# Evidence about the Effectiveness of *Evidence-based Practice: A Workshop for Training Adult Basic Education, TANF and One-Stop Practitioners and Program Administrators*

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August 2007


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*NCSALL Occasional Papers* are funded by the Educational Research and Development Centers program, Award Number R309B960002, as administered by the Institute of Education Sciences (formerly Office of Educational Research and Improvement), U.S. Department of Education. The contents of this paper were developed using funds transferred from the National Institute for Literacy to the Institute of Education Sciences. The views expressed herein do not necessarily represent the positions or policies of the National Institute for Literacy, the Institute of Education Sciences, or the U.S. Department of Education. No official endorsement by the National Institute for Literacy, the Institute of Education Sciences, or the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this publication is intended or should be inferred.

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# INTRODUCTION

In the ten years that NCSALL was in existence, those of us in charge of disseminating research discovered that one of the most misunderstood terms in our field was the term *evidence-based practice*. With the advent of the No Child Left Behind (NCLB) legislation, there has been intensive pressure on those in education, including the adult education and literacy community, to base instruction and services on evidence-based practices. Simultaneously, the U.S. Department of Education has strongly (some would say almost exclusively) promoted the idea of scientifically based research, which was defined under the NCLB legislation.

One would be hard-pressed now to find adult basic education practitioners or programs that don't know they are supposed to be basing their practices on evidence. At the same time, few can accurately define the term *evidence-based practice*, let alone understand how one employs such practices in classrooms and programs. The nervousness among adult educators, who somehow felt that every decision made in their lessons must be backed up by a randomized-controlled trial, has been a barrier to the very adoption of such practices in our field.

To address this situation, in 2006, the Institute of Education Sciences and the National Institute for Literacy funded NCSALL to develop a one-day workshop for adult basic education, TANF (Transitional Assistance to Needy Families), and One-Stop practitioners and administrators. The goal of this workshop was to help teachers and administrators understand the meaning of evidence-based practice and develop strategies for continuously accessing, understanding, judging and using research in their classrooms and programs.

The developers and presenters of the 6½-hour workshop were Beth Bingman (Universtiy of Tennessee, The Center for Literacy Studies/NCSALL), Cristine Smith (World Education/NCSALL), Lennox McLendon (National Adult Education Provessional Development Consortium), and John Comings (Harvard Graduate School of Education/NCSALL).

In each of three pilot states—North Carolina (July 18, 2006), Texas (September 12, 2006), and Wyoming (October 19, 2006)—NCSALL /NAEPDC conducted a workshop with approximately 25 practitioners and program administrators (along with selected professional developers and state staff participating as observers) that was intended to enable them to:

- *Discuss their own attitudes about research* and its connection to practice and policy
- *Define some basic concepts and terminology* about research design and methodology

- *Describe the connection* between evidence-based practice and program/classroom improvement
- *Describe what empirical evidence looks like* and how it can be integrated with professional wisdom to make decisions about instruction and services for adult students
- *Implement a plan for improving reading instruction* in their programs utilizing evidence-based practices
- *Cite strategies they can use* to continuously access, understand, judge and use research to make decisions about practice in their classrooms or programs

The workshop guide is available to the field and can be found at www.ncsall.net/fileadmin/resources/teach/EBP_wkshp_guide.pdf, and the PowerPoint slides that accompany it can be found at www.ncsall.net/fileadmin/resources/teach/EBP_wkshp_PPT.ppt. A one-page summary of the workshop agenda can be found in Appendix A of this report.

As part of piloting this workshop, we conducted an evaluation of the participants' experience, the knowledge they gained, to both determine how to revise the workshop and to gauge its effectiveness. This purpose of this paper is to report on the findings from that evaluation.

# EVALUATION METHODOLOGY

We constructed a simple pre- and post-workshop, one-page questionnaire, aligned with the workshop objectives presented in the previous section (pp. 1–2). The pre- and post-workshop questionnaires can be found in Appendix B of this report. Each included eight knowledge and practice questions about evidence-based practice, scientifically based research, types of research studies, research terms, as well as where and how often practitioners sought out research. The post-workshop questionnaire also included a question about the key concept practitioners would take away from the workshop.

We gave out the pre-workshop questionnaire to participants as they entered the workshop and asked them to fill it out. At the end of the workshop, we handed out the post-workshop questionnaire and asked participants to fill that out. In both cases, the questionnaires took between 10 and 15 minutes for participants to complete. We ended up with 68 usable questionnaires. (See Appendix C for results.)

We did not collect any demographic or background data from participants, since our goal with this evaluation was just to gauge what participants learned during the workshop.

