

lean-ISD

lean Instructional Systems Design
via the PACTSM Processes for T&D

The CADDI Newsletter

Spring 1998

Vol. 1, Issue 2

The CADDI staff wishes to thank all of our clients for the tremendous support and encouragement for our new enterprise.

“Things have started off very well; we’ve been very busy,” said Guy Wallace, one of CADDI’s co-founders. “PACT projects to transfer our technology, design Curriculum Architectures, and develop performance-based training have kept us hopping.”

“The CADDI infield has had it the toughest, but they’re not complaining.”

An overview of what we’ve been up to, PACT *project-wise*, starts on page 5.

Developing the PACT Practitioner with the PACT Process Workshops

The latest numbers are in: so far, the CADDI staff has trained more than 150 ISD practitioners in our PACT Processes for T&D.

“One of the better—more practical workshops I’ve been in since Moby Dick was a minnow,” was how one workshop participant put it.

Yes, we are trying to figure out exactly what they meant by that. Other feedback is more specific.

“This workshop contained good rigor which is important to develop consultants . . . simulation exercises are the best thing you can do to develop consultants. This gives them practical experience.”

“The tools and concepts learned are extremely valuable and greatly appreciated.”

“Hands-on exercises are invaluable.”

Our proprietary *lean-ISD* processes can provide both ISD customers and ISD suppliers with *visible, predictable ISD*.

Our PACT Process workshops have evolved over the past ten years to their current state, and are available for delivery onsite for either 8 or 16 participants.

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Performance Modeling – the Heart of the PACT Processes for T&D

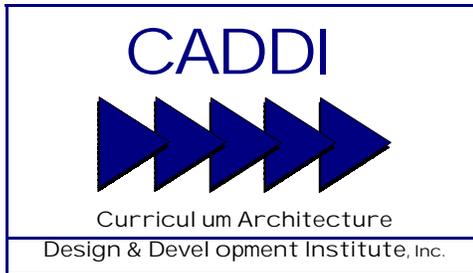
The key to the PACT Processes’ success in terms of ISD and performance-based instructional integrity is the Performance Analysis, documented in the *Performance Model (PM)*.

The PM, generated with the input from a designated Analysis Team of master performers and subject matter experts, provides an illustration of both ideal performance and actual performance via a gap analysis.

The information in a PM (left half) includes the *ideal* performance:

- ◆ The *segments* or Areas of Performance (AoPs)
- ◆ The outputs produced and their key measures/metrics
- ◆ The tasks performed to produce the outputs
- ◆ The roles and responsibilities for task performance

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“The key goals of the PACT Processes are to enable ISD projects to be more predictable in their quality, cycle time, and costs.”

From the Archives . . . Performance Models We Have Known

The PACT Process for Analysis in the hands of a competent facilitator with some ISD experience and/or education is as effective as the Analysis Team assembled to define the performance expectations, identify the major gaps in performance, and identify the enabling knowledge and skills.

We on the supply-side of ISD contribute our ISD knowledge and experience and our methods and processes. We expect the customer-side of the ISD process to provide master performers and subject matter experts for bench-marking their collective wisdom of the best-in-class performance. Their insights from experiences, both successes and failures, are captured quickly in an organized, collaborative manner. The focus is first on the performance being analyzed, and next on the knowledge/skill enablers.



ISD Suppliers

ISD Customers

Our collective experience in developing Performance Models for a variety of roles is both broad and deep—only proving that you don’t have to be an expert yourself to facilitate an analysis of performance.

Some roles we have analyzed are product managers in telecommunications, ISD professionals in accounting, information technology, merchandising managers in oil retail, as well as oil-convenience store operations, gas pipeline operations and maintenance personnel on the north slope at Prudhoe Bay and also on the Alaska Pipeline, automotive engineers, NASA management, and gas pipeline personnel in the southeast.

A complete list of the Performance Models we have helped our clients construct will soon be available on our Web site—stay tuned!

The CADDI Crew . . .

Moving soon to a new location—CADDI on the Riverwalk of Naperville

The CADDI crew will soon be packing for a move to our new quarters . . . in downtown Naperville, Illinois, about three miles from our current location. Mid-April is the official construction projected move-in date.

Our new home is the former city hall. Guy gets the mayor’s old office location, which sits on the second floor overlooking the historic Riverwalk; within site of water, a riverside parkway of grass, trees, ducks, a wooden footbridge, and a fountain. Across the street is the town library, and within a four-minute walk, about 20 restaurants.

