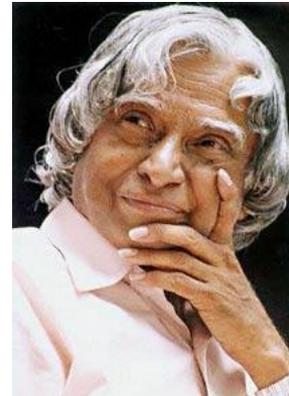


# SAEINDIA automotive SOP

Creating Human Capital for  
**India Vision 2020**



Detailed Report



## Current Situation

Students have very little industry knowledge  
Students get a shock when they join industry  
Mis-trust between institutions and industry  
Industry conduct own induction programs  
Institutes also conduct orientation programs

## Reasons

Institutions do not understand industry needs  
Industry does not understand curriculum and it has undue expectations  
Linkage between theory and practice unclear

## Effect

It takes long time before engineers contribute  
Many students leave their first companies in less than two years  
Industry unable to plan their human capital leading to slow growth  
Profitable growth of the country is affected

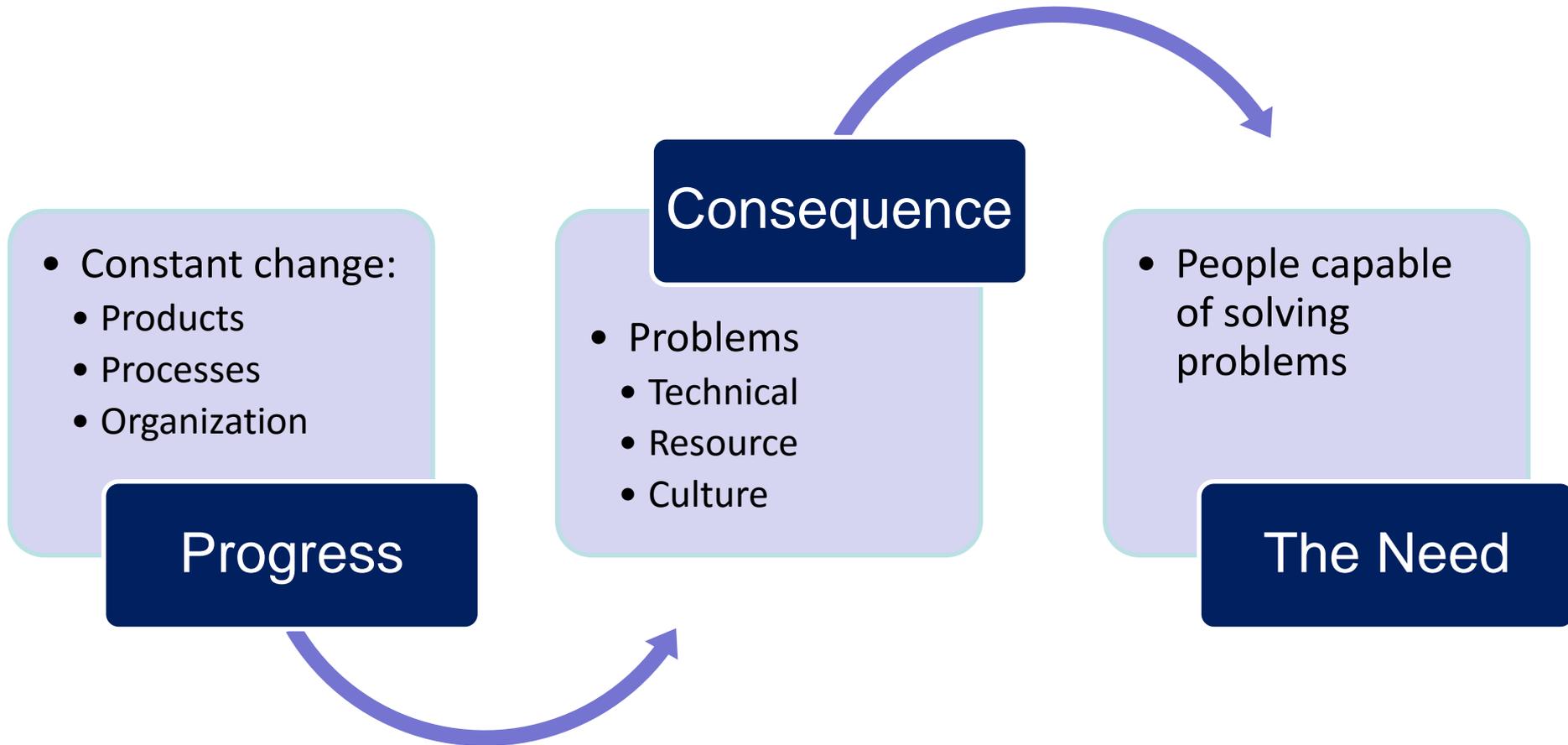
## Solution from SAEINDIA

### **SAEINDIA** automotive **SOP**

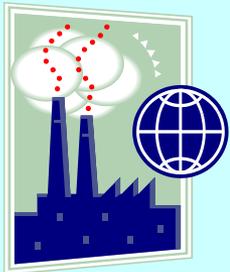
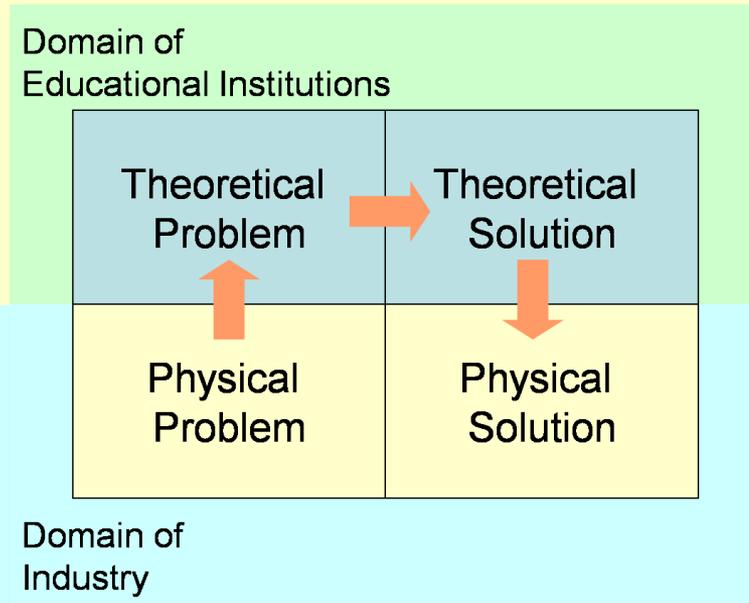
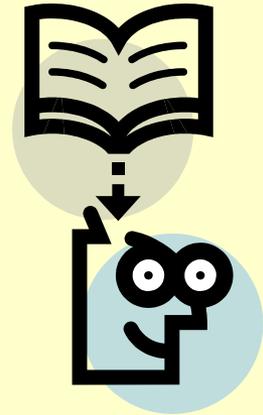
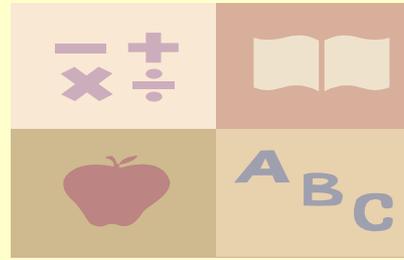
A complement to academic program  
