This paper discusses the concepts of Human Resources Development (HRD), andragogy (adult learning), and transfer of training as factors to be considered when designing training for special education teachers in rural schools. A critical question facing HRD professionals who design and deliver inservice training for special education teachers in rural schools is "What can be done to ensure that the skills learned and practiced during training will result in behavior changes once the trainees return to their classrooms?" Transfer of training may be a particularly challenging issue in rural schools because schools often are located in areas where access to educational agencies, and even trained teachers, is difficult for recent trainees. Transfer strategies recommended by HRD and staff development professionals are listed. Finally, some results are presented from a transfer of training survey that asked 44 rural Kentucky special education teachers to list factors that assisted them most in implementing their recent inservice training. This paper contains 26 references. (TES)
Please Don't Ignore the Adult In Me! Using Human Resource Development (HRD) Training Strategies to Enhance Transfer of Inservice Learning

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Running Head: Transfer of Training

Abstract

A critical question facing Human Resource Development (HRD) professionals who design and deliver inservice training for special education teachers in rural schools is "What can be done to ensure that the skills learned and practiced during training will result in behavior changes once the trainees return to their classroom?" The issue here is transfer of training, the application of training on-the-job. Transfer may be a particularly challenging issue in rural schools because schools are often located in areas where access to educational agencies, and even trained teachers, is not readily available to recent trainees. This paper discusses the concepts of HRD, andragogy (adult learning), and transfer of training as factors to be considered when designing trainings for special education teachers in rural schools. Transfer strategies recommended by HRD and staff development professionals are listed. Finally, some results from a transfer of training survey which asked teachers to list factors which assisted them most in implementing their recent inservice training, are presented from 44 Trainable Mentally Handicapped (TMH) and Severely Profoundly Handicapped (SPH) teachers across rural Kentucky.
Introduction

A critical question facing HRD professionals who design and deliver special education teacher inservice training in rural schools is "What can be done to ensure that the skills learned and practiced during training will result in behavior changes once the trainees return to their classroom? This question is extremely important because schools invest large amounts of money and time for inservice training (Wood & Thompson, 1980).

A study of three urban school districts reported training dollars spent per teacher at levels between $1,000 and $1,700 (Hyde & Moore, 1982). Expectations would be that those trained would use what they have learned on their job, and that there would be clear evidence to substantiate the use of the new skills. However, Georgenson (1982) estimated that only 10% of content presented in training is reflected in behavioral changes on the job.

Rural schools are faced with problems such as geographic location, scarce professional resources, and administrators who may be uncertain about their role in helping their teachers implement new curriculum changes for special education students (Helge, 1984). As a result of these and other barriers encountered in rural settings, teachers returning from inservice training may be discouraged from using new knowledge and skills.

This concept paper provides a review and discussion of the concepts of HRD, andragogy (adult learning), and transfer of training (the application of training on the job): based on the assumption that these are important issues to consider when designing inservice trainings for special education teachers in rural schools.

Two strategies are used in selecting the information that is presented: a) a review of the literature in education, staff development, and management, and b) an analysis of some results from a survey of rural Trainable Mentally Handicapped (TMH) and Severely Profoundly Handicapped (SPH) teachers about which factors helped them
most in implementing new training from a recent inservice (transfer of training).

HRD and Andragogy

HRD is the systematic expansion through planned learning activities of people's work-related abilities focused on improving job performance and individual growth (Jones, 1981; Nadler, 1984). HRD activities are those that are traditionally planned and conducted by staff development professionals employed by the school district or State Office of Education. Some of these activities are providing inservice training, career development and personal growth opportunities. Decisions regarding the focus of HRD activities are generally determined by administering a needs analysis to teachers and administrators in the school district.

Knowle's (1984a and 1984b) theory of andragogy contains some useful information for planning an inservice training. The andragogy theory suggests that there is something distinctively different about how adults learn as compared to youth.

The theory is based on several assumptions. They are

1. Adults need to know why they need to learn the content that is being presented.
2. Adults have a self-concept of being self-driven and capable of being responsible for their own decisions.
3. Adults enter each learning activity with a greater volume of previous experiences than youth.
4. Adults come to the learning situation ready to learn.
5. Adults are more life-centered (task oriented or problem-centered in their orientation to learning and are motivated to devote more time and energy if they perceive that what they are learning will help them deal with their life situations.
6. Adults are motivated by internal pressures such as increased job satisfaction, self-esteem, quality of life.

Knowles (1984b) recommended that these assumptions be carefully considered in the design of HRD learning experiences in order to enhance transfer of learning.
Factors Which Affect Transfer of Training

How do we enhance transfer of training, (the degree to which an individual uses the knowledge and skills learned in training on the job), considering what we know about HRD and andragogy?