The new space features a large conference room and a breakout area for our various PACT workshops and Project Team meetings. This will easily accommodate up to 16 budding PACT Practitioners with each delivery. This is good news for our clients wishing to train small numbers without waiting for their need to reach eight learners.

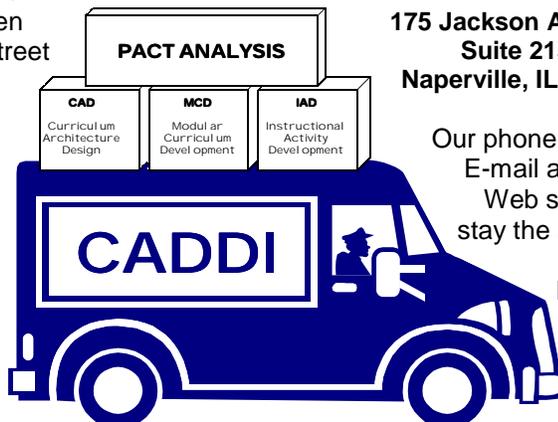
We are also now better equipped to conduct many of our PACT Process project meetings at our site – a great convenience for CADDI clients needing to pull in people from around the country for Steering Team, Analysis Team, Design Team, and all other PACT project team meetings.

Our new address is

**175 Jackson Avenue
Suite 215
Naperville, IL 60540**

Our phone, fax,
E-mail and
Web site
stay the same.

Please
up-
date
your
files!



**The
PACT
Processes
for
T&D**

Performance-
based
Accelerated
Customer-/
Stakeholder-
driven
Training &
Development

lean-ISD

**Visible
&
Predictable**

Giving back to our profession is important to the CADDI staff. That's why we present to local professional chapters and are a Patron Member of ISPI.

CADDI 1998 Conference Presence

ISPI Conference
Chicago, IL
March 24-27, 1998
Booth #422

Expo hours:

Tue.: 5:30-8:30 p.m.

Wed.: 10:00 a.m.-
6:00 p.m.

Thu.: 9:00 a.m.-
3:30 p.m.

Guy and Pete will present "*lean-ISD*" on March 26.

They will host "*lean-ISD* applications" on March 27—a session where 9 of our clients will provide highlights and their lessons learned from experiences and uses of *lean-ISD* using our CAD methodology.

Pete will co-present with Dottie Soelke on Determining the value of Performance Opportunity.

*Please join us
at ISPI in Chicago!*

Institute for International Research

New Orleans
June 23-24, 1998

We will present on Performance Modeling and *lean-ISD*.

The PACT Processes on the road and at conferences near you

- ◆ Guy delivered a short session on Performance Modeling at the **Michigan chapter of ISPI** this past January.

He said it was good to be back at his first ISPI chapter, when it was known as MSIT (Michigan Society of Instructional Technology) of National Society for Performance & Instruction (NSPI)!

- ◆ Guy and Pete presented CADDI's *lean-ISD* approach at **Lakewood's Training '98** in Atlanta. For copies of the handout, please call Jennifer Corman. We saw a couple of old friends and former clients there, and got a "Rummler shot," too.

- ◆ Coming up this March 24th through the 27th in Chicago, CADDI will deliver three sessions at **ISPI**.

Guy and Pete present on *lean-ISD*. They also host five clients in a series of crackerbarrel style presentations on their experiences in PACT Process projects. Clients include Bandag, Inc., Eli Lilly, Hewlett-Packard, General Motors, and Imperial Oil of Canada.

ISPI and what it means to CADDI

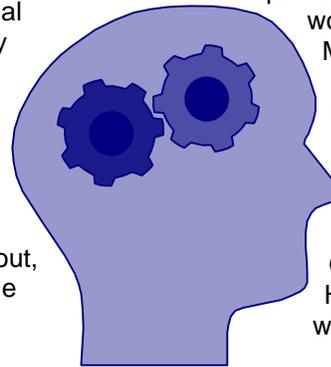
CADDI is a Patron Member of the International Society for Performance Improvement. You may wonder why we chose to do that so early in the life cycle of our new business. CADDI founders Guy Wallace and Pete Hybert feel that ISPI brings many benefits for themselves, their staff, and their business.

Guy said, "ISPI is where the technological edge is for ISD *and* performance technology. This is a great place for our staff to continue our professional development, as well as that

Pete, along with Dottie Soelke of SWI Consulting, will co-present on Determining the Value of a Performance Opportunity.

