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Janice Bute
University of Central Florida

Bruce Roberts

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TECHNIQUES OF TEACHING ADULT LEARNERS

Compiled by Janice Bute and Bruce Roberts

Co-authors:

Beasley, Peter

Black, Robin

Blackburn, Jennifer

Brown, Daniel

Bufford, Tameka

Chandler, Ralph

Durgin, Janet

Edge, Judith Rubino, Shelley

Edmonds, Mary

Gallant, Tracy

Hale, Micheal

Hill, Jennifer

Johnson, Donald

Klingensmith, Pamela

Long, Vicki

Metzler, Lori

Moehl, Geoffrey

Peak, Jason

Porter, Heather

Prasch, Tara

Rethman, Mary

Ryder, Phillip

Smith, Cynthia

Smith, Darlene

Vonkadich, Amy

Warnick-Ellis, Alica

Wetherington, Renee

Woolbridge, Devin

Yates, Eugenia

Zink, James

OVERVIEW

This project is the compiling of class discussion related to characteristics of adult learners from a course "Teaching the Adult Learner–ADE 4382" offered through the University of Central Florida. A Web-based course was offered during the spring semester 2000 and taught by Dr. Larry Hudson. The course can be accessed at <http://reach.ucf.edu/~ade4382>

Introduction

After reading and compiling the postings made by the adult learners in this course, it was interesting to learn that "Learning" takes place among different targeted groups and in different settings. The following targeted groups were identified by the students in this course:

- Radiation Therapist
- HVAC personnel
- "GenerationXers
- "Newbies" Internet Users
- Middle and High-school Teachers
- American Red Cross
- Pre-School teachers
- Community College beginners writers
- Beginners piano students
- K-12 teachers for the deaf
- Post secondary vocational adults
- Nuclear power plant technicians
- Beginners internet users
- Professional adult students
- Diverse middle school teachers
- Reserve army units
- Elementary teachers and administrators
- Youthful offenders in prison
- Returning adult students
- Adult learners 55 years and older
- Experienced construction workers
- Beginners ESL adults 30-60 of age

- Middle-school teachers
- Skycaps
- New and experienced bank tellers
- Fellow employees age 20-50
- Office Technology students
- Pre-school teachers and learning center directors
- Adult learners age 18-25
- Automotive and Autotronics students

Whether it be teachers, Radiation therapists, or Computer "Newbies" learning in a classroom, lab, or in the field; a learning experience can be gained with effective teaching techniques that will help adult learners acquire the knowledge, skills and values needed to achieve their desired goals.

Review of relevant Web references

Methods and techniques used for teaching adult leaders were found on the World Wide Web. The students of this class then discussed their reviewed research and related it to their own methods, techniques and situations.

The majority of techniques discussed involved active participation, open group discussion, activities and learning, visual aids, demonstrations, hands on activities and relevance to the student. With the use of choice, students participate in the decisions that involve them, there by increasing student participation and motivation.

Modern technology, combined with self paced, hands on, and computer technology training has made possible the ability to do independent work and study. It has allowed distance study and teamwork that was impossible before. Combine this with the fact that Adult Teaching has moved from teaching a skill to learning how to solve problems and life long learning has lead to the need for continuing support, facilitation and mentoring.

Employers are looking for employees with the ability to learn new technologies, help solve problems, and work as a team remotely, not just the ability to do a particular skill, individually, and only locally. This is where the new technologies and methods come in.

The last point might be the most important. It is important to communicate with respect, listen with patience and interest, and set the example for your class by modeling what you teach and what is expected of the student.

"Creating a learning environment that meets the needs of adult learners is a key element of successful adult education programs. The challenge is to create a non-threatening atmosphere in which adults have permission and are expected to share in the responsibility for their learning". DS

Teaching by demonstration is an effective method of helping students to learn to carry out practical skills, or to understand processes. As a visual aid, a demonstration makes learning easier and creates interest, which helps student to remember what is being taught. Inquiry teaching is an effective method of delivery, which aims to help students teach themselves. The teacher sets the problem and provides the learning resources to enable to problem to be solved. It requires students to carry through systematic thinking or research to arrive at reasonable solutions to the problem. PK

Adult learners find many techniques effective when attending staff developments. Some include presentation of theory, modeling, practice,

structured and open-ended feedback and coaching. All of these are very important for trainers to implement when conducting training. It is also important to give learners a choice in the staff developments that they attend. Through modeling, the learner is not only given time to think about how it is that they will use the new knowledge as it relates to them but they will also feel a sense of importance. If the learner does not feel a sense of importance in the training then you have lost them from the beginning. RW

It is necessary for the adult students to know the knowledge of the subject matter for the age group they work with in their field. Modeling and demonstration are techniques that will be used with these adult learners. EY

Using cooperative/collaborative learning groups is important to my ideal writing instruction. Students get more out of writing reviews performed by peers. Peer review of assignments in cooperative or collaborative groups is the best way to work with adults learning how to write effectively. AW

