Journal of MultiDisciplinary Evaluation Volume 11, Issue 25, 2015

# Conference Evaluation Focusing on Learning and Transfer

JMDE Juma lof MultiDisciplinary Evaluation

> ISSN 1556-8180 http://www.jmde.com

Michael Andersen The Danish Evaluation Institute

Bjarne Wahlgren National Centre of Competence Development

**Background:** The article presents the results of using a model for evaluation of conferences; a model focusing on learning and transfer. Many conferences are evaluated using participant-satisfaction surveys, but satisfaction is a diffuse concept and is linked to many factors other than learning.

**Purpose:** The purpose of the present study was to examined how participants of four national conferences of adult learning assessed the relevance of the content of a number of workshops, how much they had learned from the workshops and whether they had used what they had learned. And to test a tool to measure this.

**Setting:** The subject matters of the study is four evaluations based on surveys of national conferences in Denmark in 2010, 2011, 2012 and 2013. The overall purpose of the conferences was to communicate and discuss new knowledge within the area of general adult education and vocational education and training, and to help ensure that this knowledge is subsequently used in the participants' daily practices at work.

**Intervention:** Testing a tool to measure learning and transfer, which is not too resource-intensive to use for managers of workshops as well as conferences to strengthen the potential for learning and transfer by participants.

**Research Design:** Using the same survey-based evaluationtool in four different conferences in order to compare the results and try to find general knowledge.

**Data Collection and Analysis:** Collecting and analysing data on the basis of survey-data of the participant's self-reported perception of relevance, learning and use (transfer) of the content of the workshops.

**Findings:** The study shows that the percentage of conference participants who experience relevance, learning and transfer from the conferences only varies marginally from year to year, while this percentage varies particularly between the individual workshops. Another finding is that participants' assessment of relevance is more associated than satisfaction with learning and transfer.

Keywords: evaluation; conference; workshop; learning; transfer; adult learning.

# Introduction

In each of the years of 2010, 2011, 2012 and 2013, four key players within adult education and continuing training in Denmark held a national conference to communicate and share knowledge about experimental and development work within adult education and continuing training.

The four conferences focused on the relationship between practice-based knowledge and knowledge-based practice and had a uniform structure, with workshops and plenary presentations. The conferences have all been evaluated according to the same model in order to compare the participants' outcomes from year to year and to elucidate the participants' assessments of the relevance of the conference content as well as their assessments of how much they have learned, and to what extent they have used what they have learned in practice.

The first three evaluations were used by the organisers in connection with planning subsequent conferences, e.g. by comparing the workshops the participants have assessed as the most positive with regard to relevance, learning and use. In this way, the evaluations have also had a formative aim.

Many conferences are evaluated using participant-satisfaction surveys, although their purposes are not strictly to create satisfaction among participants, but to contribute to participants' learning and to develop their practice in accordance with the latest knowledge in the field. The purpose of this study has been to gain knowledge of how much participants have learned and applied in practice after participating in conferences with focus on learning and transfer, and to gain knowledge of the relationship between participant-satisfaction on the one hand and how participants assessed relevance, learning and transfer on the other hand. We assume that we will get more knowledge about learning and transfer by explicitly asking the participants about this rather than asking about satisfaction.

The four conferences in this study have had the same overall purpose: to communicate and discuss new knowledge within the area of basic general adult education and basic vocational education and training, and to help ensure that this knowledge is subsequently used in the participants' daily practices at work. The first conference was a to-day conference while the other three were one-day conferences (seven hours a day). The form of the conferences was interplay between plenary presentations and debate before lunch and activities in workshops after lunch, chosen by the participants themselves. The work in workshops was based on two or three presentations and headed by a workshop leader. The fundamental principle was to present participants with the most recent knowledge in relation to their own professional situation and needs.

Emphasis has been on enabling participants to be active in the workshops and to give them time to reflect on learning as part of the conference (Hatcher, 2006; Louw, 2011; Ravn, 2011). The organization of the conferences do also correspond well with other research results: A synthesis including 79 studies using randomized controlled trials or comparison group designs showed 'that learning methods and practices that more actively involved learners in acquiring, using, and evaluating new knowledge and practices had the most positive consequences' (Trivette et al., 2009). But apart from involving the participants in the learning and evaluating process as a common principle, the workshops have had very different topics, for instance: Use in practice of recognition of prior learning within vocational training; how vocational institutions meet the educational needs of companies; how to recruit adults with basic skills needs to teaching etc. In addition to the different topics the learning objectives and the organization of the workshops have also been very different.

It has been a condition that knowledge of the participants' learning and transfer of learning have had to be provided through surveys, where participants had the opportunity to express their subjective perception. This is in principle a weakness, but it is the authors' assumption that such knowledge is far better than no knowledge. In addition, we have wanted to test a tool to measure learning and transfer, which is not too resource-intensive to use in general for conferences and that can be used by the individual managers of workshops as well as the management of conferences to strengthen the potential for learning and transfer by participating in conferences.

## Literature review

Although the evaluation field through recent decades has developed in many directions and in relation to many different types of evaluands (Stufflebeam & Coryn, 2014), the literature review shows that there has only been a very little focus on evaluations of *conferences*.

Conferences can have different forms and purposes, with different lengths, diverse participant compositions and various degrees of social interaction. Conferences can stretch over longer periods and have a high degree of social interaction, e.g. 'a camp-based conference' (Nicholson, 2014) or 'group-relation conferences' (Wallach, 2014) and conferences can be web-based (Pletcher, 2011). Some conferences aim to create social networks that are to continue working together after the conference (Urada, 2014). Other conferences aim to create a forum for professional community or for professional development, e.g. for doctoral students at scholarly conferences (Chapman et al., 2009) and professional development (Harrison, 2010). Arellano et al. (2014) concludes that the aim of most conferences is to a greater or lesser extent to provide participants with knowledge they can use in their daily practice.