Guy will end his year as the chairperson for the **ISPI Awards of Excellence** committee, and Pete, last year's deputy chair, will take over as chairperson for next year. That will end our 5+-year involvement with this committee. (If you know anyone interested in serving as deputy chair next year, please contact Pete.)

- ◆ At the end of June, Guy and Pete will present a four-hour postconference workshop on Performance Modeling and *lean-ISD* at the **Institute for International Research's** conference for Effective Training Strategies for Retaining and Developing Your High-Tech Workforce. The conference is June 23-24 in New Orleans at the Crowne Plaza Hotel, and the postconference workshops will be held on June 25. Call Zhana Girvant of the IIR at 212/661-3500 x3709 for details.



Think *lean-ISD*

- ◆ Any local chapter of ISPI or ASTD that is interested in a presentation by a CADDI staff member on *lean-ISD* processes and methodologies should contact us to discuss the specifics.

Please call Jennifer at 630/355-9800. For more information on *lean-ISD* via the PACT Processes, please visit our Web site.

of our clients."

Pete agrees with Guy. "ISPI has consistently resisted chasing after the fads that sweep the world of training to remain focused on what really matters—improving human performance. Ironically, I have seen ISPI lead the pack when it came to total quality management principles, measurement, use of performance aids, use of electronic support tools, and the like. But in each case, the focus was the the results, not on the buzzwords."

It's all about performance.

The CADDI PACT Process workshops are designed to build your skills in the application of *lean-ISD*.

Developing the PACT Practitioner

(Continued from page 1)

Our workshops take teams of eight participants through parallel exercises to increase the amount of platform time each learner gets to practice what we preach.

Each team has a dedicated facilitator to guide, coach, and provide feedback during extended exercise debriefings. Much can be learned from others' practice applications.

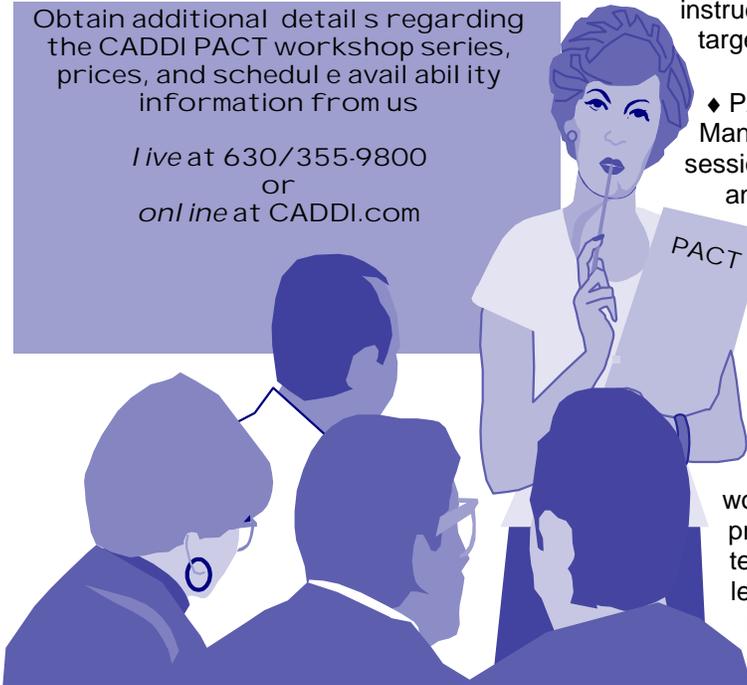
Each PACT practitioner practices facilitating the teams of master performers and subject matter experts in the PACT processes, using structured but flexible methods in a visible, predictable approach to instructional systems design/development . . . or *lean-ISD*.

The four PACT Process workshops are

- ◆ PACT Analysis—Five days in an intense series of fast-paced lectures and hands-on

Obtain additional details regarding the CADDI PACT workshop series, prices, and schedule availability information from us

Live at 630/355-9800
or
online at CADDI.com



simulation exercises to build your skills in facilitating an Analysis Team to produce a Performance Model and Knowledge/Skills Matrices—the heart of the PACT Processes for T&D!

- ◆ PACT CAD (Curriculum Architecture Design) Design—Five days of intense work

using the PACT analysis data to “systems engineer” the architecture of the T&D product line. A modular design approach from the worlds of lean-engineering and lean-manufacturing can save tremendous amounts of cycle times, development/deployment costs, and maintenance costs for the suppliers of performance-based T&D. *Learning by Design with the PACT Processes for T&D*.