# FINDINGS

- Definition of Evidence-based Practice: Overall, participants gained a better understanding of the term *evidence-based practice*. Most participants understood that it had something to do with basing their instruction on research, but few started the workshop understanding that it is "the integration of the best empirical evidence with professional wisdom in making decisions about instruction", which is the definition put forward by the U.S. Department of Education (see workshop powerpoint slides for source). However, after the workshop, more participants understood that the basis of practice was not only research findings but *also* professional wisdom gained by the field. Examples of before and after follow:

| PRE-WORKSHOP: DEFINE EVIDENCE-BASED PRACTICE | POST-WORKSHOP: DEFINE EVIDENCE-BASED PRACTICE |
|---|---|
| Instructional practices that have been proven effective by research | Integration of professional wisdom and scientifically based research to come up with best practices |
| Practice based on prior past experience of what works and what doesn't | Practice based on available research and professional wisdom |
| Practices that have been researched and have evidence | Integration of professional wisdom with the best empirical evidence |
| Using ideas/methods that have been tried by others that have given results from their practices | Employing professional wisdom with evidence |
| Research based on actual practice | Implementing practices which are based on both research and teacher knowledge |

- Definition of Scientifically Based Research: Very few participants could cite the criteria for *scientifically based research* before the workshop started; scientifically based research, as defined by No Child Left Behind legislation, must be published in a peer-reviewed journal or approved by a panel of independent experts; the results of the study must have been replicated by other scientists; or there is consensus in the research community that the study's findings are supported by a critical mass of additional studies. This concept was harder to grasp for participants than the term *evidence-based practice*; still, it is clear that at least some participants began to understand the difference between research and scientifically based research.

| PRE-WORKSHOP: CRITERIA FOR SCIENTIFICALLY BASED RESEARCH | POST-WORKSHOP: CRITERIA FOR SCIENTIFICALLY BASED RESEARCH |
|---|---|
| Validity<br>Reliability | Validity<br>Reliablility<br>Random sample<br>Peer reviewed |
| Control group<br>Study group | Peer reviewed<br>Replicated |
| Meta-analysis. Case studies have been performed | Published? Replicated? |

| PRE-WORKSHOP: CRITERIA FOR SCIENTIFICALLY BASED RESEARCH | POST-WORKSHOP: CRITERIA FOR SCIENTIFICALLY BASED RESEARCH |
|---|---|
| Been implemented in several settings. Placebos have been used so that research wasn't manipulated. | Been researched in more than one research. Published. |
| A control group. A need for the type of research done. | Published in an accredited journal. Have results of study been replicated by other scientists. |

- Differences in Research Methodologies: Participants' concepts about different types of research methodology—case studies, correlational studies, and true experiments—were somewhat "muddy" coming into the workshop. Most participants chose to define what a case study was in the pre-workshop questionnaire, but those definitions were confused with qualitative analysis in general. While only a handful tried (and succeeded) in defining what true experiments are at the start of the workshop, more attempted and succeeded at the end. However, correlational studies were still difficult for participants to describe and define, indicating that the workshop was not as successful at differentiating that type of methodology from case studies and true experiments.

| PRE-WORKSHOP: DEFINE CASE STUDIES, CORRELATIONAL STUDIES OR TRUE EXPERIMENTS | POST-WORKSHOP: DEFINE CASE STUDIES, CORRELATIONAL STUDIES OR TRUE EXPERIMENTS |
|---|---|
| Case studies—specific study with hypothesis, procedures and outcomes. | Case studies: detailed description of individual or small groups: "What's going on?" |
| Case studies: looking at groups in their natural settings to do the research. | True experiments: randomized tests that answer what works. |
| Case studies: people. Information on individuals recorded and studied over a period of time. Correlational: comparison of case studies. | Case studies: individual/group descriptions. Correlational: tests links between variables and outcomes. True experiment: randomized trials that answer "what works" questions. |
| Correlational studies: studies conducted to prove a theory. | True experiments: done with a control group and an intervention group. |
| In case studies, history and current practice are included and results are compared and controlled to other methods with comparable histories. | True experiments: Control group, participant group—measure results of methods used. Random selection of both groups. |

- Definition of Experimental and Control: About half of the participants came in understanding the difference between a *control group* and an *experimental group*. The workshop appears to have been successful both at clarifying some misconceptions about what a control group is and at helping more participants understand the basics of how a sample in research is constructed.