introducing an effective problem solving  
process in collaboration with industry

## Expected Benefits

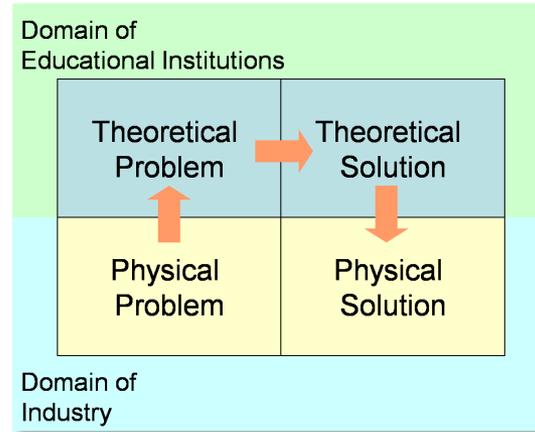
High quality engineers ready to take the challenges of industry  
Closer interaction between industry and institutions leading to higher cooperation  
Human engine to propel India to 2020 vision



Industry needs engineers to solve problems effectively



## Connecting Domains of Academy and Industry



**Physical Connection**

- Reverse Engineering



**Problem Solving**

- Vehicle Design, Prototype and Testing



**Industry Orientation**

- Project Perfect
- Effectiveness tools

**Three Step Process**



No	Module	Timing
1	Reverse Engineering - Basic	3 sem vacation
2	Survey Indian Vehicles	4 semester
3	Reverse Engineering Complete Vehicle	4 sem vacation
4	Literature Survey of Power Train Trends	5 semester
5	Vehicle Concept Definition	5 sem vacation
6	Sub-System Concept Definition	6 semester
7	Design	6 sem vacation
8	Fabrication and Test	7 semester
9	Industry Project Preparation	7 sem vacation
10	Industry Project Execution	8 semester
11	Effectiveness building	8 sem vacation

