

LEGISLATIVE BILLS: DESIGN CRITERIA AND ASSESSMENT

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PROBLEM

POOR PERFORMANCE

OF LAWS

(CALIFORNIA)

**SEARCH
CAUSE FOR
POOR PERFORMANCE**

PROJECT

COMPARE ENGINEERING
AND LAWMAKING
DESIGN PROCESSES

INVESTIGATION

CONTENT DESIGN CRITERIA

CALIFORNIA SENATE BILLS

2015-16 LEGISLATIVE SESSION

CONCLUSION

EXISTING LEGISLATIVE

DESIGN PROCESS

FLAWED, INADEQUATE

RECOMMEND

ESTABLISH

SCIENTIFIC BASIS FOR

THE RULE OF LAW

DISCUSSION POINTS

- SCIENCE
- GOVERNMENT
- RESEARCH PROJECT
- RESULTS
- CONCLUSION

SCIENCE

SCIENCE

TWO BRANCHES

- INVESTIGATIVE SCIENCE
- CREATIVE SCIENCE

INVESTIGATIVE SCIENCE

Knowledge + Tools +

Scientific Method 

Reliable Knowledge

CREATIVE SCIENCE

Knowledge + Tools +

Method  New Tools

 Problem Solution*

PURPOSE

INVESTIGATIVE SCIENCE

Accumulate Knowledge

CREATIVE SCIENCE

Solve Problems

ALL SCIENCE

Knowledge + Tools

+ Method 

Knowledge + Tools*

ALL SCIENCE

SUCCESSFUL

- GROWING KNOWLEDGE
- PROBLEM SOLUTION*

**INVESTIGATIVE
SCIENCE SUCCESS:**

**SCIENTIFIC
METHOD***

CREATIVE SCIENCE

SUCCESS:

PROBLEM SOLVING

METHOD (PSM)

PROBLEM SOLVING METHOD

Problem definition and analysis
Purpose statement
Solution innovation & design*
Costs, risks, boundaries

PROBLEM SOLVING METHOD

Testing and refinement
Follow up evaluation
Citation of references
Sign off by designer(s)

PROBLEM SOLVING METHOD (PSM)

**Only Reliable Method for
Solving Complex Problems***

GOVERNMENT

DECLARATION OF INDEPENDENCE

PURPOSE OF GOV'T:

SECURE THE RIGHTS AND
LIBERTY OF THE PEOPLE

RIGHTS - LIBERTY

- **HUMAN RIGHTS**
- **LIVING STANDARDS**
- **QUALITY OF LIFE**

GOVERNMENT OBLIGATION

Solve Problems That Degrade
or Threaten to Degrade
Rights and Liberty

LAWS

- PROBLEM SOLVING
MEANS OF GOV'T
- TOOLS - USEFUL

GOVERNMENT BRANCHES - LAWS

- **LEGISLATIVE - CREATE**
- **EXECUTIVE - ENFORCE**
- **JUDICIAL - APPLY**

LAWMAKING (LEGISLATURE)

LEGISLATURE

PURPOSE

SOLVE PROBLEMS

LEGISLATURE PURPOSE

IDENTICAL TO

CREATIVE SCIENCE:

- **SOLVE PROBLEMS**

LEGISLATURE

MEANS

CREATE LAWS*

**LEGISLATURE MEANS
IDENTICAL TO
CREATIVE SCIENCE:**

- **CREATE TOOLS
(RULE OF LAW)**

**LEGISLATURE
MEANS AND ENDS**

RULE OF LAW

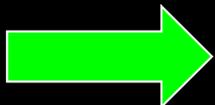


**SATISFIES PURPOSE
OF GOVERNMENT**

LEGISLATIVE PROCESS

Ideas + Method

 **New Laws**

 **(Solve Problems)**

LEGISLATIVE PROCESS DESIGN METHOD

- “Mental Modelling”
- Ideation, Reasoning
- Socratic Method, Debate

LEGISLATIVE PROCESS

TWO PRINCIPAL STEPS

1) Bill Drafting*

2) Legislative Session

LEGISLATIVE PROCESS

Idea → (1) Bill Drafting

→ (2) Legislative Session

→ New Law

RESULT

LEGISLATIVE PROCESS

SUCCESS

- **MANY NEW LAWS**

(California = 8879 Statutes; Years 2000 – 2009)

**RESULT OF
LEGISLATIVE PROCESS:**

FAILURE

- **PROBLEMS NOT SOLVED**

FAILURE OF LAWS

- **Illiteracy, Pensions,**
- **Homelessness, Poverty*,**
- **Unemployment, Debt...**

PRESENT RULE OF LAW

-- FAILS --

PURPOSE OF GOVERNMENT

CONTRAST*

**CREATIVE SCIENCE
SUCCESSFUL**

**LAWMAKING
NOT SUCCESSFUL**

REASON FOR SUCCESS VS FAILURE OF OUTCOMES?

Engineering vs Lawmaking

- Intellect of Designers?
- College Education?
- Design Method?