| PRE-WORKSHOP: DIFFERENCE BETWEEN CONTROL AND EXPERIMENTAL GROUP | POST-WORKSHOP: DIFFERENCE BETWEEN CONTROL AND EXPERIMENTAL GROUP |
|---|---|
| Experimental: behaviors of study group are unbiasedly observed. Control: defined and managed study population with predicted outcomes. | Experimental: population exposed to enhancement variable. Control: population not exposed to "enhancement variable." |

| PRE-WORKSHOP: DIFFERENCE BETWEEN CONTROL AND EXPERIMENTAL GROUP | POST-WORKSHOP: DIFFERENCE BETWEEN CONTROL AND EXPERIMENTAL GROUP |
|---|---|
| Control group is monitored more. More rules about who can make up the group. | Control group remains same and experimental: group received additional aids/training to see if there's a difference. |
| (*Left blank*) | The experimental group receives the intervention strategies. |
| Experimental: an open-ended study. A control group is followed all the way through a study. | Control continues same mode. Experimental has intervention. |
| Experimental: you experiment with unknown variables. Control: experiment with known variables (you control the variables) | Experimental: group has interventions and control group does not. |

- The Importance of Random Assignment: The majority of participants, at the start of the workshop, felt that random assignment was important in selecting a sample because it somehow "reduces bias", but could not say more than this. At the end of the workshop, there was some evidence that more participants understood the true purpose of random selection, although many still confusd the terms *sample* and *population* and many still couldn't completely state the rationale clearly.

| PRE-WORKSHOP: IMPORTANCE OF RANDOM ASSIGNMENT IN CHOOSING STUDY SAMPLE | POST-WORKSHOP: IMPORTANCE OF RANDOM ASSIGNMENT IN CHOOSING STUDY SAMPLE |
|---|---|
| Research validity is based on a comparison to underlying variation in the population. | So that each group is equally representative of the total population. |
| Because it allows for a truer "picture." | Because it provides for a wider distribution/comparison to the actual population. |
| This gives you a true outcome of how a new project would affect most other programs. | You get a true group that represents a general population. |
| It depends on what's being researched. | Self-selected participants may have a bias or pre-determined ideas. |

- How to Access Research and Extent of Research Use in Practice: The trend was for most participants to indicate that they would use research more frequently at the end of the workshop than at the beginning. One change the workshop clearly engendered was a broader understanding of where to find research. The handouts in the workshop about various websites and sources of research information appeared to be helpful to participants.

- Key Questions to Ask about Particular Studies: A good number of participants, pre-workshop, indicated that their main question was "Is this research relevant to the adult students with whom I work?" At the end of the workshop, some participants still cited this as a key question, which is legitimate, but a few others added questions they would ask about the validity and reliability of the study, about whether it had been published in a peer-reviewed journal, or whether it had been replicated.

| PRE-WORKSHOP: QUESTIONS TO ASK ABOUT RESEARCH STUDIES | POST-WORKSHOP: QUESTIONS TO ASK ABOUT RESEARCH STUDIES |
|---|---|
| Who conducted, what controls. | Was it published? Was it replicated? Supported by other research (significant amount)? |
| Is it applicable to my students? Is it practical (in terms of cost, time, outcomes)? | Are the results valid, reliable and practical? |
| Is it applicable to our situation? | Accepted by colleagues (published). |
| Methodology. Relevance of research question. | Methodology. Support by other studies. Quality of data. Peer reviewed. |

- Key Concept or Strategy Gained from the Workshop: This was the only question asked in the post-workshop questionnaire that was not asked in the pre-workshop questionnaire. The answers indicate a greater understanding of research, as well as a clearer knowledge of how to use research.

  ***What key concept or strategy do you walk away with from today's training?***

  - *The importance of research and its validity.*
  - *Much better understanding of scientifically based research principles and application.*
  - *Be able to back up your professional wisdom with scientific research because it becomes more believable to others.*
  - *Importance of knowing where to find research and how to use it to improve instruction.*
  - *It's not as difficult to incorporate research into our planning to help us meet our needs.*
  - *Using reliable research as basis for implementing change.*
  - *Scientific research can improve programs and teaching.*
  - *The need to keep sending research articles to staff and start discussion groups.*
  - *Research is not the end all. Instructor experience counts! Yeah.*
  - *Improved knowledge in analyzing data and research.*
  - *We're doing things right, research is easily accessible on the web.*
  - *Ways to implement better reading strategies.*
  - *Mean, median, and mode! Using research better to help me improve program delivery.*
  - *That research can make a difference in instructional practices.*
  - *There is a lot of research out there that can help us do a better job, if we will use it.*
  - *Accessing, understanding, judging and using research.*