Focusing on learning outcome a 'need exists to create learning spaces within conferences' (Wiessner, 2008, p. 367). Work in the individual workshops is planned as learning spaces.

As a general framework in order to understand the overall learning process in relation to a conference, including the link between what takes place during the conference and what takes place after the conference, we find that Kirkpatrick's evaluation model can be used as a starting point. Furthermore, there is an interesting difference between viewing learning at conferences from an organizer angle, as is the case in this study, and from the angle where the learning outcome of a conference is viewed by companies as users of learning.

Inspired by Kirkpatrick's evaluation model we focus on the first three levels in his model. 1) The participants' reaction: How well did the participants like the form and content of the conference? 2) The learning process: What did the participants learn under the conference? 3) The behaviour: What changes in performance resulted from the learning process? Do we find any change in the participants' daily practices? (Kirkpatrick, 1994).

An empirical investigation of Kirkpatrick's four-level model comparing 43 cases found no correlation between reaction and learning and that satisfaction values exhibited no correlation with the learning success. The study concluded that, 'the sole assessment of satisfaction values is not sufficient to evaluate the quality of rendered services' (Gessler, 2009, p. 357).

There are significant similarities between Kirkpatrick's model and approach and the model we present in this article. Kirkpatrick operates with four levels; reaction, learning, behaviour and results (Kirkpatrick 1970, 1994), the first three of which can also be found in our model: Phase 1, insofar that we have studied the participants' satisfaction which is included in Kirkpatrick's reaction concept, phase 2, learning, and phase 3, transfer, which corresponds with Kirkpatrick's behaviour concept because it includes changes in behaviour in connection with a job as a result of what has been learned from an education programme.

But there are also considerable differences between Kirkpatrick's model and our model: Kirkpatrick has the enterprise's perspective, in which enterprise is investing the in training/education of one or more employees in order to make them better at their job and thereby enhance the performance of the enterprise (see Kirkpatrick's level 4). Among other things, this entails that the enterprise has other possibilities to monitor the performance of employees before and after the training initiative with regard to the goals set by the enterprise for the training initiative. For instance, Kirkpatrick recommends before and after measurements using standardised tests measure learning (Kirkpatrick, 1970, p. 44).

Our survey examines the process from the perspective of a conference organiser, in which we as organisers want participants to learn something and subsequently use what they have learned. As organisers, we only have limited influence on whom is participating and why. This involves many important differences:

Firstly, the relevance concept is included in our model, because we assume that relevance is important for encouraging good learning and transfer, and because relevance is a decisive parameter for whether or not a person signs up for our conference (Alawneh, 2008).

Secondly, as conference organisers it is impracticable to study before-conference/afterconference changes in the behaviour of participants at their workplaces. Therefore, we have only measured the participants' subjective assessments of the learning and transfer that took place, knowing that there may have been changes in behaviour that the person was not aware of.

Thirdly, we have to leave out Kirkpatrick's fourth level about the effect on the organisation to which the participant in the conference returns.

The literature on conferences focuses on the participants' reaction and often in relation to satisfaction with content and form, including accommodation and surroundings (Absalom, 2011; Danske-Regioner, 2009; Elmegaard, 2011; Mealy, 2013; Neves, 2014), and on aspects of site selection, economic impacts, destination marketing, the meeting participation process and advances in technology (Henn and Bathelt, 2014).

But literature on the question of whether participants learn something in connection with conferences is almost non-existing (Henn and Bathelt, 2014).

Chapman et.al has worked on this question under the topic 'New Learning' at professional conferences. With regard to New Learning, they write that it is an innovative process aimed at collaborative learning in professional and scholarly events and is a new way of approaching evaluation at professional conferences (Chapman, Wiessner, Storberg-Walker, and Hatcher, 2007, p. 261). In a case study of three conferences knowledge transfer is analysed. The study concluded that 'conferences support incremental innovations through different channels' (Henn and Bathelt, 2014, p 112).

Therefore, there is a need for research that, on an empirical basis, focuses on the learning that takes place under conferences and the subsequent use of that which is learned (transfer). The literature review has confirmed our view that there is a lack of more empirically based knowledge about the relationships between the participants' satisfaction on the one hand and their assessments of relevance, learning and transfer on the other side. The literature review demonstrates that conferences can have different forms and purposes. The conferences for this research belong to the type of conferences that aims to provide participants with new knowledge they can use in their daily practice.

# Method

This research is based on a survey tool. That means that the findings are based on subjective data and are depending on the meanings the participants give to terms like learning. Although there are differences in how different individuals perceive, for example a concept like learning, and though it may be very different when a person believes that he or she has learned something, this study builds on the assumption that a subjective experience of learning is an indication that learning has actually taken place. An objective measurement of what the participants in the conferences have learned would certainly differ from this self-reported learning. However, this is not the subject of this study. Instead, the aim of the study has been to examine the relationships among a number of subjective experienced phenomena in the area of conference learning.

Our evaluations have focused on the relationship between the participants' experienced relevance of conference content, their experienced learning, their experienced satisfaction and their subsequent use of the things learned (transfer). The model shows a graphic representation of this relationship.