The techniques most important when we train is first, making the information meaningful to the learner, second, giving options to choose from, and third, providing time for practice and support. One great advantage to setting up the training sessions for teachers away from their school and routine is they have the opportunity to interact with other teachers facing similar challenges. SR

In the self-directed technique the students set their own goals for the class and how they want to attain them. Self-directed learning focuses on the process by which adults take control of their own learning. In particular how they set their own learning goals, locate appropriate resources, decide on which learning methods to use and evaluate their own progress. The other technique is humanistic. Humanist theories are concerned with the human potential for growth. Humanism holds that perceptions are centered in experience. They also believe that adults are open to change and lifelong learning. Humanistic education focuses on the individual learner rather than on the content. VL

Key learning strategies include motivation, utilization, interest, stimulus, transfer, logic, immediate application, participation and repetition. The two that I have focused on are participation and immediate application. For the kinesthetic learner, hands on applications are important for them to gain an understanding of the concepts. Applied learning support retention. The use of the computer labs assists in the retention of the lecture or presentation. The labs are designed to be completed outside of the classroom environment, and the students are encouraged to perform them as often as possible in order to increase understanding and retention.

The principle of immediate application directs students to try out the skills or verbalize the facts just acquired. In effect, tell your learners, "You've just

learned it; now do it, here in the classroom." As they begin actually applying what they've just heard or seen, they:

- Establish more relationships among the parts of the course.
- Perfect or test their understanding of the subject.
- Get involved
- Develop still stronger motives for learning.

Methods and techniques used for class participation can be used to apply the Principle of Application. The point here is: have learners do and verbalize as soon as possible after their exposure to new facts. An effective way to use this principle is to have your learners give (write-present-discuss) an application of the concepts to their own situations "back home." This could be done individually or in teams. The key is to "do it now." Thus, the principle of "immediate application" is activated." Interactivity does not necessarily have to be instructor to student; it also includes the critical interactions between students. Workgroups, newsgroups, and study groups represent concepts for establishing communication and shared discussion. PB

Discussion and classroom lecture has to be interesting to keep the students attention. Using videos, overheads, computer programs help to get the point across. Hands-on still is the best learning technique, especially when learning about new equipment. DJ

Involving the adult learners with hands-on, exciting, and motivating lessons will only strengthen their drive to successfully integrate technology in their own classes. It makes sense that adult learners will perform better if they are able to actually try out the software and work on the computers during training. But you can't just leave the learners hanging in limbo you have to follow up with support and guidance. Adult learners are usually more self-directed, but they do want a facilitator to let them know they're on the right track. ME

With Self-Pace, a syllabus is given to the student with the assignments and due dates. The assignments are introduced by the instructor, and students then work on the assignment at their own pace paying attention to deadlines. Students have the opportunity to work in class and get help from the instructor and peers but may have to do work outside to stay on target.

Self-paced learning has been found to be very successful for older adult learners. These individuals generally have sufficient self-motivation to learn the information, as they are present on their own direction. There is often resistance to moving at the same pace as everyone else in the class, and older adult learners prefer the ability to move through the material at their own pace. One of the reasons for this preference is the desire to reduce negative criticism. Older adult learners often require frequent positive reinforcement; however, they have a harder time recovering from negative feedback. These learners have been found to

perform at a reduced rate when faced with time pressures, primarily due to errors of omission.

A critical factor with self-paced learning is providing adequate time for the individuals' needs, as well as instructional needs. These include physical needs. One of the primary influences that has been found on the effectiveness of older adult learning is the distraction of physical requirements, such as vision, hearing, mental stimulus, and bodily requirements. If these can be controlled through adequate and appropriate timing, older adult learners have been found to perform at the same levels as other adult learners.

One of the most difficult areas for older adult learners is learning thorough interference. Research has suggested a number of strategies to reduce or eliminate interference. These include the following:

- learning one task at a time,
- reducing the visual or auditory distractions,
- ensuring that the technologies and learning materials aid learning, rather than distract from the learning goals,
- testing for understanding as the learning progresses to confirm that a task has been learned prior to going on to the next task.

Some researchers have suggested that older adult learners are less cognitively able to perform well when confronted with distractions and interference. These studies

suggest that as interference is reduced, the potential for effective older adult learning to occur dramatically rise. MR

Presenting the facts of the subject is best approached by presenting outlines and inspiring discussions within the group, thus keeping members involve and contributing. Stimulating relevant "real world" situations and drawing students into the discussion keeps the energy level up and running. This also allows knowledge to flow from individuals other than just the instructor.