**11 modules spread over 5 semesters**



## Combination of

Instruct and Demonstrate

Observe and Discover

## Focus on Self-Learning

## Pareto principle

Cover only subjects that are used 90% of the times in industry

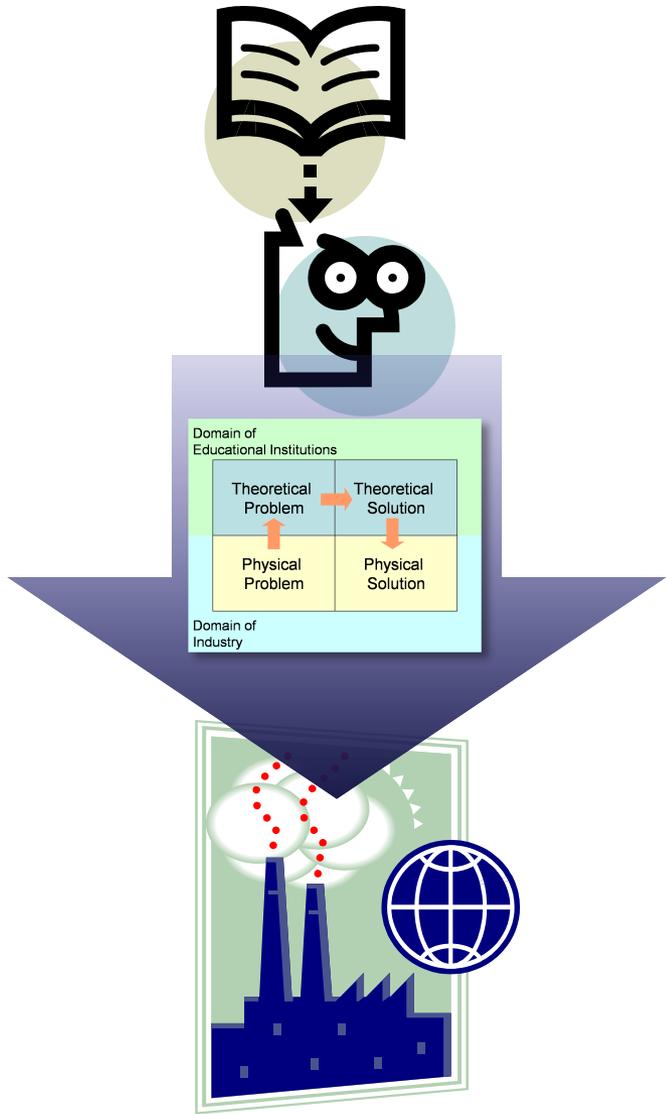
## Industry Volunteers as Coaches

## Trekking

Connection to nature and physical fitness

Character building through 7 habits

**Balanced, Enjoyable but Demanding**



# **SAEINDIA** automotive **SOP**

## **Students**

Great Opportunity to become industry ready!



# 3 compelling reasons!

## Placement

- Almost assured placement

## Industry appreciation

- Exposure to industry
- Projects coached by practicing engineers
- Skill development for industrial problem solving

## Skill set to succeed

- Problem solving
- CAD and productivity tools
- Communication and team working

Unique opportunity for students to become Industry ready!