Many factors are described in the management and education literature which affect transfer of training. Annett and Sparrow (1985) and Noe (1986) addressed the importance of the learner's motivation, attitudes about the environment, values, and cognition on affecting transfer. Noe (1986) stated that:

Positive reactions of trainee, learning, behavior change, and improvements in job-related outcomes are expected from well-designed and administered training programs. However, the attitudes, interests, values, and expectations of trainees may attenuate or enhance the effectiveness of training. Determining the specific individual characteristics that influence the effectiveness of training is important if we are to understand how to increase the likelihood that behavior change and performance improvement will result from participants in training programs. (p. 727)

He further stated:

Trainees are likely motivated to transfer new skills to the work situation when they are confident in using the skills, are aware of work situations in which demonstration of the new skills is appropriate, perceive that job performance improvements may likely occur as a result of use of the new skills, and believe that the knowledge and skills emphasized in the training program are helpful in solving work-related problems and frequent job demands. (p. 743)

Other factors have been suggested as affecting transfer of training.

Berger (1985a), Showers (1983), and Zemke and Gunkler (1985) discussed the importance of attending to the design
Transfer of training and elements in the learning environment for facilitating the use of new skills and knowledge on the job. Some of these elements are the need to:

1. Conduct a thorough needs analysis of the trainee, the boss, the work environment, and the organization so that the training is what is needed to solve job-related concerns (Robinson & Robinson, 1985).

2. Explain the goals and expectations of the training at the beginning of the first day of the inservice (Zemke & Gunkler, 1985).

3. Use recursive training designs: making the process of education reflect (be congruent with) the subject being taught (Hiebert & Smallwood, 1983).

4. Use life-like situations from the job produces a more real experience for training. This strategy is also called the use of identical elements which states, "the greater the similarity between the training and operational environment the greater the transfer of training" (Zemke & Gunkler, 1985, p. 56).

5. Use projects to reinforce learning which are directly related to the job (Knowles, 1984; Kruger & May, 1986; Zemke & Gunkler, 1985).

6. Use goal setting (Wexley & Baldwin, 1986); and contracts (Knowles, 1984a) that clearly outline new behaviors once the trainee returns to work.

7. Use coaching - a supervisor or master teacher along with the newly trained teacher should state expectations, set goals for using new skills. The coach should give feedback on progress toward using new skills, encourage and praise, and demonstrate new teaching behaviors when necessary (Zemke & Gunkler, 1985; Joyce & Showers, 1983).

8. Use the Relapse Prevention Model (Marx, 1982) or the Forecasting the problem of transfer throughout the training process strategy (Joyce & Showers, 1983). Trainees are encouraged to be aware of the relapse process itself by having them identify situations that are likely to deter their attempts to use their new skills. They are then taught a variety of coping skills that will help them continue to use the training, as well as prevent them from not using the training.

9. Staff development activities should take place at the building level so that teachers can work in small groups where sharing of ideas and collegial relationships can develop (Nickolai-Mays & Davis, 1986).
Broad (1982), Garmston (1987), Georgenson (1982), and McEvoy (1987) recognized the importance of supervisory support in affecting transfer of training. McEvoy (1987) stated:

Principals seemed to convey support for their teachers in general attitude as well as in informal conversation. Teachers, in turn, reported a willingness to experiment with new or innovative techniques because they felt their principals were supportive and would not penalize them for experiments that failed. (p. 76)

Principals and local education agency coordinators may not understand all of the learning objectives for special education students, however their willingness to learn and support their teachers efforts to implement new training into the classroom program is a tremendous start.

Finally, Howey and Vaughan (1983) and Robinson and Robinson (1985) discussed how organizational variables such as money for materials and equipment, and the development of school policies to support new instructional programs, affect transfer of training. These variables are often difficult to manage, and help from parents, school board members, and community leaders is needed.

Berger (1985a) summarized all of the major factors which affect transfer into an "impact" formula:

\[(L \times LE) \times (B \times O) = \text{IMPACT}\]

Each factor is briefly summarized below.

**L = Learner**
- knowledge, skills, cognition  
- attitudes, values  
- motivation  
- reaction to the training  
- perception of usefulness of training

**LE = Learning Environment**
- physical environment  
- adult learning strategies  
- design, development, content, materials, activities of training
Transfer

- evaluation plan for enhancing transfer, follow-up
- objectives aligned with organizational and people needs

B - Boss
- his/her needs on the job for organization
- supportive immediate supervisor, willing to allow trainee to use new knowledge and skills
- reinforce, encourage, and reward training

O - Organization
- preparedness of system to implement training
- rules, culture, attitudes, resources
- money
- supportive staff

The next section will discuss some of the results from a transfer of training survey of 44 TMH and SPH teachers across rural Kentucky. The discussion will begin with a brief description of Project SPLASH (a statewide inservice for TMH and SPH teachers in Kentucky) and conclude with a list of recommended training strategies, to enhance transfer in rural schools.

