An Ounce of Analysis –
The Legacy of Joe Harless
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[www.exemplaryperformance.com](http://www.exemplaryperformance.com)
Carl Binder
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Introductions

Joe Harless, President – Harless Performance Guild

Paul Elliott, President – Exemplary Performance

Al Folsom, Vice President – Exemplary Performance

Carl Binder, Co-Founder - Performance Thinking Network
Revolution Evolutions…

Programmed Instruction

Instructional Technology
(Mathetics, ISD, TDS, ABCD and others)

Performance Technology
(Multi-interventions to improve human performance)
FEA is the Link…

Instructional Technology

Front-End Analysis

Performance Technology
Examples of CAUSES of Performance Problems not directly amenable to training solution . . .

- Lack of FEEDBACK
- Poor JOB DESIGN
- Too heavy WORKLOAD
- Insufficient PAYOFF
- Insufficient TOOLS/EQUIPMENT
- Lack of relevant CHARACTERISTICS
- Interfering organizational POLICY
- Poor INPUTS
- CULTURAL barriers
1. Have a problem?
2. Human performance problem?
3. The state without the problem?
4. Correct behavior?
5. Allocate resources to solve it? (Value?)
6. Possible causes?
7. Evidence?
8. Probable cause(s)?
9. General class of solution(s)?
10. Alternative sub-classes?
11. Cost, effects, times of each?
12. Constraints?
13. Goals of the project?
Accomplishment: An *output* that has value to the *goals* of the organization

Examples:

- Sales
- Touchdowns
- Stable reactor
- Diagnosis
- Validated Instruction
- Answers to customer questions
Performance Technology

Intervention(s)
- Feedback
- Work redesign
- Training
- Job aids

Behavior
- Assemble
- Decide
- Sell
- Gather data

ACCOMPLISHMENT
- Sales
- Touchdowns
- Stable reactor
- Diagnosis

Organization GOALS
- Profits
- Victories
- Competent Students
- Healthy Public
Performance Technology

1. Intervention(s)
2. Behavior
3. ACCOMPLISHMENT
4. Organization GOALS

Real Time Order

FEA order
Diagnostic FEA

1. Organization goal not being met?
2. Human accomplishment(s) not being produced?
3. Behavior not being done?
4. Cause(s) of behavior problem?
5. Intervention(s) needed?
Revolution Evolutions…

- Programmed Instruction
- Instructional Technology
- Performance Technology
- Organization Improvement
- Societal Improvement
Deficient Goal: *Schools not producing sufficient graduates who are prepared for employment.*

**Desired General ACCOMPLISHMENTS**

- Graduates have appropriate skills/knowledge for jobs in the area.
- Graduates have good “work ethic.”
- Supportive learning environment.
Deficient Goal: Schools not producing sufficient graduates who are prepared for employment.

Intervention: A charter high school with these characteristics…

- Curriculum based on assessment of needs of local community.
- Performance-based content.
- High level of simulation of “real-world.”
- Dual credit with on-site technical college.
- Instruction and grade for “work ethic.”
- Faculty training in aspects of ABCD.
Goal: A high quality community

General Accomplishments:
- Community is safe
- Environment is healthy
- Adequate housing available
- Quality health care available
- Good economic conditions
- Cultural/ recreational opportunities
- Adequate infrastructure
- Adequate public services
- Good land-use and appearance
- Convenient daily life
- Quality educational opportunities
General Accomplishment: Quality healthcare available

Specific Accomplishments:
- Good hospital facilities and equipment
- Good in-patient services
- Good emergency and out-patient services
- Good public health services
- Good indigent care services
- Disease prevention programs
- Sufficient physician specialties available
- Quality physician performance
- Sufficient number of nurses
- Quality nursing care
General Accomplishment: *Quality education*

Specific Accomplishments:
- Low drop-out rate
- High SAT scores
- High scores on state mandated tests
- High level of literacy
- Relevant curricula content
- Quality special education programs
- Quality college-prep curriculum
- Access to post-secondary schools
- Quality technical/vocational programs
- Quality pre-school programs
- Quality adult education programs
General Accomplishment: \textit{Good land-use and aesthetics}

Specific Accomplishments:

- Regulations for growth management
- Good zoning regulations
- Green space preservation
- Wetlands preservation
- Cooperation between city and county government
- Historic buildings and homes preservation
- Rural/small town character preservation
- Aesthetic landscaping
- Aesthetic commercial signage
General Accomplishment: *Convenient daily life*

Specific Accomplishments:

- Low traffic congestion
- Adequate commercial services
- Good access to commercial services
- Adequate public services
- Good access to public services
- Good access to schools
- Good access to recreation
- Good access to workplaces
Examples of Societal Improvements resulting from a ‘mega-FEA’ in one small city…

- New full-service hospital
- University Center
- B.S. in Nursing added to curriculum
- 9th grade academy at each high school
- Improved water supply and quality
- New indigent care facility
- Joint meetings of city and county councils
- Redesign of two high accident intersections
- Changes in building codes
- Assistance in passing SPLOST for education
Georgia Man Wins Nobel Prize for Performance Technology
Exemplary Performers Produce Greater Results

Average performers can become more like stars.
Example 1 – Refinery Operator

Official Procedure: “slowly open valve A to allow catalyst to flow through B”
Example 1 – Refinery Operator

What we learned:

- Opening valve A too much damages valve B
- Opening valve A too little extends a 20 minute job to 2 plus hours
- There were 3 damaged valves (like B) which cost $50K per valve
- Star uses an infra-red “gun” to take the temperature of the catalyst flowing through valve B
- Star opens valve A until the temperature near valve B is 400 degrees
Example 2 – Independent Health Services Technician

Medical Person at units without a Physician...
Battle Dressing Stations (BDS) ready for operation

Accurate health records and reports

Safe and Healthy Work Environment

Operationally ready clinical inventory, and equipment

Healthy crew

Emergency Medical System (EMS) Ready

Patient fit for full duty after non-emergency illness or injury

Effective communication with Designated Medical Officer
**Major Accomplishment: Safe and Healthy Work Environment**

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<thead>
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<tbody>
<tr>
<td>1.1</td>
<td>Perform the environmental health and sanitation inspection</td>
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<tr>
<td>1.2</td>
<td>Perform the food service inspection</td>
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<tr>
<td>1.3</td>
<td><strong>Perform the water quality inspection</strong></td>
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<tr>
<td>1.4</td>
<td>Conduct training for crew, departments, drills, and stretcher-bearers</td>
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<tr>
<th>Task Code(s):</th>
<th>Reason(s) for NOT job-aiding?</th>
<th>Way(s) to MINIMIZE?</th>
<th>Reason(s) FOR job-aiding?</th>
<th>DECISION</th>
<th>Job Aid Support</th>
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<tbody>
<tr>
<td>1.1</td>
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<td>Consequences high</td>
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Complexity high
IDHS – Water Quality Inspection

WATER QUALITY INSPECTION JOB AID

1. **Step:**
   - Action:
     - Collect a sample using a calibrated 100 mL syringe and place it in a 100 mL amber glass bottle.

2. **Step:**
   - Action:
     - Carefully place the sample in the Job Aid manual.

3. **Step:**
   - Action:
     - Securely cap the bottle and label it.

4. **Step:**
   - Action:
     - Store the sample in a cool place.

5. **Step:**
   - Action:
     - Perform the next inspection as per the Job Aid.

6. **Step:**
   - Action:
     - Continue to next page.

IDHS
JOB AID 1.3
What Questions Do You Have?
Thank you!

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