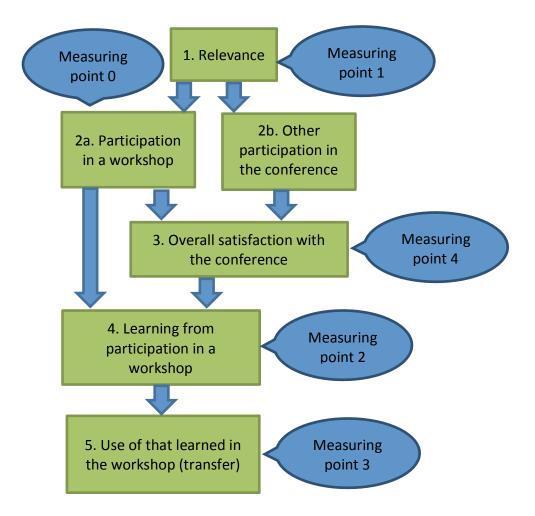


Figure 1. Model for relationship between relevance, learning, satisfaction, and transfer

The process shown in the figure begins with a relevance assessment which results in participation in a conference. The aim of the participation is learning and use of the learned in practice. Although there is a gap of time between a person examining the relevance of a conference (measuring point 1) and to the participation in the conference and from learning something in a workshop (measuring point 2) and to applying what is learned in practice (measuring point 3), data gathering took place at the same time, one-two months after the conference.

This can be seen as a methodological weakness, because some of the respondents assessments, for example of the relevance of the conference, may have been changed by the respondents over time. Conversely, it was what was possible within the framework of the chosen evaluation design. And it is the assessment of the authors that this is a minor bias. We present below the four questions with answers that represent the four survey variables, this study focuses on.

# Relevance

Relevance of the topic of the workshop the participants have attended was measured through the following question: How relevant was the topic for this workshop for your daily practices? {Insert x}There were the following options for responding: () Relevant to a great extent; () Relevant to some extent; () Relevant to a lesser extent; () Not at all relevant; () Don't know.

# Satisfaction

Satisfaction with the conference as a whole was measured through the following question: To what extent were you generally satisfied with the conference? (Insert x) We examined how satisfaction correlates with the assessment of relevance, learning and transfer. There were the following options for responding: () To a great extent; () To some extent; () To a lesser extent; () Not at all; () Don't know.

# Learning

The aim of participating in a workshop is that participants learn something. The participants' assessments of the learning outcome from the workshops they attended have been measured using the following question: To what extent did you learn something in connection with the workshop? {Insert x} There were used the same options for responding as regards Satisfaction.

# Use (transfer)

The participants' assessments of the use (transfer) of what they have learned from the workshops they attended have been measured using the following question: To what extent have you used what you learned from the workshop? {Insert x} There were used the same options for responding as regards Satisfaction.

The effect of conferences is assumed to depend on the time passing after the conference was held. Generally conference evaluation is carried out at the end of the conference (Neves, 2014). Some evaluations use a longitudinal design in which the effect is examined over a number of years (Urada, 2014), while others compare from year to year (Zisook, 2013).

This study has collected data over a period of four years about one-two months after each of the conferences. The question of when the best time is to examine how much of what was learned at the conference that has been used is difficult to determine. On the one hand, one can assume that the longer period that passes, the more that is learned will be possible to use. On the other hand, the longer period that passes from a learning event to the time for applying the learned, the more difficult it will be for the respondents to remember the context. Overall, it has been the conference managements estimate that 1-2 months have been a balancing of the two terms, where respondents have had a reasonable opportunity to apply what they have learned into practice.

The evaluation builds on a web-based survey, and the same questionnaire was used for each of the four years in order to compare the years. However, the questionnaire was adjusted each year with regard to the topics of the specific workshops. This survey form means that the picture of what the participants have learned, or for what they have used the things they have learned, has been through a subjective filter.

This result in two delimitations: Firstly, we are only provided with information about the things that the respondents are aware of, and therefore we know nothing about the unconscious learning and behaviour that has taken place. Secondly, we are only provided with information about what the respondents want to tell us and in the way they want to tell us. Although responses are anonymous, they will be affected by the respondents' self-understanding, world view and overall (including the emotional) approach to the conference as well as the evaluation. These sources of error must be included as bias in interpretation of the results.

Table 1 shows the number of respondents and the response rate for the four conferences.

Conference	Population (net)	Number of responses	Response rate
2010	148	88	59
2011	163	99	61
2012	133	77	58
2013	191	122	64

Table 1
Number of respondents and response rate for the four conferences.

Source: Danish Evaluation Institute 2011, 2012, 2013 and 2014

The questionnaire consisted of different types of questions. But in this study we have focused on the four questions we have presented already. Although the items 'relevance', 'learning' 'satisfaction' and 'transfer' are complex and multidimensional concepts, we have decided only to ask one question on each (see below). There are both advantages and disadvantages of such an operationalization: On the one hand it is a disadvantage that one question on each items cannot cover the many aspects and meanings of such complex concepts. On the other hand, it is not possibly to cover all aspects of this kind of complex phenomena even if you put enough so many questions. In addition to this, several issues can lead to both a lower response rate and a lower quality of answers. Therefore we have chosen only to ask those few questions that we found most important in terms of enlightening the concepts.

As can be seen from the four questions above, there has been used a unipolar response scale. The limited number of possible answers makes questions relatively easy to deal with. It is possible to admit that you do not know how to answer a question because the questionnaire enables respondents to state that they are not able to assess, for example, how much you have learned from a workshop. Although the questions about learning and transfer are particularly difficult to answer specifically, questions and possible answers have been formulated in such a manner that it makes them easy to answer and this has given a high response rate for the individual questions.

As can be seen in Table 5 there is a striking uniformity year by year in the levels of percentages regarding to the three variables, relevance, learning and transfer. In light of the specific circumstances, this indicates a high degree of reliability. With regard to validity, there are reasons to assume that it has been high too: First, the questionnaire was pilot tested among people who were part of the target audience for the conference. Secondly, the participants at the four conferences were either managers, supervisors or teachers from educational institutions. or researchers, government officials, representatives of professional organizations, etc. who works with education or training. Therefore, we assume that the respondents are aware of the concept of learning and were able to answer the questions. Thirdly, the questions were accurate when you consider that the respondents only were asked how they assess for instance how much they learned.