After discussion, breaking into small groups to do hands-on practice and modeling of the necessary skills we are presenting, let's the students explore the work at hand while still having the instructor and other students available to lean on when needed. This is applied easiest when modeled on typical job tasks. MH

The importance of knowing where to begin with the student is key. Every student starts academically in different places. The important point the instructor has to make is to bring the information to the student's level. There are principles that the instructor must always instill in their teaching to be successful. RB

Classroom discussion (conversation): This technique involves the entire classroom working together. Bring up an open-ended topic and prompt students to respond or share their ideas. This technique allows immediate respond to incorrect

English usage and positive feedback to correct usage. This as an excellent ESL teaches technique because it models everyday use of language.

Research and report: The activity simply involves bringing in an English newspaper and/or magazines and having the students read an article and then summarize it in front of the class. This technique exposes students to the modern usage of words and idioms. Another factor that makes this technique such a success is the flexibility of the reading material. My target students will need exposure to specialized vocabulary depending on their field. They can choose a magazine close to their profession to practice those specialized words.

Journal reporting: With journal reporting, the students keep a daily journal in English of their everyday activities. The student then presents this journal to the class. This allows students to practice their oral and written use of the language. I would upgrade this technique to keeping a journal on work related issues. It should be noted that the instructor of the class would be heavily involved with this technique as the students tend to simply list activities instead of expounding on them. JB

Continued support mean more than just a "one day and you are done" staff development. Besides having two days of learning, set up an open email support system for any questions or hurdles the teachers would encounter. This will help them to share with each other some of the problems they are running into. By

relevant learning, try to have a clear statement of what the staff development is teaching. LM

Depending on the type of training, the techniques will vary a little but there will be basics. First, goal setting activity; second, student introduction; third, icebreaker activity. Once everyone was more relaxed I will then delve into the material. Do not talk down to your students or present the material in an intimidating manner. Keep an even playing field for all involved so that the students are more receptive to the teacher and the teacher achieves the goal of getting across the material in which he or she wants the students to learn. ED

Collaborative learning is an excellent way to involve the class. It draws heavily on experiential learning and both the facilitators and learners become an active part of the educational process. It also is a great way to begin brainstorming ideas, build group structure and work as a team. In the discussion group, the student switches roles from the observer, to the listener, to the note-taker. Collaborative learning gives the student an opportunity to work with different learning levels. In addition, students discuss, exchange ideas and experiences with each other.

Students use the hands-on methods when using practical application and higher-order skills. Some of these examples are keyboarding, filing, and telephone simulation. Another ways the hands-on method is used is through Job Training.

Job interviewing, job search and filling out the application is an excellent way to show students what to expect in the real world.

Techniques most important when teaching is to provide structured group activities, case studies that demonstrate real world practical application to real world problems, and the use of visual aids. Adult learners need to be encouraged to ask questions because that is the essence of learning. Lecturing involves conveying general knowledge and information to the learners.

It is crucial for the students to have the opportunity to be able to discuss the information because it reiterates the points in the lecture and also clears any concerns a learner may have.

By providing case studies the instructor is presenting an account of real or fictitious situation including enough information to make it possible for the students to analyze the problems involved. Case studies are an excellent way to "transfer knowledge into practice."

Instructors can provide a break from the traditional lecture with visual aids. Many adult learners are better able to grasp ideas visually even after they have heard the information. Teachers should consider using, "charts, graphs, diagrams, the blackboard, models, films, filmstrips, slides, overhead transparencies, videotape, a storyboard or actual materials used in the work place." HP

The Contextual Teaching and Learning technique includes strategies to help teachers relate subject matter content to real world situations and motivate students to make connections between knowledge and its applications to their lives. Some examples of strategies used in Contextual Teaching and Learning are creating relevant problem-solving situations and teaching students to monitor and direct their own learning so they become self-regulated learners.

Another technique that will be effective with students is called Cooperative Learning and can be described as learning which occurs as a result of interactions between members of a collective group (two or more individuals). By having students work in-groups with other students of their same major, they can share ideas and experiences and more easily relate and learn from each other. JH

In demonstrating, the instructor shows the students the proper technique, use of tools, use of learned short cuts and long cuts. In the demonstration, the student looks on and observes the technique(s). The instructor will disassemble; the students will use concentrated powers of observation. The instructor will reassemble, the students will observe. Then when the Instructor deems fit, the students will be given or delegated the task of disassembly and assembly. Here, under careful supervision, the student is given the chance to emulate the instructor's correct procedures. Since my subject was a hands on technical type, these two techniques profited the student. PR

Over the last decade, there has been a move to change the way vocational teacher teach, by using many of the methods that academic teachers now use. Such methods are designed to help students develop critical thinking skills, in an effort to make them more employable. The automotive industry has complained for many years that the "product" that vocational schools turnout is not complete. They expect graduating students to be fully prepared for the work place. Not only do they expect them to know the technical skills, but also be able to communicate and exhibit clear work ethics. JZ