REASON FOR FAILURE OF LAWS?

**COMPARE LAWMAKING
METHOD WITH PROBLEM
SOLVING METHOD**

RESEARCH PROJECT

RESEARCH PROJECT

**EXAMINED LEGISLATIVE
BILLS FOR CONTENT OF
PSM DESIGN CRITERIA***

RESEARCH PROJECT

- **Bill Drafting Step (Design)**
- **California Senate**
- **2015-16 Legislative Session**
- **1480 Bills Submitted**

RESEARCH PROJECT

**10% Random Sample
(Every 10th Bill)**

Total of 144 Bills Examined

RESEARCH PROJECT

PSM CRITERIA CONTENT IN BILLS:

- **Number, Title, Sponsor**
- **Problem Definition**
- **Problem Analysis**
- **Purpose Statement (Intent)**
- **Cost Estimation (8 Separate Costs)**

RESEARCH PROJECT

PSM CRITERIA CONTENT IN BILLS:

- Risk of the Law to the Public
- Sanction (Forcing Mechanism)
- References (Knowledge Base)
- Follow Up Evaluation Measures
- Name of Designer(s)

RESEARCH PROJECT

Cost Estimate Categories

- C1 Research and Development (Modeling)
- C2 Pro-rata Legislative Branch
- C3 Promulgation
- C4 Drain from Treasury
- C5 Enforcement
- C6 Compliance / Public
- C7 Court Costs
- C8 QA and QI

RESULTS

RESULTS (% of 144 Bills)

Number, Title, Sponsor	100 %
Problem Definition	50 %
Problem Analysis*	6 %
Purpose Statement	60 %
Cost Estimation	38 %

* 41% Zero; 53 % Anecdotal / Incomplete

RESULTS

Risk Analysis	0 %
Sanction	100 %
Reference Citation	10 %
Follow Up Measures	1 %
Name of Law Designer	0 %

RESULTS

COST ESTIMATES

C-1 Research Development	0 %
C-2 Legislative Session	0 %
C-3 Promulgation	12 %
C-4 Drain from Treasury	28 %

RESULTS

COST ESTIMATES*

C-5 Enforcement	10 %
C-6 Court System	5 %
C-7 Compliance (by Public)	3 %
C-8 QA and QI	0 %

RESULTS

**One or More Essential Elements
of PSM Were Absent in Every
Bill (Knowledge Base, Cost/Risk
Analyses, Follow-Up...)**

RESULTS

Present State of Art Law Design:

No Problem Definition

No Purpose Statement

No Cost / Risk Analyses

No Basis in Knowledge

No Follow Up Evaluation

RESULT OF DESIGN DEFECTS AND OMISSIONS:

Law-Risk to Public:

Ineffective – Unnecessary

Cumbersome – Wasteful

Harmful Side Effects

Exacerbate Problems

RESULTS - COMPARISON

CREATIVE SCIENCE

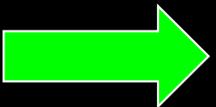
VS

LAWMAKING

CREATIVE SCIENCE

Knowledge + Tools +

PSM  New Tools

 Problem Solution

LEGISLATIVE PROCESS

~~Knowledge~~ + ~~Tools~~ +

Ideas, Debate, Reasoning

 New Laws

~~(Outcome Evaluations)~~

LEGISLATIVE PROCESS

ENDS WITH NEW LAW



**DOES NOT PROCEED
TO PROBLEM SOLUTION**

**“Once an act is passed,
the legislature’s job is
done.”**

**Davies, Legislative Law and
Process V***

CONCLUSION

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Lawmaking is not a
Problem-Solving Process*

CONCLUSION

**Legislatures Attempt To
Solve Problems with a Process
That Does Not Have Problem
Solution as Its Objective**

CONCLUSION

**By Its Lack of Standards, The
Present Legislative Process
Is Not Capable of Satisfying
The Purpose of Government**

CONCLUSION

**By Its Lack of Standards, the
Legislative Process Poses a
Threat to the Public from the
Production of Defective Laws**

RECOMMENDATION

RECOMMENDATION

**Legislatures Correct the
Defects and Omissions of
the Legislative Process**

RECOMMENDATION

Legislatures Adopt the
Problem Solving Method
as the Basis of Lawmaking*
(Bill Drafting Step)

PREDICTION

PREDICTION

PSM as Basis of Lawmaking:

**Lawmaking Becomes a
Problem-Solving Process**

PREDICTION - PSM

Improvement of Laws:

- Effectiveness
- Cost Efficiency
- Reduce Side Effects
- User Friendly
- + Outcomes (Public Wellbeing)

PREDICTION - PSM

**Evolve Scientific Basis for
Laws and Lawmaking***

PREDICTION - PSM

Rule of Law Will Satisfy

The Purpose of Government*

THANK YOU

FUTURE RESEARCH

This Project Involved the Analysis of One Session of One Chamber of the California Legislature. Additional Studies Are Recommended to Support The Findings of This Study.