# Findings

A pervading characteristic in conference evaluations is that they generally include positive assessments of the conferences attended. Another pervading characteristic is that there is a positive correlation between the participants' satisfaction and experienced outcome from the conferences. A specific study therefore reports that 'about 99% of current participants reported that the conference benefited them in some way', '92% would possibly attend again in the future', and that the participants' perception of learning was the most important predictor of satisfaction, followed by customer service, and adequacy of topics' (Hoyt, 2011, p. 100).

Generally this study also demonstrates a high degree of satisfaction with the conferences in all four years. The percentage of respondents who replied 'to a great extent' or 'to some extent' to the question about whether they were generally satisfied with the conference was therefore 86%, 92%, 94% and 85% for the four years, respectively. Moreover, the survey shows a statistically significant connection between satisfaction on the one hand and relevance, learning and transfer on the other hand.

However, the theoretical connection between the participants' assessments of a workshop and satisfaction with the overall conference is *not* a one-to-one relationship. Firstly, most participants have taken part in two workshops per conference, and secondly many other factors than taking part in a workshop can affect a person's satisfaction with the conference as a whole, e.g. who they meet and talk with during the day.

In order to achieve a greater data basis, we have combined the four datasets for the four conferences and let one unit be one participant in one workshop. This gives us a total of 848 units. The analysis shows that on this basis there is a statistically significant connection between assessments of relevance, learning and transfer at the workshops attended on the one hand and the participant's overall satisfaction with the conference on the other.

Moreover a correlation analysis shows a significant correlation (= r) among all four variables (sorted by size of r):

- The variable learning correlates with use (transfer), r = .53, p < .01 (N=684).
- The variable relevance correlates with use (transfer), r = .44, p < .01 (N=682).
- The variable relevance correlates with the variable learning, r = 0.41, p < .01 (N=707).
- The variable learning correlates with general satisfaction, r = .38, p < .01 (N=705).
- The variable use (transfer) correlates with general satisfaction, r = .36, p < .01 (N=680).
- The variable relevance correlates with general satisfaction, r = .31, p < .01 (N=708).

This shows two important findings:

- The participants' assessment of relevance, learning and transfer are associated with satisfaction. Particularly those participants' that have learned something in connection with a workshop are also satisfied.
- The participants' assessment of relevance is more associated than satisfaction with learning and transfer. In other words, if a person finds in this case a workshop relevant, it is more likely that the person will learn something and use what is learned - compared to a person who has been satisfied with the conference.

The assessment of the extent to which participants have found the topic of the workshop attended relevant is significantly connected with the extent to which extent they are satisfied with the overall conference: 57% of those who found the workshop topic to be relevant to a great extent for their daily practices were also satisfied to a great extent with the overall conference. Whereas 18% of those who found the workshop relevant to a lesser extent or not at all for their daily practices, were satisfied to a great extent with the overall conference. These figures can be seen in table 2.

To what extent were the respondents satisfied with the overall conference crossed with the extent to which they found the workshop attended relevant.

	Relevant to a great extent	Relevant to some extent	Relevant to a lesser extent or not relevant at all	Total
Satisfied to a great extent	57%	29%	18%	41%
Satisfied to some extent, to a lesser extent or not satisfied at all	43%	71%	82%	59%
Total in %	100%	100%	100%	100%
Number of respondents	337	273	98	708

Source: Danish Evaluation Institute 2011, 2012, 2013 and 2014

The Pearson Chi-Square test table shows a value of 70.756. 0 cells have expected count less than 5. P=0.000

The assessment of the extent to which participants have learned something from the workshops they attended is significantly connected with the extent to which they are satisfied with the overall conference: 79% of those who replied that they had learned something to a great extent, were also satisfied to a great extent with the conference as a whole. Whereas 18% of those who said they had learned something to a lesser extent or not at all were satisfied to a great extent with the conference as a whole. These figures can be seen in table 3.

### Table 3

To what extent were the respondents satisfied with the conference as a whole crossed with the extent to which they have learned something from a workshop

	Learned something Learned something Learned something			Total
	to a great extent	to some extent	to a lesser extent or	
			not at all	
Satisfied to a great extent	79%	40%	18%	41%
Satisfied to some extent, to a				
lesser extent or not satisfied at all	21%	61%	82%	59%
Total in %	100%	101%	100%	100%
Number of respondents	129	380	196	705

Source: Danish Evaluation Institute 2011, 2012, 2013 and 2014

The Pearson Chi-Square test table shows a value of 119.285. 0 cells have expected count less than 5. P=0.000

The assessment of the extent to which participants have used what they learned from a workshop is significantly connected with the extent to which they are satisfied with the overall conference: 74% of those who replied that they had used what they had learned, were also satisfied to a great extent with the conference as a whole. Whereas 26% of those who replied that they had used what they had learned to a lesser extent or not at all, were satisfied to a great extent with the conference as a whole. These figures can be seen in table 4.