Creating a learning environment that is non-threatening is a key element of successful adult education programs. Support for adult learners is provided through a learning environment that meets both their physical and psychological needs (Imel). Learning styles theory implies that how much individuals learn has more to do with whether the educational experience is geared toward their particular style of learning than whether or not they are "smart." In fact, educators should not ask, "Is this student smart?" but rather "How is this student smart?" (On Purpose Associates). Since everyone has individual preference in learning styles, it is important to deliver your lesson in a variety of ways. PK

When doing technology training, learners need to have hands-on practice in doing what they are learning. They should have choices as to what it is they are going to complete in the hands-on activity. They should also have some demonstration as

to what is that they are learning about ahead of time so that they can have time to process it and gather ideas as to how what they are learning relates to them. RW

Using the "lesson" approach, instead of the discovery or lecture approaches should lead to a give and take of information, appropriate to this subject and typical adult learning style. Cooperative and collaborative learning groups challenge each individual student to not only work as an individual, but also to work well in a society-a big part of adult life. AW

Discussion and non-judgmental listening: Listening to the student express his/her goals and discussing whether those goals are realistic or not is key to the success of the student. This process of listening and discussing must be initiated in the first session, and carried on throughout the entire duration of lessons. This discussion allows the student to express his/her concerns, sets the tone for the lessons, and puts the student at ease with me as an instructor.

Communication without intimidation: I have to communicate in a way that does not intimidate the student anymore than he/she is already feeling intimidated by the difficult process of assimilating all of the new information. The most effective way for me to verbally instruct my students is to make sure I smile, lower the tone of my voice, and address them in a light manner in the form of suggestions. JD

Because some courses are self-directed and self-guided, communication is key in keeping up with how they are progressing and what challenges they may be facing. I have learned that adults want to be spoken to at their level, as in eye level, so I do not speak "down" to them, but rather pull up a chair and communicate with them on their level. This technique helps the student feel more relaxed and they can feel more at ease about asking questions. TP

Learning should be an active process that engages more than just hearing. Adults tend to be self-directed and want to take charge of their own learning. Remember that learning objectives and relevancy should be established up front. Clear evaluation standards and constructive feedback should also be used. DW

Teachers should adapt to new ways of teaching those who will be learning from them. It is important to know what each student wants to achieve by taking this class. Learning is more effective when it is an active rather than a passive process. The big issues are relevancy and immediacy for adults. Information has to be relevant to our current wants and needs, and it must feel useful to us. Most people don't want to waste time if it does not benefit them directly. VL

If an adult student is to obtain an optimal education, it is important to learn in an environment that meets his or her particular learning style. The technical classes that I teach cost each student several thousand dollars, which in turn means the education must be worth its weight once the track is completed. The adult learners

in my target group come from diverse backgrounds and skill sets, but they are still in my classroom together with a combined goal to learn. It is critical to meet the needs of each student by incorporating multiple techniques that support various learning styles. PB

The success of the course relies mainly on the techniques applied to facilitate the learner's experience. Using the group's prior collective knowledge and ability to lead each other makes the task flow and models the work environment in which the skills are to be used. Working with the learner instead of talking at and down to them creates a more relaxed mood. Though conversation we can impart the info that is needed. MH

Andragogy states that instruction should be task-oriented allowing a student to learn by problem solving. This is exactly what simulation is all about as well. Allowing the student to have hands on practice so that they can use the skills that have learned to problem solve and achieve their class objectives. Although the names may vary and there may be varied perceptions, it is clear that adults are very task oriented and learn best in this manner. TG

Our goal is to help students see the connection between my class and the "real world," as well as motivating them in the meantime to show up and complete required assignments! Due to the differences, techniques should allow individuals to get with students of their same major, brainstorm together, problem-solve real-

life mock situations, and use each others' experiences and knowledge to learn from. JH

Summary

The students of this class discussed the importance of knowing which techniques work well with the group of adult learners they were working with. The bottom line is, if you do not use methods that make the adult learner as productive as possible, you as a teacher and your course as a whole will be marginally productive at best, and not productive at all at the worst.

With the emphasis on productivity, efficiency and economics nowadays and the limiting of funds, taxes and resources, you do not want an important program to be downsized or eliminated because you did not use the right methods and techniques to teach your group of adult learners.

Adults in general feel the need to be in charge of their own learning. This is even more important when it comes to generation X. Much of the old techniques do not work with this particular group. For this reason, it is important to experiment with different styles until you can settle in with several that work, not only for individual students, but the group as a whole. Without finding teaching techniques that work, you as a teacher become ineffective, causing frustration for both the students and yourself. JZ

The importance in knowing which techniques work well with this target group will guarantee that the needs of the adult learners and the course objectives are met. Teaching with the knowledge of which technique works best will make sure that these adult learners gain the skill and the knowledge they seek in a reasonable amount of time. DS

Using techniques that don't work well are a waste of time and money. Since the goal in technology staff development is empowering teachers to use existing and emerging technologies to enhance their teaching it is of prime importance to use methods that will succeed and make them technology evangelists. If that is not being done, the teacher-learners will tune out and then drop out.