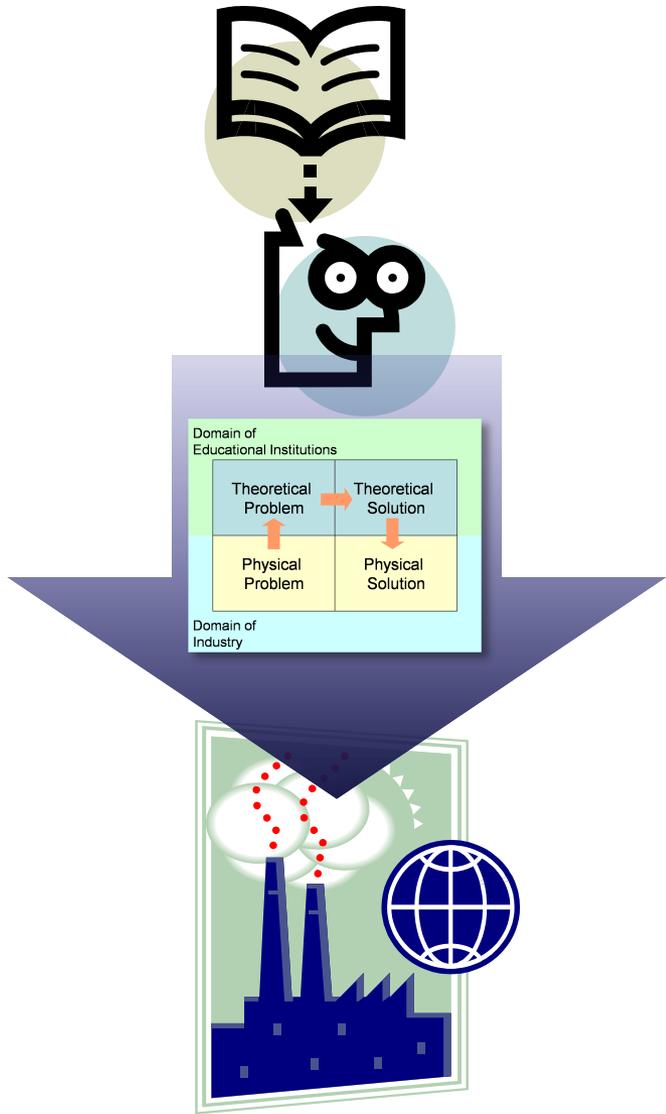
## Personal Commitment

High level of personal commitment is required  
Almost all semester vacations will be engaged

## Academic requirements

Starts with students in third semester  
No arrears allowed

**Basically high level of personal commitment required!**



# **SAEINDIA** automotive **SOP**

## **Institutes**

Great Opportunity for Engineering Colleges



# 3 compelling reasons!

## Window to Industry

- Interaction with practicing engineers and managers
- Creating facilities relevant to industry
- Industry projects

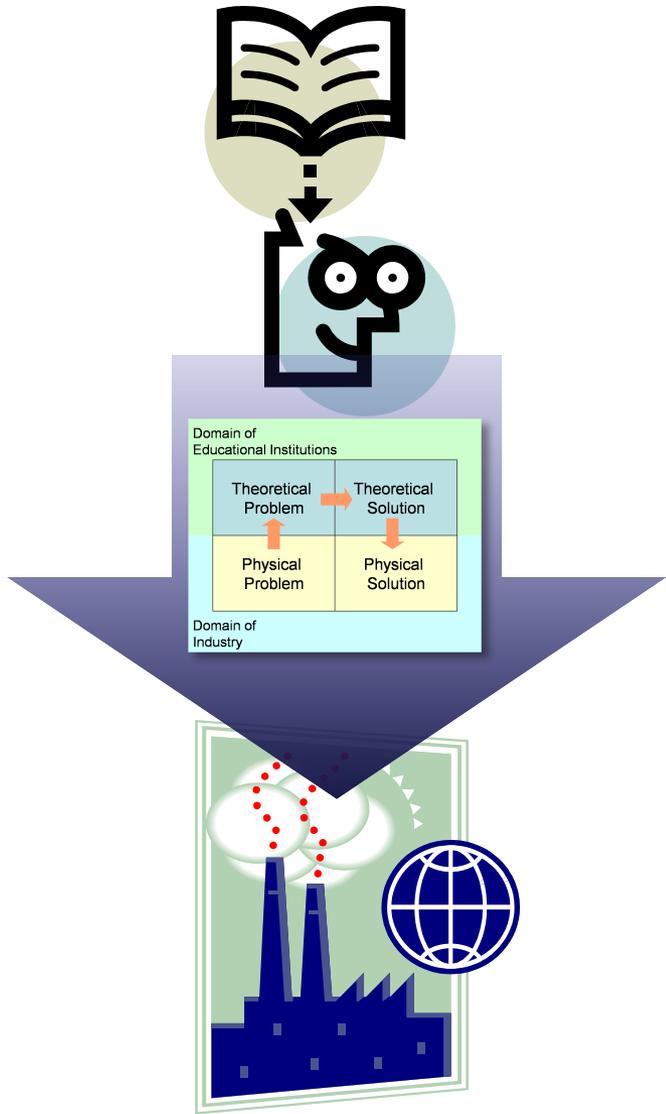
## Student Placement

- Exposure to industry
- Projects coached by practicing engineers
- Skill development for industrial problem solving

## Faculty Development

- Learning with practicing engineers and experts
- Capability to handle industrial projects and research
- Motivation to develop students and institute

Unique opportunity help students and connect with Industry!