Table 4				
To what extent were the respondents satisfied with the conference as a whole crossed with the extent to which				
they have used what they learned from the workshop				

	Used to a great extent	Used to some extent	Used to a lesser extent or not at all	Total
Satisfied to a great extent	74%	60%	26%	41%
Satisfied to some extent, to a				
lesser extent or not satisfied at all	26%	40%	74%	59%
Total in %	100%	100%	100%	100%
Number of respondents	46	244	390	680

Source: Danish Evaluation Institute 2011, 2012, 2013 and 2014

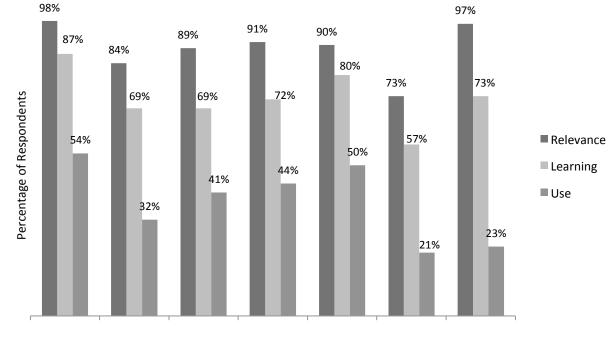
The Pearson Chi-Square test table shows a value of 94.288. 0 cells have expected count less than 5. P=0.000

If participants find the content of the workshop relevant and not least educational and useful, they are very likely to be satisfied with the conference.

However, looking at those who were satisfied to a great extent with the conference as a whole, 66% found the topic of a workshop attended relevant to a great extent, whereas 35% said they had learned something to a great extent from a workshop, and 12% said they had used what they had learned to a great extent.

Satisfaction with the conference as a whole does not necessarily mean that the participants thought they had learned something. Similarly, satisfaction with the conference does not indicate that the participants use what they have learned in their daily practices.

Figure 2 shows the percentage who replied 'to a great extent' or 'to some extent' to the three questions about relevance, learning and use of the things learned at the seven workshops held in 2013. We assume that these percentages are an indication of a positive outcome, even though we are operating with unipolar response scales. One could argue that those who answer that they have learned something or used something 'to a lesser degree' should also be included in the group with a positive outcome from the conferences. The reason for not including this group of respondents is due to the uncertainty associated with a statement on having learned something to a lesser degree or used something you have learned to a lesser degree. Not including this response value in the calculation of 'positive values' provides us with a more cautious indication of how positive the respondents have been.



Source: Danish Evaluation Institute 2014

*Figure 2.* The percentage of respondents who have replied 'to a great extent' or 'to some extent' to the three questions about relevance, learning and use in relation to the seven workshops held at the conference in 2013

Despite differences between the individual workshops, figure 2 clearly shows that many participants find that the topics have been relevant, fewer participants have learned something from the workshops and even fewer have used what they have learned. While figure 2 above only covers one year and has been divided into individual workshops, table 5 shows the respondents' assessments in relation to all the workshops they attended at the conferences in each of the four years.

#### Relevance n= Learning Use 2010 232, 233 and 216, respectively 82% 67% 40% 70% 2011 176, 176 and 173, respectively 84% 46% 2012 145, 143 and 143, respectively 86% 76% 45% 2013 218, 218 and 218, respectively 90% 69% 35% Total for all four years 85% 70% 41%

Percentages of respondents who have replied 'to a great extent' or 'to some extent' to the three questions about relevance, learning and use for the conferences in 2010, 2011, 2012 and 2013, respectively

Source: Danish Evaluation Institute 2011, 2012, 2013 and 2014

Note that the unit in the population is one participant who has attended one workshop. At the first conference, there were three rounds of workshops, whereas there were only two rounds at the last three conferences. Therefore, the same person can act as respondent more than once.

The statistical uncertainty with a confidence level of 95% for the three percentage figures is: 3.4, 4.2 and 4.7%, respectively in 2010, 3.7, 4.6 and 5.1%, respectively in 2011, 3.8, 4.8 and 5.5%, respectively in 2012 and 2.6, 4.0 and 4.1%, respectively in 2013.

On the face of Table 5, three factors stand out:

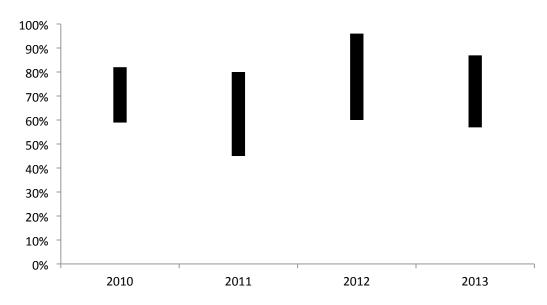
Firstly, even though the figures for the four years differ, there is a striking uniformity year by year in the levels of percentages with regard to the three variables. A clear pattern is shown with regard to all four evaluations; that a very large group of 82-90% find the topics relevant for their daily practices to a great extent or to some extent. Whereas a somewhat smaller, but still a relatively large group of 67-76% say that they have learned something from the workshop to a great extent or to some extent. Finally, a smaller group of 35-46% say they have used what they have learned. This indicates a high degree of reliability.

Secondly, there is a marked difference in level between the percentage who assess the relevance positively, the percentage who assess the learning outcome positively and the percentage who assess to have used what they have learned. The differences between the percentages who assess relevance, learning outcome and use of what they have learned positively, i.e. 'to a great extent' or 'to some extent', are statistically significant. This will be explained in the discussion.

Thirdly, the percentages are at a relatively high level, particularly in relation to relevance. One explanation to this could be that participants generally only sign up for such conferences when they find the content relevant. The participant composition supports this assumption.

As figure 2 shows, the percentages that have learned something varies from workshop to workshop. Figure 3 shows the difference between the workshop from which participants have learned most and the workshop from which they have learned least in the four years. The figure shows that where participants have learned least, 45% have learned something, while where they have learned most, 95% have learned something. The workshops in which participants have learned least differ significantly from the workshops in which participants have learned most.

