Learning transfer: Enhancing retention and usage of new knowledge, skills, and abilities acquired in training and learning programs to leverage and promote lifelong learning

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Strategies for advancing lifelong learning
Lifelong learning, which most often makes one think of adult learning, can occur in many different forms. Sometimes learning results from formal training courses. Many times the adult education is less formal such as learning English as a second language or learning to paint using water colors. Often lifelong learning is considerably informal, for instance computer skills classes held in senior centers, learning how to prepare income tax forms or investment planning.

Success of lifelong learning cannot be measured only in the return on investment that corporations and individuals realize from the monies spent, or in the actual completion of a course of study – whether formal or informal. Rather, success of any adult learning program is more significantly measured by the amount of learning which is transferred to the participants’ environments – whether workplace or home.

Through 17 case studies that include 498 respondents, the authors have determined that, though nothing can absolutely assure that learning transfer will transpire, there are many strategies that can be employed that will enhance the chances for transfer to occur. The authors’ Successful Transfer of Training model includes variables detailing learner characteristics and motivation, design and delivery, the learning context, immediate application of new learning, workplace environment and learner support, and eliminating barriers for learning transfer. The authors also address the context of variables before, during and after a course. The model additionally includes four key players who form the learning team: the program planner/designer, the instructor, the learner, and the organization or management. When each player engages in active roles during the phases prior to, during, and after training occurs, and the transfer variables are addressed, the chances for the learning to be retained is greatly enhanced. (For greater detail about these learning variables, contexts for learning, and the roles of learning...
stakeholders, the authors suggest consulting the imminent publication of the Krieger Publishing Company’s *Successful Transfer of Learning* by Daffron and North).

**Best practices and factors known to enhance the retention of learning**

The authors’ review of existing literature and research, and the analysis of the data garnered from the authors’ 17 case studies have yielded best practices for planners, trainers, learners, and organizations. The authors’ provide strategies which can be employed before, during, and after adult and continuing education experiences in order that the new knowledge, skills and abilities (KSA) can actually be used once they are learned. After all, this is the essence of lifelong learning. Of what value is any class or training if the new learning is lost soon after the conclusion of the course?

Many factors are known to influence learning transfer including:
- Planning meaningful courses that are at skill level and needed;
- Designing and delivering courses to be interactive;
- Involving the participant; applying the KSA learned in the course and meeting the expectations of the supporting organization.

The authors’ desire is that in sharing these fundamental concepts, the argument is so compelling that the reader would be impassioned to include transfer strategies for each role involved in the learning process and for every aspect of the learning continuum.

Although the theory and conceptual components of the transfer process are of the utmost importance, the tactical component is equally significant and generally more actionable. There is a desire amongst most to have one simple question answered: ‘So, exactly HOW does one go about doing any of this?’ This question can be answered by examining the processes mentioned above and detailing best practices and prescriptive advice for each.

**Planning Meaningful Programs**

It seems logical to assume that the responsibility for this phase of the program planning is strictly in the realm of the program designer. The authors’ case studies showed that most of the 498 survey respondents also thought this, though they responded that they wanted their needs to be considered by the designer. If, like the survey respondents, one supposes that planning is for designers only, one is very probably incorrect. If the authors’ have learned one thing in the course of their research and studies it is that no single thing – whether it is the phase of training, the variable in the transfer process, and/or the training stakeholders – is solely responsible for any given aspect of training and consequently learning transfer.

One might examine the different roles each of the stakeholders can play in order to positively influence learning transfer in the planning process. In this
section, the authors’ cite each of the four roles individually. Frequently the program designer and the trainer are the same person; however the function of each of these roles can be very disparate.

In planning meaningful programs that will have a chance of transferring after the course is complete, there are several aspects that effective planners must consider.

- Come together with the management or the organization requesting the program. The planner must understand the organization’s concerns, challenges, and their specific expectations.

- Conduct a formal or informal needs assessment to ensure that the organization’s and the learners’ needs are adequately addressed. Though the designer can be fairly accurate in assessing needs, the authors’ recommend that the gathered information be given to a representative group of members in the organization – both those in leadership and the actual learners – for feedback. This interaction with the organization and with prospective learners is a fruitful time to discuss and plan for learning transfer at the same time the coursework is being planned.

- Build expectations of the learners to motivate them before the course takes place. Setting positive expectations can predetermine both a successful course and learning transfer. This can be as simple as constructing explicit, clear descriptions to ensure the course is honestly portrayed. Designers can leverage expectation building as another avenue to partner with the organization.

In order for the instructor to put into place ideas and strategies to encourage participants to transfer their new skills, knowledge, and abilities (KSA), the instructor must be a connected partner in the process.

- Understand the goal of the program. The instructor must be aware of how the course will meet needs for alignment with the learners and organization’s goals and vision. Being cognizant of these facts enables the instructor to incorporate meaningful transfer strategies within the context of the coursework.