When teachers have been mandated to attend a particular in-service training session, I have seen them undermine the trainer and draw others into their negative mindset. Those trainers had no clue about drawing them in with activities geared to make use of their interests and talents. We tell teachers that the lecture method isn't work the most effective presentation method today and then we expect them to listen to a lecture when we should be modeling the techniques we want them to use.

Because staff development is not the beginning of teacher training, the learners are already experts in their area and need to be treated as such. On the other hand, their knowledge of technology is generally below the expert level and they may

feel threatened professionally. Therefore various techniques that fit their comfort level need to be accessed. JE

The overall atmosphere of the classroom is important. Students need to feel comfortable and relaxed. Creating an atmosphere, which is non-threatening, is conducive to a positive learning experience. Because of the diverseness of my class, it is important for me to meet the needs of all my students. Not only are my students diverse in their personal characteristics, they are diverse in their learning styles. It is important for me to deliver the lesson in a variety of ways so that the different styles of learning can be met. PK

Technology integration in the classroom is important and will be a big part of every young child's life. In order for teachers to pass this on to their students, they need to learn the technologies themselves. This is where technology staff development comes into play. I have to conduct training that are inviting to teachers so that they will pass this down to their students. RW

As we discussed in many of the response posts to the last activity, the instructor needs to know which techniques will work with a specific group of learners for best results. If an instructor walked into a group of auto mechanics and started to teach them how to check the tire pressure on a car tire, would the audience learn anything new?

The best way to ascertain what techniques work well with adult learners would be to give them a learning styles quiz at the beginning of the semester or training session. Focusing in on those specific styles would be in the best interests of the students. I know how important it is to make an impact on learners from the beginning, so they don't lose focus in the class and drop out, so knowing which techniques will work best is very important to me.

The main reason why it is important to know which techniques work well with my specific adult learners is that I want to create effective writers for our growing society-effective writing is the tool most useful in all aspects of the business world. Teaching my learners in the best manner possible will enhance our society as a whole, leading to a better world for everyone. AW

The importance of utilizing effective teaching techniques in any given teaching situation is in the response of the learner. Learning how to get the student to respond in a way that he/she excels at the subject matter being taught is vital, and this is done by properly studying many types of teaching techniques, trying them on our students, and seeing which ones work well for our given teaching situations. JD

Treating your adult students as equals, by listening and communicating with them on their level is a very important teaching technique that will lessen the fear and insecurity that some adults have about going back to school. A lot of my students

have never received any higher education or even graduated high school. It takes a lot of courage to decide to change your life and they want to feel like they have made the right decision and that they can do it. TP

When designing the instruction for a training session, one should be familiar with various instructional techniques. This familiarity will allow the designer of the instruction to select the most appropriate technique for the learning objective. ... Providing instructional variety helps cater to the different learning styles that adult learners have. But first, one must be familiar with various instructional techniques. DW

An adult learner learns and retains his knowledge more efficiently if they feel that they have an open communication with the instructor. Find out as quick as possible which combination of techniques work for the students. VL

In a professional adult learning environment, it is critical to discover what techniques work for each person as well as the group as a whole. Not every learner will follow the model of the instructor, so observing, listening, and asking questions about what the students have learned is critical. Lecture and discussion should assist the auditory learner. Hands on application, utilizing the computers in the laboratory environment, will benefit the kinesthetic learners. A slide show during the lecture, and physical presentation prior to the lab, should benefit the

visual learner. All of the styles should be incorporated in the presentation to assure that the student has achieved the academic goals of the course. PB

The adults that I teach are professionals who do not have time to waste. As I continue to train them on more advanced computer skills they continue to evaluate what I am teaching them and how I am teaching it. My target audience will quickly become unavailable if my teaching techniques are not beneficial to them. In a nutshell, my teaching techniques are important because if I fail to reach my learners they will simply stop coming to the training that I offer. JP

It is very important to know what type of learners you have. If you teach a class and use more of the theory approach, and your students are better hands-on learners, you will miss the target. Some may get the idea, but a different technique would have better results. DJ

Student interaction is a necessary transition for developing problem solving skill (Sternberg 1988 in DeLuca 1991). To know which teaching techniques are successful is to match the adults' learning characteristics to both the type of material being presented and to the global goals of the student and the industry.

GM

Many older adult learners are faced with negative stereotypes from society regarding their ability to learn new technologies and skill sets. It is necessary for

these older adults to be successful in their learning so that they can stay in tune with the rest of society and gain the self-confidence to learn and grow as they age.

