# WORKSHOP:

# Goal Attainment Scaling:
## *An evaluation tool to improve evaluation design and data collection for accountability and program improvement*

*Presenter:*

**Associate Professor Colin A. Sharp, Ph.D.**

**Adelaide Business School, Adelaide, South Australia**

**And**

***Consultant***

**P.E.R.S.O.N.A.L. Research & Evaluation**

**HTTPS://www.personalresearchandevaluation.com**
E-Mail: personalresearch@icloud.com

**CONTENTS PAGE**

**Paper Title:**

**Goal Attainment Scaling:**
**An evaluation tool to improve evaluation design and data collection for accountability and program improvement**
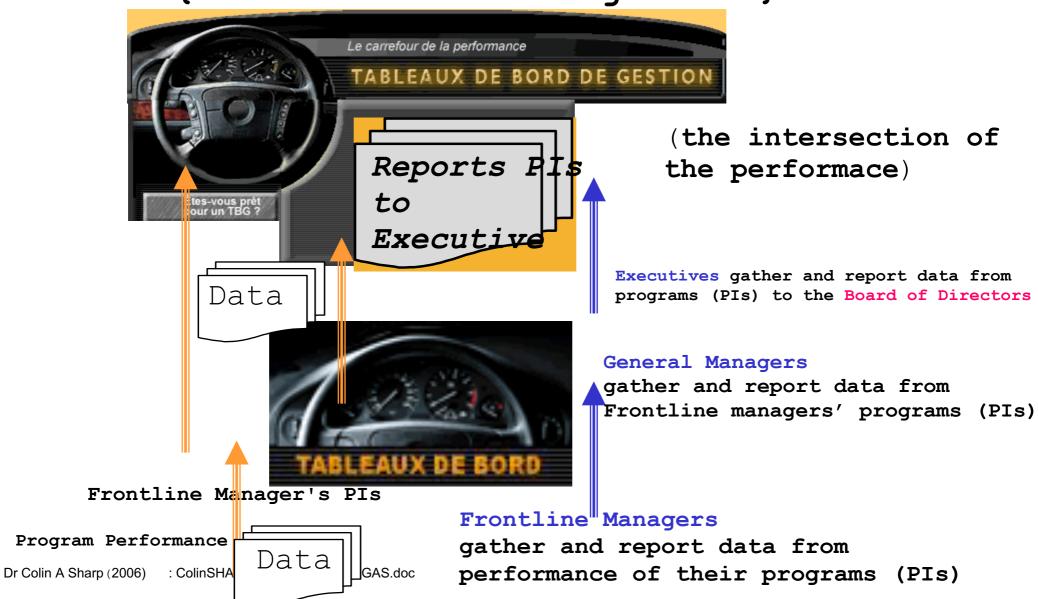Author:  Colin A. Sharp

**Abstract**

Goal Attainment Scaling was developed by Dr Tom Kiresuk (in Minnesota USA) as a useful (participative) measurement technique for evaluation of the outcomes of mental health de-institutionalization programs of the 1960s and 1970s.  Kiresuk's research has demonstrated that Goal Attainment Scaling is as valid and reliable as many other forms of quantitative scaling techniques, but it does depend on an independent person checking on the levels of the range of +2 to -2 scores on the GAS follow-up guide.  Since then Goal Attainment Scaling (GAS) has been applied in many areas of the design, planning and evaluation of organizational programs, especially where the focus of the measurement and evaluation is on outcomes.

One of the problems of focusing on outcomes is the need for adequate qualitative measurement of impact or attainment of intended goals. Goal Attainment Scaling (GAS) has been used for 50 years as a means of measuring outcome data from different contexts and enabling these measures to be cumulated in a quantitative measure. This enables a linking of measures from the frontline to upper levels of the organization's management, otherwise known as a 'tableaux de bord de gestion' (dashboard of management). The workshop will provide examples (e.g., in the evaluation of environmental rehabilitation, training program, health and aged care programs) and will introduce participants to the process of using goal attainment scaling in their own context.

Dr Colin Sharp has been developing applications and theory of goal attainment scaling for 20 years. He has conducted workshops in many different contexts with a wide variety of audiences to enable the development of their own knowledge and skills in evaluation.

