

# Assessing Needs for Improving the Performance of Recycling Efforts at Boise State University

By Kevin Taylor, Tona Mitcham, and Astrid Case

*Tales from the Field, a new monthly column, consists of reports of evidence-based performance improvement practice and advice, presented by graduate students, alumni, and faculty of Boise State University's Instructional and Performance Technology department.*

## The Field

Boise State University is oriented towards making its campus a more environmentally friendly and sustainable and the university's President has signed a nationwide sustainability charter obligating the university to become more environmentally friendly by reducing the university's environmental footprint. With general interest and now administrative backing, a situation emerges in which it is relevant to decide how to move forward. Among other things, the university wants to improve its recycling program.

## The Performance Issue and Value of a Needs Assessment

Currently, the university has a small recycling infrastructure including a handful of recycling receptacles scattered through a number of university buildings. However, at present recycling efforts fall short of what other universities around the country are accomplishing with regard to diverting recyclable material away from the waste stream. In order for the university to become comparable with other universities in its sustainability efforts, improvement of its existing recycling system has become a priority.

Our team was enrolled in Dr. Winiiecki's needs assessment course at Boise State University during the spring 2008 term. We learned that needs assessment is an invaluable tool for performance improvement specialists to use when serving client organizations. It is a method of systematic, rigorous inquiry about an organization and its goals, that results in a definition of needs to accomplish those goals and the effects they can have on the organization and beyond. Thus, our class project afforded us an opportunity not only to practice a needs assessment but also offer timely service to the university.

## Framing the System

The goals of our needs assessment were to discover where recycling efforts were good and where they were impeded, what was contributing to success and lack of success, and then suggest a systemic set of interventions based on those findings. Through conducting a systematic performance analysis we were able to discover what gaps existed, thus laying the foundation for conducting a cause analysis, and suggesting appropriate remedies to be deployed in the intervention phase (discussed below). The project followed practices as reflected in the ISPI-HPT model (<http://www.ispi.org/services/whatshtmodel.pdf>).

## Research Methodology and Documenting the Dynamics

In the first phase of our needs assessment, use of qualitative methods was instrumental in helping us discover drivers and obstacles experienced by students with regard to recycling behavior. These methods were especially useful due to the lack of reliable extant data on the recycling program. Qualitative methods involved observation of areas around existing recycling stations, one-on-one interviews, artifact collection and preliminary analysis of those data in terms of what we knew about successful recycling programs and HPT. This

provided information required to start developing questions for focus group interviews and affinity sorting of data we collected during the second phase of the needs assessment.

Our questions were designed to elicit students' experiences, ideas and feelings about recycling and their current level of recycling behavior. Once these data were collected, we organized their responses based on common themes found across the responses. Subsequently, we were able to couple those themes with the data collected and analyzed in the initial phase of the needs assessment. These processes added several layers of empirical support to the contention of some university personnel that students' desire to recycle was high and their likelihood to engage in it would be dependent upon the resources and knowledge available to them. Interview and focus group data also indicated that maintenance of the system is an essential part of the system.

Our findings indicate that: (a) students were motivated to recycle, but weren't always knowledgeable about what was recyclable or where recycle bins were located, (b) even though students wanted to recycle, recycling bins were not strategically placed or the bins were not regularly emptied (this led to litter around the bin or disposing of recyclable material in trash cans), (c) the administration had interest, but no clear plan for managing the recycling system, and (d) the university was not even aware of how well or how poorly the current program was going, or how to compare current performance against desired performance. In other words, lack of metrics and reliable measures for tracking program performance made systemic progress difficult.

These findings allowed us to move into the third phase of our needs assessment and develop an understanding of the changes that would need to occur to see an increase in students' recycling behavior. We also discovered that the university planned to hire an individual whose job would be, in part, to oversee the recycling program. With this, we also applied our findings to a competency-based assessment resulting in a set of criteria the university could use in selecting an individual for this job, and a rough set of guidelines for what that person's job would entail in terms of maintaining the recycling program.

### **IPT Grounded Advice**

Throughout the project we used the HPT model as a touchstone for organizing our data, deriving findings and conclusions, and developing an intervention plan. We also used it to frame our communication with university stakeholders to underscore the systemic nature of the issues, our findings and our intervention plan. Figure 1 displays a high level view of our data.

From this, we offered a coordinated and systemic set of interventions to address the environment and its gaps in supporting desired performance: (a) Coordinated effort to provide data that would improve students' knowledge of recycling and what could be recycled, (b) provision of resources in the form of adequate numbers of recycling bins in strategic locations around campus, (c) regular pickup of recycled materials from these locations, and (d) an ongoing evaluation of 'how we're doing!' that would both inform the campus administration and students of progress. As a network of factors, we proposed that this would allow the students and administrators to achieve its goal of creating more sustainable campus and greener future.