- *Align teaching with research.*
- *Alignment between research, instruction and assessment.*
- *Importance of moving from "by the seat of your pants" instruction.*
- *You can use research to make change.*

# CONCLUSION

From the findings reported here as well as from our experiences and interactions with the participants and state staff members in the pilot states, we believe that the Evidence-based Practice Workshop was effective in reaching its objective to enable participants to:

- *Discuss their own attitudes about research* and its connection to practice and policy
- *Define some basic concepts and terminology* about research design and methodology
- *Describe the connection* between evidence-based practice and program/classroom improvement
- *Describe what empirical evidence looks like* and how it can be integrated with professional wisdom to make decisions about instruction and services for adult students
- *Implement a plan for improving reading instruction* in their programs utilizing evidence-based practices
- *Cite strategies they can use* to continuously access, understand, judge and use research to make decisions about practice in their classrooms or programs

Participants tended to leave the workshops sharing enthusiasm about implementing what they had learned about research utilization in their own programs.

However, we would be remiss if we did not point out the limits of this evaluation and the limits of the workshop. The findings reported here are based on a one-time, pre-post questionnaire administered on the day of the workshop. The questionnaire went well beyond asking for a response to the workshop by querying content knowledge, but we can only report on changes in content knowledge. We cannot really say anything about actual changes in practices made by participants in these workshops. A more extensive effort that examines program changes over time would be needed to assess implementation.

The workshop was designed to be completed in a one-day session. This design has its own limits. Professional development efforts that extend over time and have program change efforts built into and supported in the design are more likely to lead to change in practices. Each of the three pilot states had their own plans to follow up with the participants in the pilot workshops and to support them to some extent. Tracking the results of these efforts and taking the results into account in any redesign of this workshop could strengthen the results.

# APPENDIX A: WORKSHOP AGENDA

1. **Introductory Activity: Welcome, Objectives, and Agenda** (15 minutes)
   A whole group activity where participants are introduced to each other, share a strength of their programs, and learn about the workshop as a whole.

2. **Attitudes Toward Research: Discussion Activity** (35 minutes)
   A whole group discussion activity to help participants understand that there are a range of existing attitudes towards research and its role in improving practice. Participants analyze their own attitudes towards research and the attitudes they think other practitioners might hold, and they think about what attitudes about research mean for promoting evidence-based practice.

3. **Introduction to Research Design** (70 minutes)
   An overview of the basics of research in experimental design and quantitative data analysis. Participants create their own data, explore how to analyze such data and learn basic research concepts such as random sampling, reliability, validity, means/medians/modes, standard deviation, findings and implications. The activity concludes with a group discussion of experimental, correlational, and case study research and when each might be useful to answer questions in adult education.

4. **Understanding Research and Identifying Evidence-based Practice** (110 minutes)
   An activity where the concepts of scientifically based research and evidence-based practice are defined. Participants analyze research related to adult reading instruction, and generate principles of evidence-based reading instruction.

5. **Using Evidence-based Practice to Improve Your Program** (45 minutes)
   A small group, program-specific activity where participants think about a recent change they made in their own program (and the steps involved), read a case study about a fictional program making a program improvement change based on an evidence-based practice about reading, and then compare their own change process with the case study to see how they might incorporate evidence-based practice in their program.

6. **Next Steps: Action Planning** (40 minutes)
   An action planning activity in which participants talk about specific problems that they are currently facing in their programs for which reading research might be useful, how they will take the information on evidence-based reading back to their programs.

7. **Accessing, Understanding, Judging and Using Research On Your Own** (60 minutes)
   A whole group discussion activity where participants consider a strategy for how they will continuously access, understand, judge and use research as part of their ongoing efforts to improve their programs.

8. **Evaluation and Closure** (10 minutes)
   An activity to get feedback from the participants about the workshop.

# APPENDIX B: EVIDENCE-BASED PRACTICE PRE-WORKSHOP QUESTIONNAIRE

*First Name and Last Initial*_____

1. How would you define *evidence-based practice*?

2. Name two features or criteria of scientifically based research.

3. Define one of these three types of research design:
   - case studies
   - correlational studies
   - true experiments

4. What's the difference between an experimental and a control group?

5. Why do you think random assignment is so important in selecting a research sample?

6. To what extent would you say you now *use* evidence from empirical research to inform your teaching and/or administration work in adult education?

| **Never** | | | | | **Daily** |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |

7. How do you access research now?

8. What questions about a particular study would you ask to determine whether you should make a change in your practice based on the research findings?

