harrington's *High Performance Benchmarking* shows the "what's" and "how's" and how they come through in this first book on benchmarking.

Originally published by nine co-authors in 1996, this book has undergone editorial change by Miki Halliday and was republished in 2001. *Coaching, Mentoring, and Managing*, edited by William Hendricks, advocates treating your employees as real people and helping them along the way with coaching instead of condemning, and mentoring instead of maligning.

Robert S. Kaplan and David P. Norton bring their "balanced scorecard" concept from seminar to book form and extend it into a performance management framework in *The Strategy-Focused Organization*.

Business strategy with a practical application is the theme of *Strategic Planning: A Practical Guide for Managers*, by Drs. Harold Kerzner and Peter J. Rea. The authors use a dozen or more case studies to show how it's done in different companies.

Although Alvin Toffler's *The Third Wave* was written twenty years ago, it has as much thought-provoking insight as *Future Shock*. It is worth taking time to read it.

The "Reinventing Work Series" by Tom Peters consists of three books. The books are titled: *The Brand You 50*, *The Professional Firm 50*, and *The Project 50*. Each is a list of fifty actions to reinvent the work of that subject area. Naturally, we are most interested in *The Project 50* but the others are important as well.

Now for the seminars appropriate to the Principal Skill Set.

*Appraise Your World* was created by the Management Research Group of Portland, Maine. Where do your decision styles come from

and how do they compare with a like group? Everyone is affected by a Professional/Public Self, Leisure Self, Personal Self, and Inner Self. Each of these factors includes four or five subfactors. The importance you place on each of these subfactors affects the way and ways you make decisions. *Appraise Your World* collects your response to these individual subfactors and compares them to a norm. The purpose is to give you an insight to how and why you make decisions and how you relate to your peers. Such inclinations will affect how you progress in your career, among other things.

The *Leadership Decision Styles Survey* was created by the Center for Creative Learning in Greensboro, North Carolina, and is usually presented by company training departments whom they certify in the process. Each company is franchised to handle the course. Using a series of case studies, the leader (you) decides how he or she will handle the decision required for each case by using one of the five methods as a basis. The results are analyzed by plotting your decision style against the recommended decision style for each case and then summed into a decision profile that represents you. The five decision styles form a spectrum, from making the decision alone to making a decision with the entire team involved.

### **Suggested Reading**

Englund, Randall L., Robert J. Graham, and Paul C. Dinsmore. *Creating the Project Office: A Manager's Guide to Leading Organizational Change*. San Francisco: Jossey-Bass, 2003.

Farkas, Charles M., and Phillippe De Backer. *Maximum Leadership*. (New York: Perigee Books, 1998.

Harrington, H. James. *High Performance Benchmarking: 20 Steps to Success*. New York: McGraw-Hill Trade, 1995.

Hendricks, William, ed. *Coaching, Mentoring, and Managing*. Franklin Lakes, N.J.: The Career Press, Inc., 2001.

Kaplan, Robert S., and David P. Norton. *The Strategy-Focused Organization*. Boston: Harvard Business School Press, 2001.

Kerzner, Harold, and Peter J. Rea. *Strategic Planning: A Practical Guide for Managers*. New York: John Wiley and Sons, 1997.

Peters, Glen. *Beyond the Next Wave*. Englewood Cliffs, N.J.: Financial Times Prentice Hall, 1996.

Peters, Tom. *Reinventing Work Series*. New York: Alfred A. Knopf, 1999.

Toffler, Alvin. *The Third Wave*. New York: Bantam Books, 1984.

### **Seminar Contacts**

*Appraise Your World*

Management Research Group

14 York Street, Suite 301  
Phone: 207 775-2173  
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E-mail: [Info@mrg.com](mailto:Info@mrg.com)  
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*Leadership Decision Styles Survey*  
Center for Creative Leadership  
One Leadership Place  
P.O. Box 26300  
Greensboro, NC 27438  
Phone: 336 545-2810  
Fax: 336 282-3284  
E-mail: [Info@Leaders.ccl.org](mailto:Info@Leaders.ccl.org)  
Web site: <http://www.ccl.org>

In this part we talked about the preparatory skills as well as the company, customer, and industry skills you need for project management. Then we went into each of the five levels and showed what subject areas were necessary to satisfy the needs of each level. We found that exposure to all the subject areas was desirable at every level but concentration on certain subject areas was essential in order to be competent at a specific level.

One thing I hope you learned in this part is that project management learning is progressive. It is progressive in both scope and depth. It is a learning process that never ends. This part presented those subject areas necessary for basic project management training and for getting a good start in expanding that basic training to advanced, expert, specialist, principal levels, and beyond.

Part III will build on this start and give you insight into more expertise through additional reading, workshops, and seminars.

## Notes

1. Also available at: <http://www.aipm.com.au/html/ncspm.cfm> >Downloads (several).
2. Also available at: <http://www.apm.org.uk/copyright/next.htm> (document requires registration).
3. Also available at: <http://www.ipma.ch/> >Certification >IPMA Competence Baseline Download.
4. For an excellent comparison of the PMI PMBoK and PRINCE2, see: <http://www.pmforum.org/library/papers/Prince2vsGuide3.htm>.
5. Dr. Chester L. Karrass, *Effective Negotiating* (New York: HarperBusiness, 1994), see: [www.karrass.com](http://www.karrass.com).