The science behind water-oriented leadership programs: How this can effect WaSH post-2015 policy

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Background

Water resources are increasingly being brought under collaborative management endeavors.

UN-Water, the United Nations inter-agency coordination mechanism for all freshwater and sanitation related matters, identified 5 interconnected targets for WaSH in the Post-2015. All of these are dependent on coordination of numerous actors.

Social science has a role to play in understanding how collaborative efforts can be successful and can provide insight into policy development.

Developing leaders for water management is more important than ever.

Many of the challenges faced go beyond technological concerns; many are social in nature; all require adaptive and innovative sustainable water management.

Leaders must have the ability to critically think about the interface of ecological, economical, political and social challenges.

Research questions

1. To what extent are water-related leadership development programs designed to change behavior and develop new abilities and skills?
2. Are water-related leadership development programs theory based?
3. To what extent do leadership development programs conduct assessment and evaluation of leader development?
4. How do programs vary in terms of target audience?
5. How do programs vary in terms of duration?

Methods

- Internet search for water-related environmental leadership programs.
- Reviewed 30 programs for adherence to the McCauley et al. (2010) model of leadership development.
- Variables coded 1 as present or 0 as absent, and each variable was summed and combined into categories.

- Nine target audience groups identified
- Cross tabulations were run on target audience, theoretical foundation, target audience, and program length.
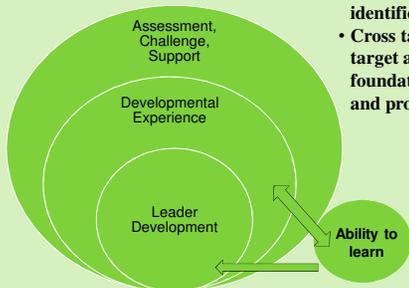
McCauley Model of Leadership Development

A Post-2015 Global Goal for Water

Results

Based in Theory/Book	Number of programs
Using Leadership Theories	8
Using Non-theory Books	2
Using Personality Type	4
Using Ecological Resilience	1
Using neither theory nor book	18

Assessment type	Number of Programs
Assessment	9
Post-Program Assessment	4
Post Program Feedback	7
No Evaluation	14

Program duration	1 day - 3 months	4-6 months	7-9 months	10-12 months	>12 months	Range months	Range contact hours
All audiences	12	5	7	4	2	.1 – 22	12 - 288

Target Audience	Total Number of Programs
Water resources professionals	7
All with interest in water	4
All with interest in environment	5
Natural resources professionals	10
Students	2
Private sector	4
NGOs	2
Water residents and users	4
Community or environmental leaders	6

Conclusion

- Most water-related leadership programs are not grounded in an evidence-based curriculum.
- Most programs do not use individual level assessment to provide feedback to participants about their own leadership development before, during, and after the program.
- Most programs are not collecting information regarding participant learning.
- A wide range of target audiences are pursued; for water/natural resources professionals only 4 programs are grounded in theory.
- Program duration varies widely (with a mean of 6.6 months); program activities vary greatly.

Connecting research to policy

The UN-Water declaration for WaSH post-2015 calls for Collaborative Water Governance: "All countries strengthen equitable, participatory, and accountable water governance".

Professionals and citizens must not only be knowledgeable in the technical aspects of sustainable water but also be equally adept at working together toward the goal of creating equitable, participatory, and accountable processes. Leadership development programs can connect interested professionals and citizens.

The current programs will not develop in participants the abilities and skills that 21st century water management issues require. There is an urgent need for new or revised leadership development programs for those interested in collaborative water governance.

We recommend that water-related leadership development programs
1) be grounded in evidence-based theory;
2) offer a variety of developmental experiences, the opportunity to learn from experience, and provide assessment, challenge, and support;
3) conduct long-term program evaluation to determine if the programs are meeting objectives and to determine if adjustments are necessary;
4) assess alumni impact on water resource governance.

References

McCauley, C. D., Van Veslor, E., & Ruderman, M. N. (2010). Introduction: Our viewpoint of leadership development. In E. Van Veslor, C. D. McCauley, & M. N. Ruderman (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 1-26). San Francisco: Wiley.

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