# APPENDIX B: EVIDENCE-BASED PRACTICE POST-WORKSHOP QUESTIONNAIRE

*First Name and Last Initial*_____

1. How would you define *evidence-based practice*?

2. Name two features or criteria of scientifically based research.

3. Define *one* of these three types of research design:
   - case studies
   - correlational studies
   - true experiments

4. What's the difference between an experimental and a control group?

5. Why do you think random assignment is so important in selecting a research sample?

6. To what extent would you *like to use* evidence from empirical research to inform your teaching and/or administration work in adult education?

| **Never** | | | | | **Daily** |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |

7. How will you access research now?

8. What questions would you ask about a particular study to determine whether you should make a change in your practice based on the research findings?

9. What key concept or strategy do you walk away with from today's training?

# APPENDIX C: EVIDENCE-BASED PRACTICE WORKSHOP QUESTIONNAIRE RESULTS

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 1 | Define ebp | Practical "work" that derives structure and method from observation and assessment to define best method | Combo of professional wisdom |
| | 2 features sbr | Controlled variables<br>Observation of behavior | Data collection |
| | Define 1 type research des | Case studies: comparison and assessment of existing data | Case studies: written report on research for situational comparisons |
| | Diff exp & control group | Exp: behaviors of study group are unbiasedly observed<br>Control: defined and managed study population with predicted outcomes | Exp: population exposed to enhancement variable<br>Control: population not exposed to "enhancement variable" |
| | Random assign import? | About 10% of total | Allows unforeseen variables to be better digested into research results |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | From books | |
| | ?s ask about partic study | Does "it" work in my situation? | What are the inferences |
| | Key concept take away | | All great |
| 2 | Define ebp | That the practice is backed up by empirical research that has been applied and show proof of ideas suggested by the study | Setting up practices based on scientific research |
| | 2 features sbr | Validity<br>Reliability | Peer-reviewed<br>Data-backed |
| | Define 1 type research des | Case studies: follow people or situations over a specific period of time to record findings in empirical, real world settings that help describe and illustrate research and thinking | Correlational studies: determining relationships between variables |
| | Diff exp & control group | Exp gets a placebo and the real pill<br>Control gets only the pill | Exp: gets to test different variables<br>Control: remains the same |
| | Random assign import? | You are able to generalize to a larger population | Fair and impartial |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Now use/like to use eviden | 6 | 6 |
| | How access research | Internet, college/univ libraries, dissertations | Same way: internet, checking with practices of other similar programs |
| | ?s ask about partic study | Is there a correlation between the results of the study and what you see in real world? | Is it valid and reliable?<br>Is it backed by strong data?<br>Has it been applied? |
| | Key concept take away | | Much better understanding of scientifically based research principles and application |
| 3 | Define ebp | Uses research evidence to complement the educational situation | Teaching and learning based on evidence from research |
| | 2 features sbr | Lack of bias<br>Double blind research | Peer review<br>Lack of bias |
| | Define 1 type research des | Case studies: helpful but less scientific in approach<br>True experiments: double blind studies where both the research subject and examiner are not allowed to know who is receiving the "new" product | Case studies: soft data from questionnaires, classroom situations, testing |
| | Diff exp & control group | The control group is not part of the subject population which receives something added to regular situation | Exp group receives some added experience or product<br>Control group is not receiving anything added |
| | Random assign import? | Reduces the chance of bias in the research | Essential for a non-biased research program |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | Internet | Internet |
| | ?s ask about partic study | Does the research meet the criteria I am working with? Will the results be positive for my classroom population? | Is there peer review? What is the method? |
| | Key concept take away | | The ability to see the importance of research (even soft data) and education |
| 4 | Define ebp | Instructional practices that have been proven effective by research | Integration of professional wisdom and scientifically based research to come up with best practices |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | 2 features sbr | Random sampling<br>Validity | Validity<br>Reliability |
| | Define 1 type research des | Correlational studies: compare two dependent variables to see if there is a relationship between the two, such as higher IQ and higher SAT scores | True experiments require random sampling, dependent variables and independent variables |
| | Diff exp & control group | Control group is the "norm"; exp group is the one receiving "treatment" or a new method | Exp group is the group that receives the "treatment". Control group is the "normal" |
| | Random assign import? | To make sure that groups are as similar as possible; to increase the internal and external validity | To ensure validity |
| | Now use/like to use eviden | 4 | 6 |
| | How access research | Reading articles on internet, Focus on Basics, articles provided by our department chair | Hopefully, I will take more time to visit websites such as NCSALL and NIFL to gain input |