MR

We must get them to tell us, somehow, what they are here for, and how we can help them, after all they ARE the customers! After that we must know and use the methods that can best reach/meet their needs. MH

If a successful businessperson is paying me a hefty sum of money to increase his/her English speaking ability, I must make the majority of my teaching hours based on conversation. JB

Technology integration is important to student's learning and therefore, must be a part of a teacher's daily routine. I have personally seen that it makes a difference in my students. Teachers have to have a similar feeling about technology in order for them to be willing to learn the technology. Technology staff developments must be suited for the learners and be appropriate to what they are willing to learn. LM

It is necessary to understand adult learners have lives outside of work and/or school. The content that is given to skycaps is highly important in order to have a functional airport. DB

Students have varied backgrounds and unless we understand our audience and know how to meet their learning needs, we will not be successful in meeting our learning objectives. Not all students learn in the same manner. Nor are all methods successful. If you put a classroom to sleep, they are not learning. A student needs to be motivated, challenged and understand the value in what they have learned. These goals will be met when the instructor successfully implements various teaching techniques. TG

As a teacher it is my responsibility to ensure that my students get out of the class what they want as well as what I want them to. ED

Various learning methods help to reach the different types of adult learners. They all are used at various times depending on the educational needs of the students. In one-on-one teaching, the student is the only one getting instruction. The instructor has their focus on the student and in my opinion it is the best way to retain the student. CS

It is the teacher's responsibility to facilitate learning for every participant regardless of previous experience or educational background. It is essential for the instructors to be consciously aware of the characteristics of adults and understanding of their needs. "Telling is not teaching, nor is listening learning." It is the teacher's duty to engage their students in a variety of structured learning activities, which will lead to a full understanding of the information at hand. HP

Implementation

This is where the students of this class got to talk about how they would use this research in their own classes. They showed how to use traditional methods with adults and combine them with the new methods to reach all students.

The students would incorporate surveys of the adult learners at the beginning of class to ascertain the adult learner's best methods of learning, their choices on subject matter and their learning goals. The students discussed the use of hands on projects that would be related to the jobs that adult learner does right from the beginning of the course. They discussed the use of interactive techniques to involve the adult learners and allow the sharing of knowledge the group members already had with each other. The use of teams, and learning from each other would be included because this is directly related to the methods used in the work place. Even the use of research and report writing is directly related to methods used in the business world.

While the inclusion of these techniques would involve some additional planning and flexibility on the teacher's part, it would greatly increase the productivity of the teacher, the student and the class as a whole. Sending adult learners to the field who have learned the material to a higher standard, can directly relate it to their jobs and be more productive at their jobs, will improve the productivity of their companies and through their lives, improve the community as a whole. Now that is what I call a sound, efficient and economical approach to training.

After sufficient hands on practice the student is responsible for making the decision to perform a competency evaluation of a procedure with the instructor. The student practices up to that point and it is up to them when they feel that they are fully prepared. The student will be informed at the beginning of the program that they will be responsible for educating their peers in a presentation using a dummy on how to perform a particular treatment and also present a question and answer period at the end of the presentation. They are given sufficient time to prepare this presentation and must give it during the ninth month of the program. AK

With the class, I would take apart equipment, for example, in front of them and show them the parts. Or we would have a training mock-up of a certain piece of apparatus and I would explain how the item would be disassembled and assembled in a proper order. Then I would have the students do the same thing under my supervision. I would wait until the student(s) would complete the task before I would begin to make my judgments. Actually, you could say I just told them to do it for themselves without any help from me until they finished. PR

Group discussion can start as a problem solving session. The group is given a problem, which they must come-up with the solution (much like the group activities in our web-based classes). This will help develop critical thinking skills that will be need to diagnosis problems on automobiles in the field.

Demonstration is an old teaching technique, but is still very effective as a teaching tool.

In my class, the demonstration is given before the theory is taught. Over a period of time, I have found that students make greater learning strides by seeing the visual skill performed first. Then when the theory is taught, they have a visual reference point to visualize. JZ

Before I attempt to teach, I need to survey the learners as to what they already know, what they want to learn, and what is available to them in their own classroom and school. It is very possible that a whole group introductory session would be impractical if the levels are too varied. Ideally, levels should not work together at first so as not to overwhelm beginners, but a few well-placed helpers can speed up the process (adults want to get going in a hurry — just tell me what I need to do _____) and reduce frustration. One idea I read about — short videos on several topics that can be checked out and watched at leisure — is an excellent way to introduce topics. Our school has computer and video production classes where students could produce those types of videos for teacher use.