- Incorporate feedback from the pre-course needs analysis and from previous sessions of the specific course. Savvy instructors use every piece of feedback at their disposal to tailor courses to address the needs of individuals and distinct organizations. The tailoring process includes building into the training session specific strategies for
learning transfer that are germane to the individual learners or specialized organizations represented in the participant group.

- Plan for practice and follow-up. There is a need for practice sessions within the course. Consummate instructors plan the practice sessions to incorporate many learning modalities. When the practice closely resembles the context of the workplace or home environment, the learning has a greater likelihood of transferring. Planning for follow-up seals the process.

One must not underestimate nor misunderstand the organization’s role in the transfer process. After all, the leadership within an organization is in unique position to understand what outcomes are optimal for their specific learners and organizations. (Broad and Newstrom, 1992). Regrettably, all too often organizations abrogate the responsibility of forming meaningful and transferable learning to the designer and instructor. Astute organizations do not abrogate; they leverage. When organizations share in planning training with the designer, the instructor, and learners, then organizations can mitigate some of the barriers to learning transfer before the program ever takes place. On a corporate level, organizations can bring the entire team together and offer incentives.

- Explain to designers and instructors how the outcomes will affect the organization’s goals and objectives.

- Solicit management and learner input to assess needs prior to the event. This contributes to the feeling of ownership for all parties involved.

- Evaluate and compensate managers based upon how well the new KSA are implemented post-training.

- Reward and promote learners who demonstrate the new KSA in the work environment.

- Be an active participant in the design, construction and implementation of the course. Be generous with time. Allocate the time necessary for learners to complete pre-work during their work day.

The learner or participant cannot be neglected as a contributing partner during the pre-program planning process. In the authors’ case studies they found that training participants usually were not a part of the planning process, nor were their organizations involved. Though the learners expressed little to no concern about being left out of the planning process, they were very vocal in their complaints if the topics were wrong or if they felt
their needs were not met. Involving the participant is a fundamental part of the planning process.

- Participants involved in the planning stage feel more invested in the program, therefore increasing participation during the program and the likelihood of transferring the learning once they return to the home or work environment.

- When learners are involved the content of the class tends to be more relevant to the issues and problems facing participants once they return to the work or home environment. When the content closely matches the environment, learning transfer is increased.

- Many different learning modalities can be addressed and incorporated into the course. When disparate learning modalities are taken into consideration, learning transfer increases.

**Designing and delivering the course**

The quality of the design and delivery of any course is paramount to the course being successful. Undoubtedly, one measure of course success is in determining that the new knowledge, skills and abilities (KSA) have transferred to use in the participant’s environment. Transfer rarely happens as a serendipitous event. One can proactively arrange opportunities for transfer before the course by building it in to the planning, design, and delivery. The onus for this key process seems to fall more heavily upon the program planner and on the instructor; however the responsibility for this process does not exclude the other partners. There are still occasions for the organization and the training participant to share in the design and delivery responsibilities.

Baldwin and Ford (1988) determined that transfer is optimized when general rules and theoretical principles, in addition to skills, are a part of the learning design and delivery. Sometimes this is referred to as the ‘why’ part of new KSA as opposed to the ‘how’. Adding discussion and activities around the basic rules surrounding a concept, or inserting mention of the broad theory behind a model tends to increase the likelihood of transfer. The deeper understanding that comes with the ‘why’ component allows participants to more clearly see applications in their specific work or life environments.

It is incumbent upon the planner and instructor to include general principles in whichever presentation method they employ, whether it is lecture, PowerPoint, case studies, etc. The organization has a smaller role here, but there is ample room for the organization to support the concept of general principles by including germane discussion in one-on-one meetings with participants, and by pointing out general principles to newly trained employees as appropriate to specific work environment events. The participant has a slightly larger role than the organization. He or she must be cognizant of the theories and general rules, be ready to access them as needed, be vigilant to notice applicable moments when the rules and
principles come into play, and finally to be proactive in using new KSA when
the general rule or principle is a good fit for the participant’s task.

Feedback is essential when planning and delivering courses. Allowing for or
providing feedback can be central to planning for transfer. Feedback must be
both timely, that is, as immediate as possible, and explicit. The program
planner and can plan for times of feedback during the program, particularly if
participants are involved in group activities or partner activities in which they
are exploring concepts or practicing new skills. The planner and instructor are
obliged to also build in a time for learning how to provide specific and
actionable feedback. Feedback is effective when obtained from many
different sources. Valuable feedback can come from the group, a partner,
and/or from the instructor.

Once again the focus tends to fall first on the program planner and instructor.
Designing and implementing practice in the form of feedback directly
correlates to these two roles. However, the organization and the participant
also have some responsibilities for transfer when one considers feedback as
a tool. One of the richest sources of feedback for an employee with new KSA
is his or her manager. Managers who provide insightful and achievable
feedback can influence transfer of the new KSA in a profound way.