- ◆ PACT MCD (Modular Curriculum Design) Design—Five days of intense work using the PACT Analysis data in the highly structured, *lean-ISD* design methodology to design performance-based T&D. The MCD design details the instructional Activities, within the Lessons, within the Modules that are within the T&D Events. The design provides guidance for the developers of modular T&D Events and leads toward greater reuse of component instructional content across many target audiences in the future.

- ◆ PACT Project Planning & Management—An initial two-day session of intense exercises, with an interim, on-the-job exercise to produce a real Project Plan, followed by another two-day session. Intended for an experienced PACT Practitioner with experience in multiple CAD and MCD projects.

Each PACT Process workshop has required pre-readings, pre-session testing, not-too-boring lecturettes, and plenty of role-plays and hands-on simulation exercises. They are designed for learning from others' efforts and

building skills yourself *when it's your turn to be up*. Each workshop ends with both a written test and performance test for PACT Process certification assessment.

All PACT Practitioners and their credentials will soon be listed on the CADDI Web site.

lean-ISD

The PACT Processes are *lean* because they shorten cycle times, reduce incurred expenses, and improve the quality of the outputs. The PACT

Processes are *lean* due to their use of teams, templates, tools, and a defined ISD process. PACT provides a common process—a common approach for the conduct of ISD by T&D professionals.

The PACT Processes enable visible/predictable ISD: lean-instructional systems design/development.

The PACT Processes include:

CAD
Curriculum Architecture Design – Systems Engineering of T&D Product Line

MCD
Modular Curriculum Development – New Product Development of the T&D Products

IAD
Instructional Activity Development – Development of Instructional Components

CADDI Applications News Update... Current PACT Process projects

- ◆ Kelly Rennels and Guy are co-conducting a PACT Process MCD project for a maintenance and customer care organization at AT&T.

We facilitated an Analysis/Design Team to build a detailed set of design specifications and are now developing T&D Events and Modules with designated master performers and subject matter experts for on-line deployment on an intranet.

This series of structured learnings being developed from the detailed design involves navigating Web-style pages and other links for reviewing existing organizations' home pages/Web sites, plus many structured, on-the-job observations and exercises to develop competence gradually.

This project followed a CAD project conducted last fall by Kelly.

- ◆ At Bandag, Deb Arndt and Guy are co-conducting an MCD project to develop several Events and Modules from a CAD completed last year.

This MCD project is targeted at franchise production managers responsible for the heart of their business—the repair and/or retreading of truck tires.

- ◆ Deb is spending a lot of her time at General Motors University (GMU) where we are conducting a PACT Process Technology Transfer (PPTT) project.

This project is a multiyear effort, guided by a licensing agreement for GMU's global use of the PACT Processes for T&D (known internally at General Motors as Modular Curriculum (MC), and Modular Instruction (MI)).

- ◆ The overall goal is to reduce life cycle costs and new product development cycle times for performance-based T&D. The adapted PACT Processes of MC/MI and the extensive set of tools and templates of PACT provide a common process for lean-ISD.

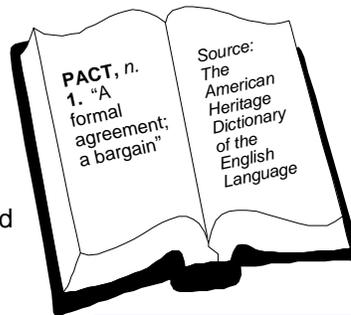
The MC and MI versions of the PACT Processes are being transferred through a series of demonstration projects and workshops intended to internalize quickly the capability of conducting CAD and MCD projects not only with GMU staff, but also with their key ISD strategic partners' staff.

All four CADDI consultants are supporting this transfer where more than 100 have currently been trained and certified.

- ◆ At Landis & Staefa, a division of Siemens specializing in building controls, Pete and Kelly are involved in a series of CAD and IAD projects as part of the corporate initiative to reduce "time to performance."

The CAD is being conducted for most of the field populations.

The IAD effort involves the development of performance tests (being used as qualification instruments) and administration processes and tools to ensure implementation, operations, and maintenance of the system.



T&D Customers/ Stakeholders T&D Staff



CADDI's PACT Processes for T&D:
Address T&D better, faster, cheaper!

- ◆ Kelly has recently finished a project for NOVA Gas Transmission, Ltd., in the Calgary area of Alberta Canada. She conducted an analysis effort with a team of master performers and subject matter experts to produce a Performance Model and Knowledge/Skill Matrices for the Prioritize, Coordinate and Schedule (PCS) Process of the Facilities Maintenance Area. The project was also conducted to demonstrate the key PACT Analysis Process in-house, so NOVA management could assess the possibility of a PACT Process Technology Transfer.