#### Table 5



Source: Danish Evaluation Institute 2011, 2012, 2013 and 2014

*Figure 3.* The gap between the workshop with the highest percentage of respondents replying that they have learned something 'to a great extent' or 'to some extent', and the workshop with the lowest percentage in each of the four years

The following workshops got the highest ratings in the four years:

- Companies' use and assessment of labor market courses (among workshops with N> 10): (N = 36)
- Flexible learning (N = 16)
- Innovative learning in adult and continuing education (n = 25)
- Application of recognition of prior learning in relation to labor market courses (n = 37)

While there may be many factors that have an impact on the relationship between how much respondents have learned by participating in a workshop and the theme of the workshop, it is a common denominator for these four workshops that have got the highest ratings in the four years, that they all have been about themes that has been highly relevant for the participants in their daily work at the educational institutions.

We have presented above results from the evaluations on the basis of quantitative data on the participants' assessments of relevance, learning and use. The survey also enabled respondents to answer an open-ended question in their own words. The question was to exemplify what they had used and how. These data are interesting because they illustrate the variation in the use in practice of what has been learned at the conferences.

The results of the open-ended question were a number of examples on use which provide an insight into the relationship between the content of workshops on the one hand and use on the other. As use is linked to the outcome that some specific persons experienced from participating in specific workshops, it is not possible to generalise up to the general spread of the various wavs of using what is learned at conferences. We have chosen not to reproduce verbatim comments from the participants, as they are often highly contextual and therefore can be difficult to interpret without the specific context. However, the following categories illustrate the different ways of transfer:

- Some participants have used what they have learned in a subsequent personal reflection process and/or development process, e.g. in connection with clarification of concepts and relationships or understanding challenges.
- Some participants have used what they have learned for specific work assignments, e.g. supervision or educational planning.
- Some participants have used what they have learned as inspiration for organisational change or new measures.
- Some participants have used what they have learned to share knowledge with colleagues, collaboration partners and others.

Many of the examples of use described suggest that use has had value for the organisations in which the participants work (see level 4 of Kirkpatrick's model). However, it is not possible to determine whether this has actually been the case with this research design.

The conference management has seen the examples of what the participants have used in practice in connection with every single workshop, and that has been a valuable feedback to be used in planning of future workshops in order to strengthen the dimension of transfer.

# Discussion

We have chosen to use the actual workshops as our data points, where a participant can have participated in more than one workshop, though this need not to be the case. In this way a participant in the conference can have participated in up to three workshops in one year, and thereby contributing with three data points. We have chosen this approach for two reasons: One, to get a higher number of data points and two, because we wanted to focus on the learning aspect etc. in each particular workshop. It is a weakness of this concept, that there might be spill over effects, for example participants' impression of one workshop influencing their perception of another or interactions among participants when meeting each other in the breaks etc. We have not been able to run statistical analysis that can eliminate those kinds of possible spill over effects that can influence the single respondent. So the results should be interpreted with this reservation.

The findings show that the interval as regards assessment of transfer is clearly below the interval as regards learning, which in turn is clearly below the interval as regards satisfaction: While between 86 and 94% are satisfied in the four years, between 67% and 76% assess they have learned something, and between 35 and 46% have used something they have learned. This pattern appears relatively stable in spite of the differences in conferences themes, content of each year's workshops and the specific participants.

When some people has been satisfied with participating in a conference aimed at learning and transfer, although they have not learned anything from their participation, it emphasizes the need to ask directly for learning and transfer rather than on satisfaction. But although it is more obvious to ask directly for assessing relevance, learning and transfer than for satisfaction, it is also necessary to look at how these three concepts interact. The three concepts: relevance, learning and use (transfer) are related in a complicated and inconclusive way. Each of them refers to different aspects of a more overall learning process, as illustrated in the model in figure 1. Content can be relevant without it resulting in learning. Similarly, participants can learn something without translating it into practice (transfer) in a specific context.

Nevertheless, it makes sense to couple the three concepts, because use of something learned obviously presupposes that it has actually been learned, and because it is reasonable to assume that the fact that participants find something relevant facilitates the possibility of learning. Therefore, although there is a logical relationship between the three concepts, it is difficult to link them together in practice. This is due to several types of uncertainty:

Firstly, there is uncertainty relating to the relevance concept. Relevance is about the significance or importance attached to something in a given context. Therefore, if a conference participant is asked about the relevance of a specific topic, the assessment will depend on how this participant perceives the significance or importance in relation to the situation the person is in, including the challenges at work and the person's values and interests (what he/she finds interesting and important). Thus, when a respondent assesses something to be relevant, it may be related to the fact that the respondent finds it useful for his/her own situation, or deems it important in general and does not necessarily have a specific learning need.

Secondly, there is uncertainty relating to the learning concept: It is difficult to express learning in words, and there is no one-to-one relationship between what you learn and what you think you have learned. Therefore, there is a difference between conscious and unconscious learning, and the assessment of what and how much has been learned is influenced by a series of subjective factors, such as motivation to learn and the assessment of the value of the things learned. Thus when a respondent assesses that he/she has learned something, this assessment will be strongly influenced by the respondent's awareness of the result of the learning process, just as it will be influenced by other subjective circumstances.

Thirdly, there is uncertainty relating to the transfer concept: In this article transfer means use of knowledge and ability in one context to qualify action in another context (Wahlgren and Aarkrog, 2012). Therefore, when a respondent assesses that something he/she has learned in one context has been used in another context, it will be influenced

by how conscious the respondent is of what has been learned and how it has been used. There may be participants who have actually learned a great deal without realising it and subsequently change their behaviour as a result of this. In addition to this is the time dimension, as the respondents were asked about use of the things learned relatively shortly after the learning situation (about one month). Therefore, there may be examples of people not using what they have learned until after they have been asked about it. This is because they will not be in a situation to use what they have learned until later.