# 1. Tableau de bord de Gestion
## { Dashboard of management }

Le carrefour de la performance

TABLEAUX DE BORD DE GESTION

(the intersection of the performace)

*Reports PIs to Executive*

Êtes-vous prêt pour un TBG ?

Data

**Executives** gather and report data from programs (PIs) to the **Board of Directors**

TABLEAUX DE BORD

**General Managers**
gather and report data from
Frontline managers' programs (PIs)

**Frontline Manager's PIs**

**Frontline Managers**
gather and report data from
performance of their programs (PIs)

Program Performance

Data

Dr Colin A Sharp (2006)    : ColinSHA           GAS.doc

# Board's (Organisational Governance) Goal Attainment Scaling

| Rating Level | OUTCOME Standard | Goal 1 | Goal 2 |
|---|---|---|---|
| + 2 | Much More than Expected (120% of standard ?) | | |
| +1 | More than Expected (110% of standard ?) | | |
| 0 | Expected (100% of standard ?) | | |
| - 1 | Less than Expected (90% of standard ?) | | |
| - 2 | Much Less than Expected (80% of standard ?) | | |

**Plans & Reports**

**Lead Data**

**Gap Data**

**Measures**

**Plans**

**Measures**

## Management's Goal Attainment Scaling

| Rating Level | OUTCOME Standard | Goal 1 | Goal 2 |
|---|---|---|---|
| + 2 | Much More than Expected (120% of standard ?) | | |
| +1 | More than Expected (110% of standard ?) | | |
| 0 | Expected (100% of standard ?) | | |
| - 1 | Less than Expected (90% of standard ?) | | |
| - 2 | Much Less than Expected (80% of standard ?) | | |

## Client's Goal Attainment

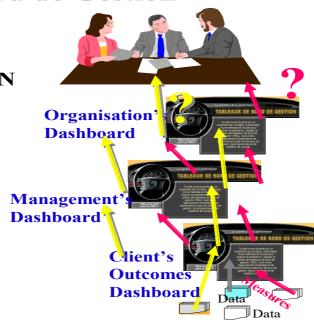| Rating Level | OUTCOME Standard |
|---|---|
| + 2 | Much More than Expected (120% of standard ?) |
| +1 | More than Expected (110% of standard ?) |
| 0 | Expected (100% of standard ?) |
| - 1 | Less than Expected (90% of standard ?) |
| - 2 | Much Less than Expected (80% of standard ?) |

Dr Colin A

# Tableaux de Bord de Gestion

**Do the Program data & evaluation reports address:**
**\* Manager's EVALUATION needs or**
**\* reflect the Customers' Outcomes or**
**\* Organisational performance ?**

Organisation's Dashboard

Management's Dashboard

Client's Outcomes Dashboard

Measures

Data

Data

**DISCUSSION:**
   Can the individual outcome data collected from your program's clients be linked to the performance  of the program?  (please explain in your group)

☐ **Yes by:**_____

☐ **No because:** _____

☐  **Don't know**

# 2. Steps involved in Goal Attainment Scaling

The steps involved in developing the scales and implementing this method would be as follows (as illustrated in the evaluation of an *Employee Participation* program in a local government authority):

(a)  form a group of key participants in the project who will act as the **Evaluation** Steering Committee, and will coordinate the Goal Attainment Scaling process;

(b) the **Evaluation Steering Committee** identifies the goal areas as part of the planning of the project,

(c) the **Evaluation Steering Committee** identifies the sub-goals contained within these goal statements for each program;
e.g. "identify productivity savings"
   "implement productivity improvement programs"
   "efficient manner", etc.

(d) **establish time frame** (including the start and the follow-up period) for the evaluation appropriate to the sub-goals for each program (e.g., say the worker participation program has monthly meetings to review progress, so the Goal Attainment Scales should identify the outcomes according to monthly targets);

(e) **establish the expected outcomes** for each sub-goal, care should be taken to ensure that these outcomes are *realistic, relevant and stated so that all can agree* that they have been achieved or not, and the wording is impartial regarding the value of the outcome, i.e. **"less than expected"** is not necessarily "BAD");

(f) **label the headings of the GAS** table using the sub-goals as the "scales";

(g) **fill in the other cells of the table to specify the +2 to the -2 rated outcomes** for the other goal areas in clearly *observable* terms;

(h) **decide whether or not to derive a numerical index**, i.e., are the scales to be used in calculations such as when the analysis of scores is required for the evaluation of the project and the subsequent decision-making in Program Budgeting; if there is to be data analysis then follow the procedures recommended by Kiresuk and Lund (1978), and see Appendix A in Kiresuk et al (1994, p. 273).