Queeney (2000) tells us that practice opportunities which are provided in
courses are more likely to transfer when the knowledge, skills and abilities
(KSA) can integrate directly into the training participant’s work or home
environment. The new KSA fit and work without the need for reworking or
modification. Frequently program designers and trainers do not have a
profound understanding or complete comprehension of the actual
environment in which the learner will use new skills. Therefore the designers
and/or instructors must collaborate with the organization and with the
participants in order to build relevant and useable practice into the
coursework. Obviously, the program planner and instructor must work in
partnership with the organization to ensure the practice opportunities are
applicable to the learner’s environment. The obligation is for participants to
actively participate in the practice sessions during the program, to
communicate the nature of the practice to an accountability partner, and then
to risk making a change in established patterns by trying the newly practiced
KSA in their environment.

**Involving the participant**

In reading the existing literature and conducting research via the 17 case
studies, the authors have found compelling evidence that can open doors for
all of the players in the process. Unquestionably, the art of ensuring that
trainees are engaged can be an integral piece of the program in general, and
learning transfer specifically. Nevertheless, involving the participant is much
more profound than the singular notion of learner engagement. Program
designers, instructors, and the organization have roles as well. They must be cognizant of how different professions learn. They must plan ways for learners to extricate individualized significance from the newly learned KSA in order to make use of them in their specific environments. They must be mindful of and strategize ways for learners to be involved in the learning process. These are all master keys to the learning transfer kingdom.

Daley’s (2001) study identified that when professionals learn something new, the meaning of the new KSA was not clear until it was correlated to the context of the learners’ individual environments, in other words, hooked onto something the learner already knew. Daley’s respondents expressed the need to connect the newly learned KSA to their existing set of personal knowledge. This is supported by the findings of others. (Merriam and Leahy, 2005), (Cheetham, and Chivers, 2001). How does one take the new information and make meaning of it? How can one turn the information into knowledge?

Here is what Daley tells us, ‘New knowledge is made meaningful by the ways in which learners establish connections between knowledge learned, previous experiences, and the context in which learners find themselves.’ (p. 41)

Instructional methodology that is perfect for one learner can be worthless for another. The authors found, through hundreds of responses to their survey, that the preferred method of learning is highly specific to individuals; one cannot say that certain groups of professionals prefer one specific method. For example, when conducting the case studies, the authors’ thought they might find that lawyers prefer to have their instruction delivered via lectures and handouts, or perhaps that social workers favor having their instruction delivered by using scenarios and case studies with role playing activities. Instead, the authors’ found that there is no one preferred method for any group. Individuals within any group have their personal preferences; groups as a whole cannot agree on the exclusive use of one method for delivering instruction. (Daffron and North, In press).

Instead, what was repeatedly stated in the majority of the authors’ 17 case studies was that if a training course is an hour long, the format was usually 55 minutes of lecture with 5 minutes at the end for questions. Interestingly, the same respondents informed us that they learn better and have a greater chance of using the information later, that is to say transferring the learning, if the program designers and the instructors get them involved in small group discussions, plan for participation in activities with a learning partner, and present case studies and encourage them to practice in role play sessions to name just a few. (Daffron and North, in press), (Daffron, Cowdrey, and Doran, 2007), (Daffron and North, 2006)
If the greater part of classes consists of lecturing with questions at the end, are visual learners and tactile/kinesthetic learners being served? Furthermore, are the visual and tactile/kinesthetic learners transferring the learning to their environments? Could it be that one is missing an opportunity to relate to many in the audience if only one delivery method, the lecture, is used?

What does that mean to establish what all of the players involved in an educational program can do to encourage transfer of the new KSA to the work environment? Program designers and trainers are obliged to present training using a variety of methods. In order to serve all of the training participants in the training classroom, multiple modalities must be designed into the training and then presented appropriately by the trainer. Training participants must be self-directed in their learning. Hiemstra (1994), says, ‘Individual learners can become empowered to take increasingly more responsibility for various decisions associated with the learning endeavor. Self-directed learners appear able to transfer learning, in terms of both knowledge and study skill, from one situation to another.’

The organization has more of a peripheral responsibility in this particular aspect of transfer. The organization can help supply program designers and trainers with real-world scenarios to use in the training program. Managers can mentor employees through role playing to help coach their employees in newly learned KSA. Yet again, even though some roles are more heavily involved than others, each one of the training partners can be involved.

**Conclusion**

There are many methods which can be employed to enhance the chance that knowledge, skills, and abilities (KSA) of any sort will transfer to the learner’s work and home environments. Adult learning providers can leverage and promote lifelong learning by implementing the variables of the ‘Successful Transfer of Learning’ model, by involving all the role players throughout the stages of the learning process.

**References**


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