

MPC-470

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Project Title:

Evaluating Transportation Professional Development and Continuing Education Courses

University:

Utah State University

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Research Needs:

Each year, upwards of 18 million dollars is collectively spent by state and tribal departments of transportation on continuing education and professional development courses for the county and local governments in their jurisdictions. These courses are meant to provide training for new employees as well as provide long-term employees with an opportunity to update their knowledge on current regulations and best practices. Furthermore, many organizations use this continuing professional education as a way for employees to advance given that many of the targeted employees do not have more than a high school education. It is important for this training to be accessible and have an immediate impact on the participant's ability to complete the essential functions of their job.

Currently, these courses are evaluated based upon customer satisfaction. Participants are asked to complete exit surveys based on their initial response to the training including whether or not they liked the course and whether or not they feel the information that was presented can help them in their job. Current evaluations do not tie responses to the actual objectives of the trainings or follow up with participants to see if/how the information presented in the training is/was used in the course of the participants' job. Oftentimes, this leads to courses that are seen as nothing more than a hoop to jump through to advance one's career with little to no long-term retention necessary. If the goal of continuing education is to provide opportunities for employees to keep up to date with appropriate technologies and regulations encountered in the course of their jobs, it is necessary to provide training opportunities that facilitate this end. Strong course evaluation instruments are necessary to ensure that training courses are meeting the stated objectives and participants feel like they are provided with information that may help them better complete their job functions. Furthermore, results from research based course evaluation instruments will help instructors better plan training opportunities that more closely tie course objectives to course outcomes.

Research Questions:

1. Are the courses offered by LTAP organizations effective in meeting stated course objectives?
2. Are the courses offered by LTAP organizations effective in meeting the needs of course participants by providing them with skills that they will use in the course of their jobs? (Do students rate these workshops as valuable in terms of: Quality of Instruction? Relevance of the Content? Amount of Instruction?)
3. To what extent do instructors use evaluation feedback to make improvements to their classes/workshops?
4. Do program participants report long-term benefits of LTAP training (i.e: knowledge retention, increased self-efficacy, job advancement, desire to take more classes)?

Logic Model:

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| <i>Assumptions</i> |
| <ul style="list-style-type: none"> • Current evaluation activities are minimally useful • Current evaluation results are rarely used for program improvement • Limited tracking of training impacts on job performance and advancement are currently reported |
| <i>Inputs</i> |
| <ul style="list-style-type: none"> • Time • Data • Research Base |
| <i>Activities</i> |
| <ul style="list-style-type: none"> • Align course objectives to course delivery, course delivery to desired outcomes, and desired outcomes to course planning • Evaluate the ability of the courses to provide participants with skills that they will use in the course of their jobs |
| <i>Outputs</i> |
| <ul style="list-style-type: none"> • A “Best Practices” evaluation manual for LTAP agencies to use in the evaluation of their courses • Adapt a course evaluation instrument to measure: <ul style="list-style-type: none"> ○ Participant satisfaction in terms of increased competence in their job ○ Alignment of course outcomes with course objectives ○ Student appreciation for current events ○ Student ability to apply current events to classroom content ○ Teacher proficiency in running Socratic Discussions • Adapt a longitudinal course evaluation instrument to measure: <ul style="list-style-type: none"> ○ Participant knowledge retention ○ Self-efficacy ○ Job mobility |
| <i>Short-term Outcomes</i> |
| <ul style="list-style-type: none"> • Participants will gain knowledge and skills necessary to complete their jobs • Instructors will gain valuable information that will allow them to better prepare their future courses. • Course objectives and outcomes will be aligned • Administrators will be provided with “Best Practices” for future course evaluation |
| <i>Long-term Outcomes</i> |
| <ul style="list-style-type: none"> • Participants will become more confident in their job performance • Participants will become upwardly mobile in their jobs • Course evaluation procedures will better reflect alignment between objectives and outcomes • Course delivery will be changed to reflect information in restructured course evaluations |

Research Methods:

The overall goal of this evaluation is to improve the quality, effectiveness, and efficiency of training courses. This research will use qualitative analysis of course descriptions, curricula, and evaluations to examine the relationship between training activities and improvements in participants' on the job performance.

Work Plan:

The following tasks will be completed over 12 months:

1. Conduct a comprehensive review of the literature surrounding the evaluation of professional development programs (Month 1)
2. Compile course descriptions and objectives for training courses currently offered by Utah and North Dakota LTAPs. (Month 2)
3. Compile current program evaluation surveys for courses taught during the previous year (Month 2)
4. Adapt an existing professional development course evaluation instrument for use with LTAP courses. (Month 3)
5. Implement adapted course evaluation instrument in all courses offered by Utah and North Dakota LTAPs. (Months 4-8)
6. Work with trainers to align objectives, course delivery, and desired outcomes based upon course evaluations. (Months 5-11)
7. Follow up with course participants at regular intervals regarding if/how they used the training in the commission of their jobs (Months 6-11)
8. Follow up with instructors to see if/how they have used the information from the course evaluations to improve their courses (Months 6-11)
9. Compile report/best practices manual to be disseminated to LTAP trainers (Month 12)

Expected Outcomes:

1. Participants will gain knowledge and skills necessary to complete their jobs helping them to become more confident in their job performance
2. Instructors will gain valuable information that will allow them to better prepare their future courses by aligning course objectives with course outcomes.
3. Administrators will be provided with "Best Practices" for future course evaluation
4. Course evaluation procedures will better reflect alignment between objectives and outcomes
5. Course delivery will be changed to reflect information in restructured course evaluations

Relevance to Strategic Goals:*Economic Competitiveness*

Improving the quality and usefulness of professional development courses will provide the current and future workforce with professional development opportunities that will give participants the skills needed to implement new technologies necessary to "move goods and

people more efficiently” and to “operate, maintain, and repair increasingly sophisticated vehicles and equipment.”

Educational Benefits:

Data collected from improved course evaluations will provide instructors with the information necessary to structure their courses in a way that meets the practice based needs of participants. Collecting longitudinal data will ensure that courses not only meet the short term needs of participants (continuing education credits, job advancement, etc.) but also the long term goal of providing training that is actually used in the course of the participants jobs.

Project Cost:

Total Project Costs: \$99,295

MPC Funds Requested: \$48,618

Matching Funds: \$50,677

Source of Matching Funds: LTAP Funds

TRB Keywords:

Continuing Education, Program Evaluation, Professional Development.