(i) **decide whether the scales will need to be weighted** for a fairer comparison of the performance towards the overall desired outcomes (if not weighted then drop the $w_i$ factor out of the above formula).

## 3. BLANK GOAL ATTAINMENT SCALE FOLLOW-UP GUIDE

**Figure 1**

| Level of Expected OUTCOME 3 months after the course | Rating | Behavioral Statement of EXPECTED OUTCOMES: - GOAL 1 | Behavioral Statement of EXPECTED OUTCOMES: - GOAL 2 |
|---|---|---|---|
| MUCH *MORE* Than EXPECTED | +2 | | |
| MORE than EXPECTED | +1 | | |
| EXPECTED Outcome | 0 | | |
| LESS than EXPECTED | -1 | | |
| MUCH *LESS* Than EXPECTED | -2 | | |

COMMENTS:

# 4. REFERENCES

Baulderstone, J., & Sharp, C.A. (1997) "Outcome measures as performance indicators in contracting out of services" *Evaluation: Equipping Communities and Government - Proceedings of the Australasian Evaluation Society International Conference 1997*. ACT: Australasian Evaluation Society, September, pp. 104 - 110.

Dunn, J. (1997) "Goal Attainment Scaling in evaluation of a community based health services program in rural and remote Australia?" *Evaluation: Equipping Communities and Government - Proceedings of the Australasian Evaluation Society International Conference 1997.* Curtin, ACT: Australasian Evaluation Society, September, pp. 225 - 232.

ENAP, 2005. "Tableau de Bord de Gestion". l'École Nationale d'Administration Publique de Universitie du Québec, Canada [online http://formation.enap.ca/tbord/ accessed 26-12-05]

Epstein, M. and Manzoni, J.-F. 1998, 'Implementing Corporate Strategy: From Tableaux de Bord to Balanced Scorecards'. *European Management Journal,* vol 16 No 2 April, pp. 190 - 203.

Hargreaves, W.A. & Attkisson, C. C. (1978) Evaluating Program Outcomes. In Attkisson, C. C.; Hargreaves, W. A.; Horowitz, M. J. and Sorensen, J. E.. (Eds) *Evaluation of Human Service Programs.* Academic, N. Y., pp. 303-339.

Johns, A. & Sharp, C.A. (1991) "Validation therapy: An evaluation of a program at the South Port Community Nursing Home." Paper presented at the *Australian Association of Voluntary Care Associations Conference*, Melbourne, Vic., November 10- 13, 1991.

Kiresuk, T.J. & Lund, S.H. (1978) "Goal Attainment Scaling". In Attkisson, C.C., Hargreaves, W.A., Horowitz, M.J. & Sorensen, J.E. (Eds) Evaluation of Human Services Programs. Academic Press, New York, pp. 341-370.

Kiresuk, T.J. & Lund, S.H. (1994) "Implementing Goal Attainment Scaling". In Kiresuk, T.J., Smith, A. & Cardillo, J. E. (Ed.s) *Goal Attainment Scaling: Applications, Theory and Measurement.* Hillsdale, New Jersey, Lawrence Erlbaum Associates.

Malavazos, M. & Sharp, C.A. (1997) "Goal Attainment Scaling: Environmental impact evaluation on the upstream petroleum industry" *Evaluation: Equipping Communities and Government - Proceedings of the Australasian Evaluation Society International Conference 1997.* Curtin, ACT: Australasian Evaluation Society, September, pp. 332 - 340.

Sharp, C.A. (1997b) "Goal Attainment Scaling in Validation Therapy for elderly disoriented people: An evaluation or a facilitation?" *Evaluation: Equipping Communities and Government - Proceedings of the Australasian Evaluation Society International Conference 1997.* Curtin, ACT: Australasian Evaluation Society, September, pp. 480 - 487.

Sharp, C.A. (1994) "What Is Appropriate Evaluation? Ethics and standards in evaluation" *Evaluation News & Comment (*Australasian Evaluation Society), vol. 3, no. 2 (December) pp. 34-41.