| | ?s ask about partic study | Are the participants or groups similar to ours? Was it a true experiment? Was it valid? Was it an experiment that can be generalized? | Are the results of the study generalizable to a broader population? Is it scientifically based? |
| | Key concept take away | [redacted] | Research can inform and encourage us to pursue best practices. Thanks |
| 5 | Define ebp | Practice based on prior past experience of what works and what doesn't | Practice based on available research and professional wisdom |
| | 2 features sbr | Validity<br>Reliability | Validity<br>Reliablility<br>Random sample<br>Peer reviewed |
| | Define 1 type research des | Case studies: studies of individuals | Case studies: intense observation of individual case history |
| | Diff exp & control group | Exp: try something different<br>Control: stays the same | Exp: make a change<br>Control: keep the same |
| | Random assign import? | Better makes the research apply to the general population | To make it valid across the whole population |
| | Now use/like to use eviden | 2 | 5 |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | How access research | Internet | Internet |
| | ?s ask about partic study | Does it apply to our students/program? | How does it apply to me/my students? |
| | Key concept take away | | Motivation to increase students' retention |
| 6 | Define ebp | Practices that have been researched and found to be factual | A "practice" that has met all basic principles of the methods of scientific; proven by scientific method of research |
| | 2 features sbr | Non-biased<br>Controlled without anything to make it invalid | Testable theory gives predictions that could be proven wrong<br>Scientific knowledge has had to pass a test |
| | Define 1 type research des | Case studies: using actual "real life" criteria | Case studies: a sample study of real participants with specific criteria set |
| | Diff exp & control group | Exp: group has variation in participation<br>Control: no ifs, ands or buts: everything is the same | Exp: given guidelines/extra guidance (group who practiced ball)<br>Control: subjects given no help or guidelines (group who didn't practice) |
| | Random assign import? | A cross-section of the population is sampled, making the data reflect more than one segment of the population | To get an accurate selection |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | On-line, educational magazines | Internet, working with other CC |
| | ?s ask about partic study | | |
| | Key concept take away | | Principles of scientific methods applied to research |
| 7 | Define ebp | Research that has been validated and proven to work in the classroom | Integrated professional wisdom with scientific based (valid and reliable) research to bring about positive results in the classroom |
| | 2 features sbr | Theory | Systematic<br>Rigorous |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Case studies: actual situations that have been written in narrative form for the purpose of discussion | True exp: randomly selecting a group and comparing the overall results from an experiment of those who were provided extended practice and those who were not to validate the scientific theory |
| | Diff exp & control group | Exp: randomly selected<br>Control: selected specifically with much supervision | Exp: given the support of additional practice<br>Control: stays as is |
| | Random assign import? | It provides more diversity to the study | So there is a diverse group in which to base the scientific research. |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | Internet | Using internet links given in this training |
| | ?s ask about partic study | Who was the research group? Who conducted the research? How long was the research conducted? | Who were the participants? How long was it conducted? Is there other research available in that area? |
| | Key concept take away | | Be able to back up your professional wisdom with scientific research because it becomes more believable to others |
| 8 | Define ebp | Using research (evidence that it works) to improve/enhance teaching (practice) | Integrating professional knowledge with scientific research to make informed decisions |
| | 2 features sbr | Collect accurate data (unbiased)<br>Interpret data correctly | Random selection of control/experimental<br>Systematic |
| | Define 1 type research des | Case studies: study of a particular practice/student to see how it works | Case studies: description of individual student or group |
| | Diff exp & control group | Exp: get the new (“stuff”) instruction.<br>Control: does not get the new stuff/instruction | Exp: gets treatment<br>Control; no treatment |
| | Random assign import? | Unbiased | Avoids biased results |
| | Now use/like to use eviden | 5 | 4 |
| | How access research | Internet, journals | Web, journals |
| | ?s ask about partic study | Is it from a reputable source? How alike is the research sample/situation to my situation? | Is it from a reliable source? |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Key concept take away | | Importance of knowing where to find research and how to use it to improve instruction |
| 9 | Define ebp | Using proven data to develop/inform program content and decisions | Professional wisdom and empirical evidence |
| | 2 features sbr | Hypothesis<br>Significant data | Panel/peer evaluation<br>Rigorous analysis |
| | Define 1 type research des | Case studies: in-depth narrative and measurements that describe a particular organization/situation, etc. | True exp: random sampling, pre and post testing and other empirical data; 1 variable (to the extent possible) |
| | Diff exp & control group | Control group: does not have added intervention (or whatever the experiment is) so that you can compare what happens with and without intervention | Control group doesn't get intervention |