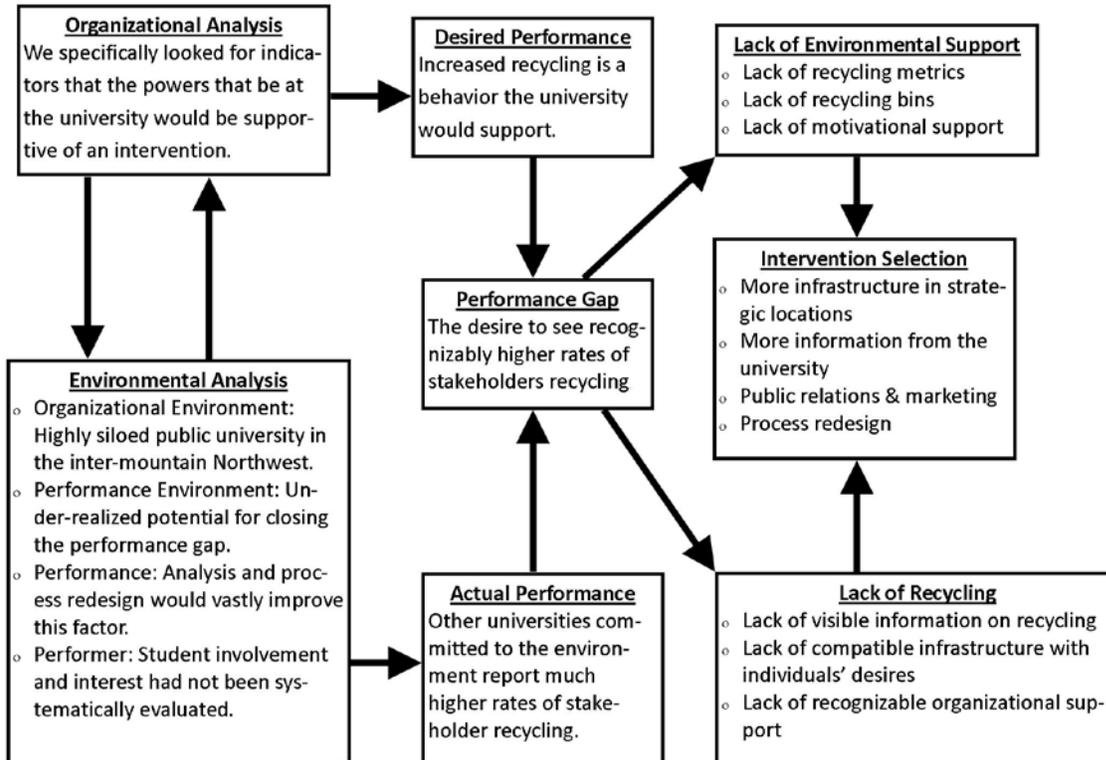


Figure 1. A high level view of the needs assessment data.

### Author Biographies

Kevin Taylor is a graduate assistant of the Instructional & Performance Technology (IPT) program at Boise State University. He is scheduled to complete his MS in May of 2009. His previous work has included research into perceptions of training and development professionals regarding Second Life as a training and development tool and his current research efforts are focused on the improvement of Boise State University Housing's recycling system. His primary professional interests are in Organizational Learning, Sustainable Business Development, and more recently he has developed an interest in Project Management Life-Cycles and Business Process Design and Management. Kevin can be reached via email at [kevintaylor@u.boisestate.edu](mailto:kevintaylor@u.boisestate.edu).

Tona Mitcham is an upcoming graduate of the IPT program at Boise State University. In her current work, she is designing e-learning for a major cable television provider and she recently redesigned instructor-led curriculum for a continuing education program offered by a state sponsored Real Estate Commission. She looks forward to establishing a career designing both written and electronic instruction for large scale organizations, as well as helping organizations identify and improve their performance. Tona can be reached via email at [anotona@earthlink.net](mailto:anotona@earthlink.net).

Astrid Case is a graduate student in the IPT program at Boise State University. Her primary areas of interest are instructional design and human performance technology. She has professional experience in conducting gap and cause analysis and is currently working with an E-learning team that has been the recipient of ISPI awards. After graduation in December 2008, she looks forward to entering the field of organizational consulting, specializing in instructional design and management consulting. Astrid can be reached via email at [asca99@hotmail.com](mailto:asca99@hotmail.com).