Sharp, C.A. (1993) "Goal Attainment Scaling in evaluation of a therapy program for elderly nursing home patients". Flinders University School of Accounting, Finance and Management "Research Day" seminar, July 1993.

Sharp, C.A. & Kiresuk, T.J. (1993) "Thriving on Chaos? Implications of Arational processes for goal setting and strategic planning". Paper presented at the *Australia & New Zealand Academy of Management (ANZAM ) Conference*, Deakin University, December 6th - 8th.

Sharp, C. A. (1996) *S.T.A.R.T.: A Do-it-Yourself Evaluation Manual .* Sydney, Australian Youth Foundation.

Sharp, C.A. Ronaldson, S., Mc Laren, H., Joyner, B., and Johns, A. (1989) "Use of Goal Attainment Scaling in the Monitoring and Evaluation of the Validation Therapy Program." *The Sixth National Evaluation Conference*, Brisbane, July 1989.

**APPENDIX**

| GOAL ATTAINMENT SCALING: |
| --- |
| **SAMPLE GOAL  ATTAINMENT FOLLOW-UP GUIDES** |

**GENERIC GOAL ATTAINMENT SCALE FOLLOW-UP GUIDE**

CLIENT's NEED: _____

GOAL 1: _____
(stated as an observable outcome, using action verb, by whom, by when expected, by what measure)
GOAL 1: _____

| GOAL 1<br>(including weighting<br>if applicable) | GOAL 2<br>(including weighting<br>if applicable) | Levels of<br>Predicted<br>Attainment of<br>Goal | Rating |
| --- | --- | --- | --- |
| (Behavioral description of level of much higher attainment of Goals than expected) | | **MUCH more** than expected outcome | **+2** |
| (Behavioral description of level of somewhat higher attainment of Goals than expected) | | **MORE than Expected** level of outcome | **+1** |
| (Behavioral description of expected level of attainment of Goals) | | **EXPECTED Level** of outcome | **0** |
| (Behavioral description of level of somewhat lower attainment of Goals than expected) | | **LESS than Expected** level of success | **-1** |
| (Behavioral description of level of much lower attainment of Goals than expected) | | **MUCH less** than expected outcome | **-2** |

**LOCAL PUBLIC RELATIONS (PR) GOAL: MPS Advocacy/Lobbying**

| | | |
|---|---|---|
| *All* MPS PR activities, have 80% (or more) of invitees attend; AND all community groups offer to distribute MPS material each time a community education activity is arranged; AND regular PR volunteers promote MPS at *all* community activities. | **MOST favourable** Likely Outcome | **+2** |
| *Most* MPS PR activities, have 80% (or more) of invitees attend; all community groups offer to distribute MPS material each time a community education activity is arranged; or regular PR volunteers promote MPS at *most* community activities. | **MORE than Expected** level of success | **+1** |
| *Some* MPS PR activities, over every three month period, have 80% (or more) of invitees attend; or *several* volunteers offer to distribute MPS material *most* times a community education activity is arranged. | **EXPECTED Level** of Success | **0** |
| MPS public relations material available through service delivery staff but not widely circulated through the communities; or MPS PR activities (quarterly) have 50% to 70% of invitees attend; or *too few* volunteers to present MPS PR material at community education activities. | **LESS than Expected** level of success | **-1** |
| MPS public relations *material confusing*; MPS PR activities only conducted every six months, and have 50% (or less) of invitees attend; several *complaints* of lack of awareness of MPS activities *most* times a community education activity is arranged. | **MOST UNfavourable** Likely Outcome | **-2** |

Example: **Multi-Purpose Services** (**Mid-West Health and Aged Care)**
Wudina, South Australia

**Multi-Purpose Services**

**LOCAL MANAGEMENT GOAL:**

**Reduce Admin. Overhead & Redirect to Service**

| | | |
|---|---|---|
| 20% DECREASE in Admin. expenses & INCREASED Services expenses to appropriate needs | **MOST favourable** Likely Outcome | **+2** |
| 10% DECREASE in Admin. expenses & NO change in Services expenses | **MORE than Expected** level of success | **+1** |
| SAME % of MPS Budget spent on Admin. expenses (No increase) | **EXPECTED Level** of Success | **0** |
| 10% INCREASE in Admin. expenses & No change OR Reduced Services expenses | **LESS than Expected** level of success | **-1** |
| 20% INCREASE in Admin. expenses & No change OR Reduced Services expenses | **MOST Unfavourable** Likely Outcome | **-2** |