Perceptions of TMH and SPH Teachers in Rural Kentucky Regarding Factors Which Affected Transfer in Project SPLASH

Project SPLASH (Strategies for Programming Longitudinally for All Severely Handicapped) is a 10-day statewide inservice training for TMH and SPH teachers in Kentucky, designed to assist with implementing a more functional community-based program of studies for students with moderate and severe handicaps. SPLASH consists of three modules (Attitudes and Behavior Management; Communication Development; Curriculum Considerations). The SPLASH training curriculum components are:

1. strategies for developing a functional age-appropriate curriculum.
2. assessing critical skills in natural settings.
3. designing behavioral objectives.
4. data collection.
5. principles of non-aversive behavior management.
6. successful learning and teaching strategies.
68 teachers who had participated in the SPLASH training were surveyed and asked to list five factors which provided the most assistance in helping them implement SPLASH (transfer of training). Forty-four teachers responded to the question. However, not all of the teachers listed 5 factors. The teachers listed 27 different factors which provided them the most assistance in terms of implementing SPLASH. The findings are presented in Table 1. When the 27 factors were ranked according to the number of teachers mentioning the factor, the following nine received the highest number of responses:

1. "hands on" practice (17)
2. local catalogue/notebook (13)
   teacher's experience, interests, or education (13)
   sharing and mentioning with other teachers (13)
3. money (10)
   coordinator (10)
   a trainer (10)
4. principal (9)
5. small group simulations and feedback (8)

Many of the factors mentioned above were previously described in the management and education literature as affecting transfer.
Transfer

10

Recommended Training Strategies for Enhancing Transfer in Rural Areas

On the basis of the results from this study, review of the management and education literature and consultation with SPLASH trainers and trainees, ten transfer of training strategies are proposed for consideration when designing and delivering inservice training, especially those conducted in rural schools:

1. A component for "hands on" practice with the type of students in the teacher's class.

2. Provide plenty of written materials related to the topic, including sample lesson plans that have been developed by participants in the training (local catalogues).

3. Offer the inservice to teachers who are interested and motivated to participate in the training.

4. Provide opportunities for teachers to share ideas and mentor one another. This allows them to begin talking about transfer before they leave the training. Mentoring opportunities (completing assignments in small supportive groups) often provide the foundation for continued support that teachers need to continue transferring the new skills weeks and months after the training. Use a newsletter to encourage the sharing of ideas, after the training.

5. Teachers need money to implement the training. Therefore, a budget should be committed to them before they attend the inservice. This way, they can plan their new instructional program during the training, based upon the budget.

6. Coordinators and principals should have a preview of the training. This will help them understand their role in supporting their teacher's effort to implement the training.

7. Multiple training strategies should be used such as small group simulations, role plays, and lecturettes.

8. Transfer Action Plan (Relapse Prevention Model) - Teachers should return to their classroom with a transfer action plan. Barriers to transfer should be discussed before the teacher returns to the classroom.

9. Principles of andragogy should be incorporated in the design of the training.

10. Teachers should be encouraged to evaluate the effectiveness of inservice training in terms of what helped them transfer the skills once they returned to the job.
Although the transfer of training strategies presented above are proposed for inservice trainings in rural schools, they are also effective in urban settings.

Conclusions and Summary

The primary reason for studying transfer is to help teachers use their new skills and knowledge in the classroom to educate handicapped students. Transfer is a challenge to achieve in all trainings, but can be particularly difficult in rural settings. Schools are often located in areas where there are few other education agencies or trained teachers that might help with implementing new training. When confronted with barriers such as lack of support, money, resources, or even uncertainty about some of the material covered in the training, it may be difficult to follow-through with new skills and knowledge.

Using principles of adult learning theory in the design and delivery of inservice training enhances transfer. "Hands on" practice with actual students provides a real learning situation. If sharing of ideas and peer-mentoring are encouraged during the training the likelihood that these relationships will continue after the training is greater. Thus, offering a tremendous source of support for transfer. Offering the training to teachers who are interested in the content of the training is important to consider. And, finally, principal and coordinator support enhance transfer, by providing the leadership that teachers need to try new teaching approaches.
REFERENCES


Transfer


### Table 1

**Rank and Frequency for each factor reported as Providing Assistance in Implementing Splash.**

<table>
<thead>
<tr>
<th>Rank</th>
<th>n</th>
<th>Factor</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>17</td>
<td>&quot;Hands on&quot; practice</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>Local catalogue and notebooks</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>The teachers' experiences, education, interests</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Sharing and mentoring with other SPLASH teachers</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>Money</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Coordinator</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Trainers</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>Principal</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>Small group simulations and feedback</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Classroom aide</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Developing instructional programs</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>Sharing and mentoring with trainers</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Parents</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>The training director of SPLASH</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Training</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>Supportive staff (psych., nurse, sec.)</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Transportation</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Speech therapist</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>Nonhandicapped peer-teacher</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Lectureettes</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>Community</td>
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<td>11</td>
<td>2</td>
<td>Consultation time</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>College instructor</td>
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