Teaming learners to produce a product — a multi-media presentation, word-processed document, Hyper-Studio stacks, for example - to be used in a subject area or as an interdisciplinary unit will help the process continue after the initial in-service is finished. Having the primary trainer and/or a co-worker 'expert'

available for consultation will keep the learners from getting discouraged. These could be just a phone call, or small follow-up sessions set up to accommodate the learner's schedule. With the right amount of support and nurturing, many will want to expand their knowledge. Shorter sessions held before or after school, during planning periods, on Saturdays, and during the summer will keep pushing them forward to follow their interests at their own pace. JE

To build rapport I employ informal room arrangements setting up the tables in a U-shape. I also provide snacks and drinks. ...In delivering the basic first aid and CPR courses I use a variety of approaches so I can accommodate the various learning styles represented. Part of the lesson is delivered through lecture. The students are given a book to follow along. ...Basic first aid and CPR skills are viewed on VCR tape and then I reinforce the teachings from the videotape by demonstrating the skills on a mannequin. ... Students are given time for return demonstration. It is at this time that the students learn from each other's mistakes. As skills are performed successfully, positive reinforcement is given. Through inquiry learning, the students are given a scenario and then asked pair up in groups of two or three and asked to respond to the situation at hand. PK

At the beginning of each training session, I will model what it is that the learner is going to learn and at the end, I will give the learner choices in how to implement whatever technology it is that they have learned. RW

At the beginning of the workshop I will survey the learners as to what they already know, what they want to learn, and what is available to them in their own class or age group. At each workshop, I will demonstrate what the group is going to learn then offer the learners' opportunity to make choices on how to implement the technology to the area or age group of their work field. EY

Using the lesson approach in a writing class rather than the lecture approach seems like the best way to put forth the necessary information. Subsequently using collaborative/cooperative groups to reinforce the ideas the class has discussed will be a big benefit to all people in the classroom. AW

The implementation of discussion and non-judgmental listening has been the main key to my success with adult piano students. Setting the tone and basic overall attitude by the way I listen to my adults, and talk to them is the main issue that keeps them coming back to lessons. JD

Participants choose sessions on specific titles they could use in their classroom to enhance language development. ...Participants were also given time for guided and independent practice. Participants had time to do what they learned and try to create a start to their own project and receive support from trainers. ...Participants also worked on topics specific to the needs of their classroom and worked with others in the group that may have similar ideas. SR

I will implement these techniques by setting time aside to speak one-on-one to each of my students. We will go over how they are progressing, any obstacles that they might be facing, and their immediate and long-term goals they have for being in the program they have chosen. TP

At the beginning of the course, the instructor lets the students start out by introducing themselves and telling the other students why they are taking the Internet for Beginners class and what they hope to gain by taking this course. After a brief introduction, the instructor shows them how to set up an email account. They are instructed to email the person sitting beside them. This self-directed activity will show them instant results on what they are doing, by receiving and sending the email. At this time the instructor tells all the students to email them their main objective for taking this particular class. This will give the student a chance to feel connected to the instructor and at the same time give the instructor more insight to the individual students objectives. Letting the student know that they can email the instructor with any questions or concerns they have about the class is less intimidating than for a student to let his peers know in public what he knows or does not know about the particular subject. VL

While presenting a lecture, an instructor should involve the class with an open forum on the topic that is being presented, as well as have them follow the lecture with a handout, which requires them to fill in the blanks. This motivates the students to maintain focus on the instructor. While concentrating on the lecture,

and filling out the study guide, the presentation is reinforced and put into a visible format for students to refer to later.

Application of learned concepts is simpler if the course is structured appropriately. The students utilize their lab manual to complete labs which are directly associated with the lecture. Each student has their own computer and works either independently, or with a partner, to perform predefined tasks. It is critical for the instructor to present the objective of this lab project prior to the beginning the lab, so the students will have a larger picture of what they are about to do. Once the lab is completed, it is important for the instructor to summarize, using interactive discussion, what was performed and learned. PB

Group discussion and group activities are very appropriate for the teaching setting that I am in. With a small computer lab and only four computers I will be able to assign two teachers per computer and allow two groups of four to work at the same time in the lab. A mini-lecture will be appropriate for the groups but will have to be less formal when I am addressing teachers in their classrooms.

Solutions to real world problems will be the easiest teaching technique to use when I am dealing with the teachers in their classrooms. JP

If I am teaching about specific software, be it educational software for the classroom or software that can be used to assist teachers with their jobs, I will be sure that everyone has the opportunity to experiment with the programs on a

computer. If I am teaching about equipment, I will have them on hand to try out.

When giving lessons on integrating the Internet, I will have my learners visit specific sites that I am referencing. I will give continuous support and facilitate learning by giving follow up training. I will also be in contact to make sure my adult learners are on the right track. ME

Self-paced learning can be implemented by providing some instruction at the beginning of a section, then allowing the older adult learners to review the materials and complete an activity on their own. If you place a break at the end of the activity, this will allow some individuals to take additional time if necessary.

The goal of interference reduction should be attempted in all classrooms. This can be instituted by setting ground rules regarding behavior, and structuring class activities so that they do not interfere with the ability of older adults to successfully learn the material. MR

Every student would introduce him or herself, let us know why they have chosen to take the course. Also, students would be given a survey to fill out informing the teacher of their needs towards this course. The survey would let the teacher know what level the student is on.

Students would be paired in-groups of two. Each person in the group would have certain responsibilities for the activity given. RB

The journal teaching technique can be used daily as an icebreaker. Every class can open with journal reporting. Once the tone has been set, we can begin an activity.