**Comments:**

| | | |
|---|---|---|
| Standards met in all facilities; and QA teams training staff for regular cross-facility internal reviews. | **MOST favourable** Likely Outcome | **+2** |
| Standards met in all facilities. | **MORE than Expected** level of success | **+1** |
| One or two standards are not met in one facility, but no risk to residents (or clients). | **EXPECTED Level** of Success | **0** |
| One or two standards are not met among all facilitates But no residents at risk. or significant number of standards are not met across the region's facilities. | **LESS than Expected** level of success | **-1** |
| Significant risk to rights (or health) of residents in one or more facilities due to failure to meet standards of care. | **MOST Unfavourable** Likely Outcome | **-2** |

**Comments:**

**AIM:  Ecotourism With Minimal Impact On Coastal Dunes**

| Goal Score | Goal 1 | Goal 2 | Goal 3 | Goal 4 |
|---|---|---|---|---|
| | Zero impact upon Aboriginal & other heritage sites | Negligible rubbish in situ | Minimal impact upon vegetation | Minimal disturbance to dune |
| +2 | • Site has been reported and tourists deviated to avoid site by at least 100m | • No evidence of rubbish within whole dune scape | • No removal of vegetation | • No dune cuts<br>• No swales cut |
| +1 | • Site has been scouted, flagged, reported and line deviated to avoid site by at least 50m | • No rubbish in sample area | • Priority 4 herbs and shrubs less than 1m removed | • Minor dune cut less than 0.5m<br>• Sand stacked along side of cut<br>• Windrows in swale less than 0.1m |
| 0 | • Site has been avoided by at least 10m, reported and flagged | • Maximum of 2 items of rubbish per km sampled | • Priority 3 and 4 shrubs less than 2m removed<br>• Less than 30% of tree branches removed<br>• No trees removed | • Dune crest cut 0.5-2m<br>• Sand stacked along side of cut<br>• Side cut 0-1.5m<br>• Windrows in swale less than 0.3m |
| -1 | • Site has been narrowly avoided (less than 10m), not reported and not flagged | • 3 to 4 items of rubbish per km sampled | • Shrubs greater than 2m removed, including root stock<br>• Trees less than 2m removed | • Dune rest cut 2-4m<br>• Sand ramped onto corridor<br>• Side cuts 1.5-3m<br>• Off-line trafficking evident<br>• Windrows in swale greater than 0.3m |
| -2 | • Site has been damaged as a result of the operation. Line traverses site.  Site not reported, not flagged | • 5 items of rubbish or more per km sampled | • Trees greater than 2m removed, including root stock | • Dune crest cut greater than 4m<br>• Sand ramped onto corridor<br>• Side cuts greater than 3m<br>• Claypans cut |

# Preparatory Self-Diagnosis & Learning Goals

In order to prepare for your personal learning, it is useful to think about what are your needs, what do you want to know; and how do you intend to use project evaluation knowledge in the near future. Please begin by quickly and informally noting some of these points below, for discussion in class and for **your future reference**.

**1a What are your needs?  What led you into enrolling in this workshop?**

Comments about your NEEDS:

**1.b What do you NEED to achieve from using the skills / knowledge expected from this workshop?**

Comments about your NEEDS:

**2. What do you expect to learn (gain) from this Workshop?**

**GOAL(S)**:

1 _____

_____

2 _____

_____

| Level of Expected OUTCOME 3 months after the course | Rating | Behavioural Statement of EXPECTED OUTCOMES: - GOAL 1 | Behavioural Statement of EXPECTED OUTCOMES: - GOAL 2 |
|---|---|---|---|
| **MUCH *MORE* Than EXPECTED** | **+2** | | |
| **MORE than EXPECTED** | **+1** | | |
| **EXPECTED Outcome** | **0** | | |
| **LESS than EXPECTED** | **-1** | | |
| **MUCH *LESS* Than EXPECTED** | **-2** | | |

**Comments about your EXPECTATIONS:**