| | Random assign import? | To have true data, you can't select based on knowledge of individuals. Cohort must be widely representative and random sampling is most effective for that | To ensure validity of findings |
| | Now use/like to use eviden | 4 | 5: want to be informed but not a slave to research! |
| | How access research | Relationship with ProLiteracy American, professional development opportunities (state and national conferences, SCALE) | Start with our existing database. Have recently recruited grad student for this, will have better direction now. Contact NIFL and NCSALL. |
| | ?s ask about partic study | In what ways is the group studied similar to and different than our own organization? | What factors made the difference? What were the results for the exper. Group vs. control? How replicable is it? |
| | Key concept take away | | Persistence study data: VERY useful! |
| 10 | Define ebp | Strategies that have research-based success | Integration of professional wisdom with best available empirical evidence to deliver instruction |
| | 2 features sbr | Control group<br>Study group | Peer reviewed<br>Replicated |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Correlational: proof that a strategy is aiding in student success, such as a class that requires supplemental instruction seems to have more student success than one without SI | Case studies: highly detailed descriptions on how an instructional strategy operates in classroom |
| | Diff exp & control group | The variable tested is withheld from control group | Exp group includes intervention |
| | Random assign import? | To provide diversity in the groups | To control study variability |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Internet and literature | Internet |
| | ?s ask about partic study | Will this change provide student success and retention? | Has the study been peer reviewed? Has the study been replicated? Is there a consensus in research community that findings are supported by additional studies? |
| | Key concept take away | | A program improvement plan |
| 11 | Define ebp | Employing classroom instruction that is based on research | Use of professional wisdom that is based on empirical research/combination of the two |
| | 2 features sbr | # of people studied<br>Amount of time study done (period of time covered in study) | Peer reviewed<br>Data analyzed |
| | Define 1 type research des | Case studies: discuss a situation and resolve the problems | Case studies: various situations<br>True exp: two groups, one controlled and one experimental under same conditions |
| | Diff exp & control group | Control group is monitored more. More rules about who can make up the group | Control group remains same and exp group received additional aids/training to see if there's a difference |
| | Random assign import? | It depends on what's being researched | Self selected participants may have a bias or pre-determined ideas |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Mostly internet from various sources. Also books when preparing workshops | Internet (have more sites to refer to), books |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | ?s ask about partic study | How many people were involved? How many variations were included? How long was the research carried out? | Who participated? Were they randomly assigned? Was it reviewed by peers, and what peers? |
| | Key concept take away | | It's not as difficult to incorporate research into our planning to help us meet our needs. |
| 12 | Define ebp | You have evidence based on research that it is an effective practice with student success | Research has been completed on and study groups done |
| | 2 features sbr | Helps to expand student knowledge<br>Proven to be effective and helpful | Has data to back it up<br>Peer reviewed<br>By investigating testable problems |
| | Define 1 type research des | Case studies: where you get a certain group of people to experiment what you are trying to prove to be effective | Case studies: you have information turned in and then a study was completed |
| | Diff exp & control group | Control group is the one you know the end result<br>Exp group to test unknown variables | Exp group had time to practice. Control group no change. |
| | Random assign import? | So you will get "accurate" end results (if not random, you will not get a true end result) | So it is not fixed outcome |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | Internet, books, newsletters, etc. | Internet, conferences |
| | ?s ask about partic study | If it is helping them or not | Do you understand? What my outcome is, positive or negative |
| | Key concept take away | | Research can be helpful |
| 13 | Define ebp | Practices that have been researched and have evidence | Integration of professional wisdom with the best empirical evidence |
| | 2 features sbr | Individuals/subjects<br>Study<br>(illegible) | Empirical findings<br>Peer review |
| | Define 1 type research des | Case studies: following an individual/subject in the research for results followed by narrative, more personal | Case studies: more narrative |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Diff exp & control group | | Control: random and not exposed<br>Exp: subjects specifically chosen for the research, exposed |
| | Random assign import? | Don't have a biased group | Prevent bias |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | Computer, books, articles | Take you websites and begin searching |
| | ?s ask about partic study | (Hope I have better answers for the post tests!) | |
| | Key concept take away | | The importance of research and its validity |
| 14 | Define ebp | Practice (action-behavior-service delivery-instruction) that uses research findings (evidence) to direct it/support it | Combination of empirical research and professional wisdom: practice of instruction, etc. |
| | 2 features sbr | Hypothesis<br>Measurement-pre/post | Peer review<br>Random sample |