JB

I will give real examples that have been used in a middle school classroom to integrate technology. I will start with basic, simple tools like using PowerPoint for notes, to using software and the Internet as a resource, to testing using PowerPoint in a computer lab setting. I have will have all these examples on a disk for the learner to keep and refer to on their own as necessary. LM

As we progress, the material becomes more complex. Decision-making is a skill that is addressed daily. Without the prior day's information, they would not be able to make a decision using all of the factors involved. This decision making as well as each skill that is addressed is practiced daily in our classroom. Both in group activities and individually at their teller stations. It is this technique of simulation that I find most successful. There is no better experience than when a student can learn from their mistakes. It is also in the simulation that I see the confidence growing in my students. TG

Personal

Teaching Techniques can impact your students in such a way that the learning experience can be made easier. The adult learners in this course were and are impacted by many teaching techniques.

"As an adult learner these teaching techniques, lecture, demonstration, and inquiry impact me in that I learn not through only one best way but through a variety of ways." RC

"It was a great experience to have the support and experience of others to draw from." SR

"While performing these techniques the student will feel more as if they have more control of their education and they will also feel as if they are always using their time wisely." AV

"Then when the Instructor delegated me the task of doing it my self without any interference from him, that raised my self-confidence." PR

"As a visual learner myself, I understand the need for students to visualize components and repairs before understanding the theory behind why they work."

JZ

"Verbal information along with a visual aid is a technique that makes learning very easy for adults." DS

"I don't think quickly and like to ponder new ideas for awhile before I comment on them or ask questions, so ongoing learning sessions would be especially good for me." JE

"Being able to return a demonstration not only affirms the notion that I understand the delivery of the skill, it also gives opportunity to build up self-confidence in myself." PK

"I am able to take their successes and mistakes and apply them to my own training that I facilitate." RW

"By taking evaluations from the students on the workshops I can learn which techniques were useful and productive." EY

"Perhaps that was the purpose of this activity, to bring out the best teaching techniques we have been involved with." AE

"I have observed that the courses that have professors that are a bit "lighter" in their overall approach and teaching style tend to have happier, more productive students." JD

"They have communicated to me that they feel cared for and comfortable in discussing any issues or challenges that they face." TP

"I know that these techniques (self-directed procedure development, observation and practice) work well for me." DW

"If you get their attention at the start, chances are you will keep them interested."

VL

"This is probably due to the fact that I must be active in presenting this information to those learners different than myself, which in turn forces me to rely on my talents as a kinesthetic learner." PB

"Like most adults, I am pressed for time; I enjoy learning but become very frustrated when time is wasted." JP

"I can learn the info better if I use it, operate it, and then learn why it's works."

DKJ

"We had a support system that continued throughout the school year with follow up training sessions and opportunities to share with other adult learners what projects we attempted in our classrooms." ME

"I was more than surprised at how many and varied the techniques that I use daily. A shotgun approach might describe this well, with at least one pellet technique hitting each targeted population." GM

"If you are ahead in class, you can get help from the instructor and you are looked to help others but if you fall behind and your peer is ahead, they have no problem helping you out and learning is better because you're not competing and not really rushing." TB

"I believe that the reduction of interference is important to achieve for all learners, adult or non-adult, however, I do not believe that the cognitive aspects of the importance of this technique is the same for other groups." MR

"Now I must practice, practice, practice them until they are as smooth enough to go unnoticed." MH

"As a teacher, I personally will have to keep insight to every technique available to be the best teacher I can be." RB

"By intermingling these activities with activities in our text, I believe the students will get a well-rounded ESL education." JB

"I do not like to waste my time or learn about something I cannot use. I would prefer small staff developments where the learning is very defined." LM

"When they discover the value in the knowledge that they have gained and when they are confident that they can go out there and "WOW" their clients, then I am more than pleased and know that the techniques I have used were successful." TG

"As an adult learner I find goal setting very important and a great way of focusing on what I want to accomplish." ED

"Giving attention and being aware is important in the educational environment. The teacher needs to know what is going on with her students." CS

"The personal impact on me as an adult learner should let the importance of the issues at hand make sense." DB

"Adult learners are concerned about feeling comfortable in the classroom so, providing an inviting environment is crucial." HP

"I really appreciate any learning environment that attempts to make what I have to learn relevant and beneficial to me and my life." JH

"I can still remember the skills that I was taught and the words of encouragement that was said to me by my instructors. These skills and words of encouragement

helped me to finish high school, earn an associate degree and gave me the courage to come back to college after seven years to earn my bachelors degree. JLB

It is very important to know which techniques work well with adult learners. Whether the adult learner learn a skill to get a job, promotion or enjoyment, the techniques used to teach them these skills can really have a great impact on their understanding and learning experience.

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Karen L. Clark, Ed.D. Assistant Professor, School of Education and Human Services
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Your Career in Aviation

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