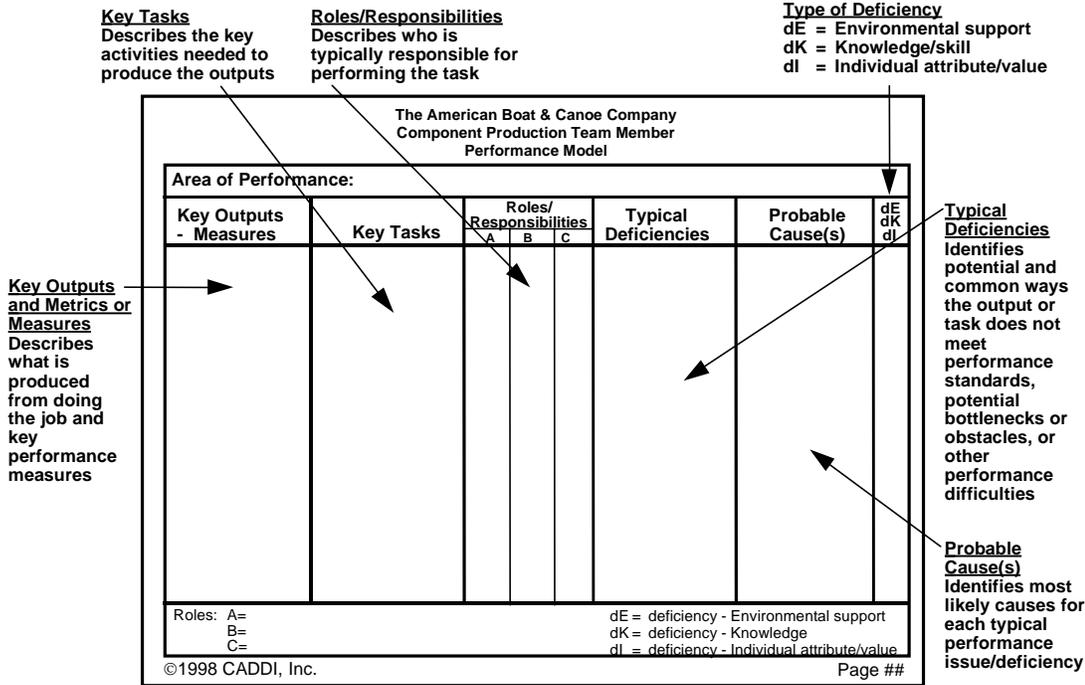
Performance Modeling

(Continued from page 1)

The PM format is presented below.

PACT Analysis includes Target Audience Data, Performance Modeling, Knowledge/Skill Analysis, and assessment of existing T&D.

Each PM chart represents an Area of Performance (AoP). The AoPs are our segmentation scheme for the performance



Areas of Performance (AoPs) are our segmentation scheme for dividing and conquering the analysis of human performance within business processes

The information in a PM also captures and articulates the *real* performance via a gap analysis (right half), which captures and presents the

- ◆ Typical performance gaps (where standards for measures at any level are *typically* not being met by the job incumbents)
- ◆ Probable causes of those gaps
- ◆ Differentiation of those causes into one or more of three categories of cause
 - dE: deficiency of environmental supports
 - dK: deficiency of knowledge and skills
 - dI: deficiency of individual attributes and values

PMs may be developed for an entire organization, a function, a job, a major or minor task, or a business process.

within the scope of our project. This AoP “chunking” of the wholistic performance allows us an opportunity to systematically slough through detailing the process/job/task until done. Without it, “task analysis” can quickly turn into analysis paralysis.

The trickiest part of the PM is getting a good set of AoPs defined before launching into detailed data gathering and analysis. That takes some knowledge on the part of the facilitator of how the downstream PACT Process uses the AoP framework and how much variation the PACT Process can tolerate. These variations affect the downstream K/S Analysis methodology, which immediately follows Performance Modeling and the later CAD and MCD design methodologies.

The graphic on the following page depicts the AoPs for an account representative of a fictitious company.