Therefore, it is necessary to make some reservations with regard to the respondents' replies in connection with their assessments of relevance of topics as well as how much they have learned and to what extent they have used what they have learned.

The fact that there are more respondents who find a topic relevant than there are respondents who have learned something by participating in a workshop on this topic, may be related to the fact that:

- Participants who find the topic relevant beforehand have extensive knowledge about the area and for that reason they do not learn anything new.
- The organisers of the workshop did not succeed in organising the workshop in such a manner that it contributed learning, despite the fact that participants found the topic relevant.

Together this means that the percentage of participants who have learned something, in this case from a workshop, is likely to be smaller than the percentage of participants who found the topic relevant.

The fact that there are more respondents who reply that they have learned something than respondents who reply that they have used what they have learned, may be related to a number of potential barriers for transfer: factors in the participants themselves, including motivation to use what they have learned. factors in the use situation, including possibilities to be able to use what has been learned in practice (Burke and Hutchins, 2007; Russ-Eft, 2002).

Together this means that the percentage of participants who have used what they have learned is likely to be considerably smaller than the percentage of participants who have learned something, in this case from a workshop.

# Conclusion

In our study we have found significant correlations variables: among the four participant's assessments of relevance, learning and transfer at the workshops attended and the participant's overall satisfaction with the conference. Moreover, participants' assessment of relevance, learning and transfer are associated with satisfaction. Particularly those participants' that have learned something in connection with a workshop are also satisfied. Moreover, Participants' assessment of relevance is a stronger associated than satisfaction with learning and transfer. In other words, if a person finds in this case a workshop relevant, it is more likely that the person will learn something and use what is learned - compared to a person who has been satisfied with the conference.

We have determined that the percentages who find the content to be relevant, who state that they have learned something and who say that they use what they have learned, only vary marginally from year to year. This is despite different participant compositions and different contents at conferences.

Even though participants' satisfaction with different parameters in connection with a conference in itself can be useful knowledge for the organisers, it is a weak indicator of learning and transfer. This survey shows that participants, who have learned something or used what they have learned to a great extent, are also satisfied with the overall conference to a great extent. However, the reverse cannot be concluded. The degree of satisfaction only says little about how much participants have learned and used.

Therefore, to find out more about learning and transfer, it is necessary to ask explicitly about these aspects. Questions for the participants on their assessment of relevance, learning and use can qualify the evaluation and provide organisers with valuable knowledge for planning future conferences. Furthermore, such questions can help strengthen focus on learning outcome and transfer in connection with conferences as learning arenas and in this way they can be used with a formative purpose.

# Acknowledgment

We owe Methodology Consultant Soren Haselmann and other colleagues at The Danish Evaluation Institute thanks for helping with collecting, calculating and analyzing survey data.

# References

- Absalom, M., and Morgan, A. (2011) What language teachers want - considering the evaluation of 18th biennial conference Babel, 47(1), pp. 32-38.
- Alawneh, M. (2008). Factors Affecting Training Transfer: Participants' Motivation to transfer training Literature Review (p. 7): Penn State University.
- Arellano, D. E., Goodman, D. A., Howlette, T., Kroelinger, C. D., Law, M., Phillips, D., Jones, J., Brantley, M. D. and Fitzgerald, M. (2014) Evaluation of the 2012 18th Maternal and Child Health (MCH) Epidemiology and 22nd CityMatCH MCH Urban Leadership Conference: Six Month Impact on Science, Program, and Policy Matern Child Health J, 18, pp.1565-1571. doi: 10.1007/s10995-014-1585-x.
- ASTD, American Society for Training and Development (2009) The value of evaluation: Making training evaluation more effective .
- Burke, L. A., and Hutchins, H. M. (2007). Training Transfer: An Integrative Literature Review *Human Resource Development Review*, 6(3), pp. 263-296.
- Chapman, D. D., Wiessner, C. A., Storberg-Walker, J., and Hatcher, T. (2007) New Learning: a different way of approaching conference evaluation *Knowledge Management Research and Practice* 5, pp. 261-270. doi: 10.1057/palgrave.kmrp.8500147.
- Chapman, D. D., Wiessner, C. Aalsburg, M., Janet, F., Nancy, J., Stevenson, L. and Majekodunmi, D. (2009) Crossing scholarly divides: Barriers and bridges for doctoral students attending scholarly conferences New Horizons in Adult Education and Human Resource Development, 23(1), pp. 6-24.
- Danske-Regioner. (2009). Evaluering af ViSkonferencen den 7. maj 2009 . pp.1-16.
- Elmegaard, L. (2011). Evaluering Idékonference om Socialt Entreprenorskab http://www.udvindvaekst.aau.dk/, pp. 1-12.
- EVA, Danmarks Evalueringsinstitut (2011) Evaluering af VEU konferencen i 2010 .
- EVA, Danmarks Evalueringsinstitut (2012) Evaluering af VEU konferencen i 2011 .
- EVA, Danmarks Evalueringsinstitut (2013) Evaluering af VEU konferencen i 2012 .
- EVA, Danmarks Evalueringsinstitut (2014) Evaluering af VEU *konferencen i 2013*.
- Gessler, M. (2009) The correllation of participant satisfaction, learning success and

learning transfer: an empirical investigation of correlation assumptions in Kirkpatrick's fourlevel model *International Journal Management in Education*, 3(3/4).