# **SAEINDIA** automotive **SOP**

## **Lead Instructors**

Great Opportunity for Young Faculty



## 5 compelling reasons!

### Building Knowledge

- Physical connection
- Industry processes

### Better Teaching

- New teaching methods and tools

### Industry Projects

- Physical connection
- Industry oriented facilities in college
- Interaction with practicing engineers

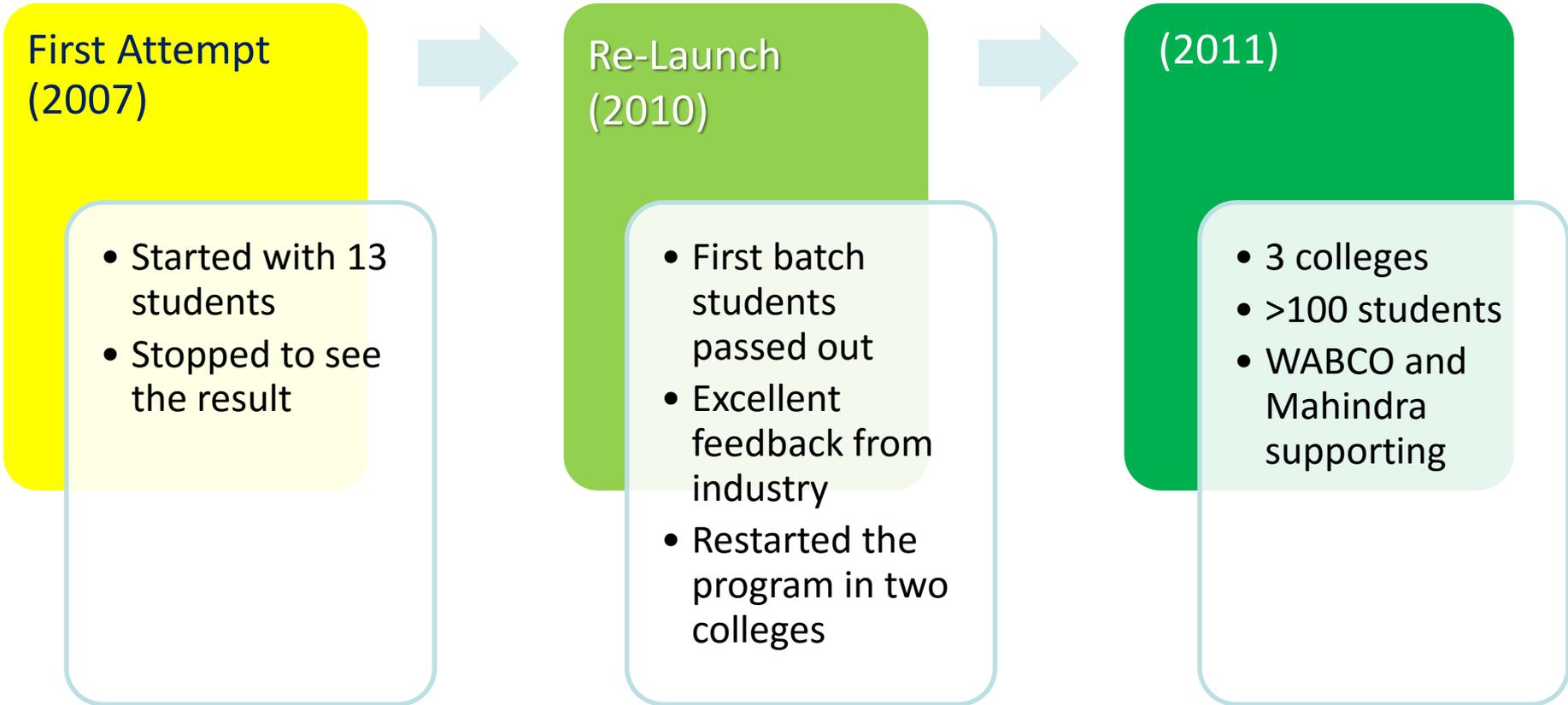
### Better Compensation

- Faculty fee + optional curriculum development activities
- Sponsored projects
- Faster professional growth

### Image and Respect

- in student community
- Practicing engineers
- College management

**Enhancing the Image as a Respected Teacher!**



**Benefits are confirmed and program is stable now!**

Let us work together to achieve

# India Vision 2020