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**The Performance Model
is the heart of the
PACT Process Analyses.**

dl: *deficiency of individual attributes and values*

- ◆ T&D cannot solve these deficiencies; only a change in the selection system can affect these issues. (And T&D might be targeted at the managers or others responsible for recruiting, selecting, and hiring of the target audience.) The dIs can be caused by deficiencies in one or more of the individuals' attributes and values, including the following:
 - Intellectual attributes
 - Physical attributes
 - Psychological attributes
 - Values

The Performance Model is a powerful device for both processing and then capturing front-end analysis data. It can then be used for all types of follow-on analysis, such as knowledge and skills, personality traits and characteristics, even enabling competencies!

The Performance Model documents ideal performance and actual performance via a gap analysis . . . and enables additional analysis of knowledge/skills and attributes/values

Performance Modeling

(Continued from page 6)

Back to the dEs, dKs, and dIs. These categorize the probable causes for the barriers to superior, high performance.

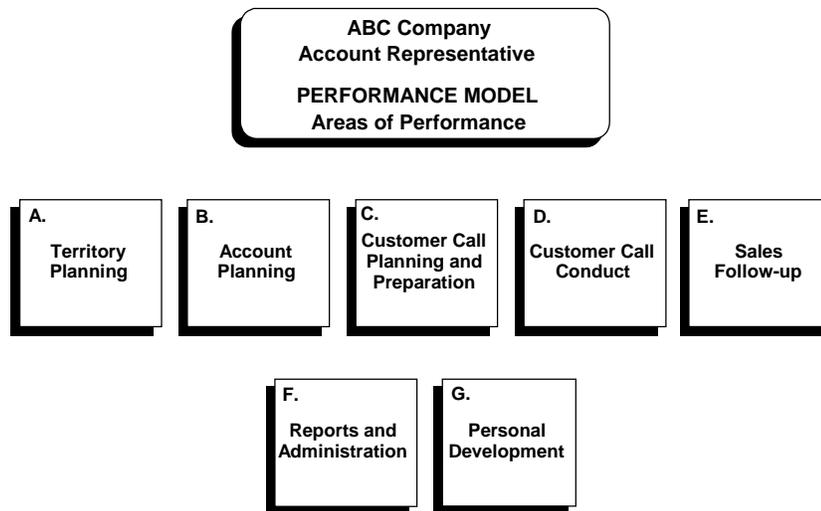
dE: *deficiency of environmental supports*

- ◆ Environmental supports may be deficient and impede high performance. T&D cannot solve these deficiencies. T&D can only give the learner a heads-up that these are part of the imperfect world that they'll have to learn to deal with to be successful. The dEs can include the

- Facilities
- Materials
- Methods/procedures
- Financial resources
- Consequence system
- Information/data

dK: *deficiency of knowledge and skills*

- ◆ Knowledge and skills of the incumbent performers may be deficient, causing them to have difficulties in performing the tasks required for producing the desired outputs to the appropriate metrics/measures and standards. T&D can usually solve these deficiencies unless dIs and dEs also exist.



But look . . . the Performance Model already defines the business process (terminal) competencies! All that is required is to further tease out the enabling competencies, whether they be knowledge/skills and therefore trainable, or the nontrainable selection criteria.

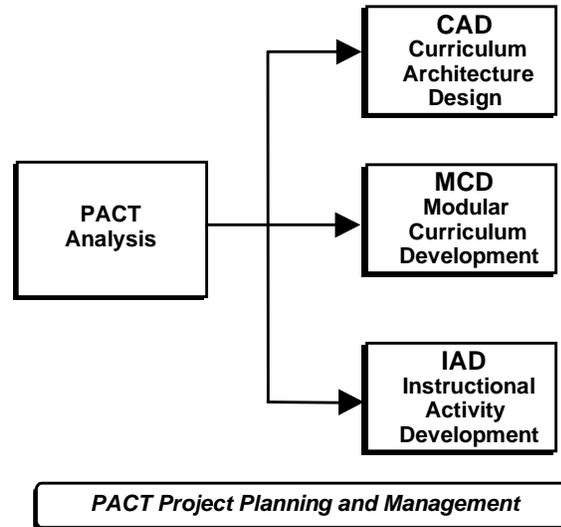
Performance Modeling is best accomplished in a group forum, where you can quickly build consensus. It benchmarks the organization's master performers and always works when led by a skilled and knowledgeable facilitator.

Good luck and good performance!

lean-ISD

via the PACT processes

Performance-based
Accelerated
Customer-/Stakeholder-driven
Training & Development



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Please note CADDI's new numbers/address
as of mid-April 1998

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Web: www.CADDI.Com

Please visit our web site.
We update it quarterly, at the change of the seasons.
We'd appreciate any feedback you care to provide us.
Thank you.