- Harrison, R. (2010). Unique Benefits of Conference Attendance as a Method of Professional Development for LIS Professionals *The Serials Librarian*, *59*, pp. 263-270. doi: 10.1080/0361526X.2010.489353.
- Hatcher, T., Wiessner, C. A., Storberg-Walker, J. and Chapman, D. (2006) How a research conference created new learning: a case study *Journal of European Industrial Training*, 30(4), pp. 256-271. doi: 10.1108/03090590610673632.
- Henn, S., and Bathelt, H. (2014). Knowledge generation and field reproduction in temporary clusters and the role of business conferences *Geoforum*, 58 (2015), pp. 104-113.
- Hoyt, J. E. and White, C. (2011). Increasing the Quality and Value of Conferences, Seminars, and Workshops *The Journal of Continuing Higher Education, 59*, pp. 97-103. doi: 10.1080/07377363.2011.568828.
- Kirkpatrick, D. L. (1970). Evaluation of shortterm training in rehabilitation College of Education. Department of Special Education. University of Oregon. Eugene, Oregon 97403.
- Kirkpatrick, D. L. (1994). Evaluating Training Programs San Francisco: Berrett-Koehler Publishers.
- Louw, I., and Zuber-Skerritt, O. (2011) The learning conference: Knowledge creation through participation and publication *The Learning Organization*, *18*(4), pp. 288-300. doi: 10.1108/09696471111132504.
- Mealy, K. A. (2013). 2013 APSA Teaching and Learning Conference and Track Summaries *The Teacher, American Political Science Association, 2013.* doi: 10.1017/S1049096513000772.
- Neves, J., Lavis, John N., Panisset, Ulysses and Klint, Markus Hultstrand. (2014) Evaluation of the international forum on evidence informed health policymaking: Addis Ababa, Ethiopia - 27 to 31 August 2013 Health Research Policy and Systems (12:14). doi: 10.1186/1478-4505-12-14.
- Nicholson, N., Shapley, K., Martin, P., Talkington, R. A., and Caraway, T. H. (2014) Trekking to the Top - Learning to Listen and Talk: Changes in Attitude and Knowledge After a Family Camp Intervention *The Volta Review*, 114(1), pp. 57-82.

- Pletcher, S. N. R., Scott W. (2011) Web-based Morbidity and Mortality Conferencing: A Model for Rural Medical Education Journal of continuing education in the health professions, 31(2), pp. 128-133. doi: 10.1002/chp.20117.
- Ravn, I., and Elsborg, S. (2011). Facilitating learning at conferences *International Journal Learning and Change*.
- Russ-Eft, D. (2002). A Typology of Training Design and Work Environment Factors Affecting Workplace Learning and Transfer *Human Resource Development Review*, 1(1), pp. 45-65.
- Stufflebeam, D.L., and Coryn, C.L.S. (2014). *Evaluation Theory, Models, and Applications*. Second edition. San Francisco. Jossey-Bass.
- Trivette, M.C., and Dunst, C.J., Hamby, D.W. and O'Herin, C. E.. (2009) Characteristics and consequences of Adult Learning Strategies *Research Brief Volume*, *3*(1), pp. 1-33.
- Urada, D. I., Rawson, R. A. and Onuki, M. (2014) Peace Building Through a Substance Use Conference Structured on Peace Psychology Principles Peace and Conflict: Journal of Peace Psychology, 20(1), pp. 84-94. doi: 10.1037/a0035579.
- Wahlgren, B., and Aarkrog, V. (2012) Transfer -Kompetenceudvikling i en professionel sammenhaeng Kobenhavn og Aarhus: Aarhus Universitetsforlag.
- Wallach, T. (2014). What do Participants Learn at Group Relations Conferences? Organisational and Social Dynamics, 14(1), pp. 13-38.
- Watkins, R., Leigh, D., Foshay, R., and Kaufman, R. (1998) Kirckpatrick Plus: Evaluation and Continous Improvement with a community Focus ETR and D, vol. 46, No. 4, 1998, pp. 90-96, ISSN 1042-1629.
- Wiessner, C. A., Hatcher, T., Chapman, D. and Storberg-Walker, J. (2008) Creating new learning at professional conferences: an innovative approach to conference learning, knowledge construction and programme evaluation *Human Resource Development International*, 11(4), pp. 367-383. doi: 10.1080/13678860802261488.
- Zisook, S., Boland, R., Cowley, D., Cyr, R. L., Pato, M. T. and Thrall, G. (2013) Teaching Scholarly Activity in Psychiatric Training: Year 6 and 7 Academic Psychiatry, 37(2), pp. 82-86.

# Appendix: The Questionnaire

- Background questions:
  - What type of institution or company do you represent / are you employed?
  - What position do you have?
  - What was your role in the conference? (speaker or other forms of participation)
- Assessment of the workshop in the first session:
  - Which workshop did you participate in the first session?
  - How relevant was the theme of this workshop for you in relation to your daily work?
  - To what extent did you learn something related to the workshop?
  - To what extent have you applied what you learned in the workshop?
- Please describe the learning you have been using and how you used it. It might be about taking an initiative in relation to your colleagues, changed practice or have sought supplementary knowledge. (open question)
- Assessment of the workshop in the following sessions (Questions above is repeated)
- Assessment of plenary presentations
  - To what extent did you learn something related to the presentation in plenary by ...? (Repeated as needed)
- Overall assessment and perspectives
  - To what extent did you benefit from the exchange of experience between participants in the conference?
  - To what extent did the conference give you useful contacts and network?
  - To what extent did you find the conference spread of content (in workshops and plenary) rewarding?
  - To what extent do you find the price for participation in the conference fair?
  - To what extent were you satisfied with the conference venue, including in terms of facilities, catering and service?
  - To what extent were you overall satisfied with the conference?
  - To what extent would you want to participate in a similar conference again?
  - Write here if you have any other comments about the content of the conference or form. (open question)
  - If you have suggestions for themes or topics that could be interesting to consider in the context of a new conference? (open question)