| | Define 1 type research des | Correlational: studying variables in search of correlations, relationships, etc. Looking at two or more variables to gauge their interaction | Correlational: pursue relationship of variable and outcome |
| | Diff exp & control group | Exp: has variable(s) under study introduced<br>Control: no variables controlled or introduced ("natural") | Exp: variable applied<br>Control: no variable applied |
| | Random assign import? | So that effects/results are not controlled or affected and therefore "muddy up" the results (keep sample "pure" and unbiased) | To eliminate bias that affects (can effect) results |
| | Now use/like to use eviden | 3 | 5 |
| | How access research | Prolit publications conferences/ncsall conf and training team accesses | NCSALL sites and links you provided |
| | ?s ask about partic study | Validity<br>Relevance for our program | Valid?<br>Reliable?<br>Scientific? |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Key concept take away | | Don't be afraid of research. Look for what's out there in areas of concerns/interests to us and then review for components that can inform and improve our work |
| 15 | Define ebp | Using ideas/methods that have been tried by others that have given results from their practices | Employing professional wisdom with evidence |
| | 2 features sbr | Standardized rules<br>Standardized equipment<br>Fact based outcomes | Professional wisdom<br>Evidence from research |
| | Define 1 type research des | Case studies: completed and reported on to enhance the (teaching or) use of information | Case studies: study of a problem that was set to steps in order to overcome the problem |
| | Diff exp & control group | Controlled is equal<br>Experimental is random | Exp: gets practice added incentives<br>Control: does not get added guidance |
| | Random assign import? | Because everyone learns differently. Therefore selecting research should cover all arenas | It gives a truer results |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | Internet. Other instructors (colleges), pre-posting testing students | Internet/from other instructors/NCCCS office |
| | ?s ask about partic study | Is this practice helping our students to complete their education? Is this practice retaining students in the program? What could we do to improve upon this study and research for our program? | Is it scientific research or non scientific? |
| | Key concept take away | | The action plan for our college for one of the areas of concern. |
| 16 | Define ebp | Data obtained from studies and used as the focus or foundation of your teaching practice | Wisdom and empirical evidence |
| | 2 features sbr | The variables used<br>Length of study | Control group<br>Variables |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Case studies: to decide on what you are going to look at. Select the subjects to follow. Have a timeline for completion. Look to see if there are any common factors based on the established criteria/variables that were pre-determined | Case study: study of a specific topic or group |
| | Diff exp & control group | Control: the group you are trying to match<br>Exp: the group that you are looking at to notice commonalities with the control group | Control group: chosen to have no change in materials<br>Exp: chosen to use new materials |
| | Random assign import? | It gives a new perspective, opens up new questions | Because it helps the validity of the research. it gives a truer picture of the group to be studied |
| | Now use/like to use eviden | 2 | 2 |
| | How access research | Internet | Internet |
| | ?s ask about partic study | | Was it published? Has it been evaluated by peers? Is there any more research on the topic? Is this a new concept? Who was the population? |
| | Key concept take away | | Limited adult ed research is available |
| 17 | Define ebp | Practice based on research which has shown this approach to be effective | Practice based on scientifically based research and professional wisdom |
| | 2 features sbr | Random assignment<br>Control group | Empirical methods<br>Peer reviewed |
| | Define 1 type research des | Case studies: studies of individual students | Case studies: study of individual students |
| | Diff exp & control group | An experimental group is being exposed to the area of research and the control group is not | Exp group is exposed to variable and control group is not |
| | Random assign import? | To ensure that there is no bias | Important for validity and reliability |
| | Now use/like to use eviden | 5 | 5 |
| | How access research | On-line websites and literature | Recommended websites |
| | ?s ask about partic study | | I would be interested to know if more than one study had been done |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Key concept take away | | Integrate scientific research with professional wisdom |
| 18 | Define ebp | A practice based on research that has been tested using the scientific method to measure an outcome | Use of strategy or method that you have utilized and found successful or useful |
| | 2 features sbr | Use of control groups<br>Follows scientific method | Control group<br>Standard deviations |
| | Define 1 type research des | Case studies: anecdotal accounts of real situations used for comparative purposes | Case study: anecdotal account of a situation, what they were investigating and outcome without hard data for support |
| | Diff exp & control group | Control: variables are manipulated<br>Exp: uncontrolled variables: let's observe and note | Control: group that has manipulated variable<br>Exp: random group |
| | Random assign import? | | To eliminate as many variables as possible |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | NCSALL, NIFL articles in print and on web.<br>Additional links or references from these sources | Web and journal articles |
| | ?s ask about partic study | Is this comparable to our student population and program and can we implement this? | Did it follow scientific criteria and was it peer reviewed? |
| | Key concept take away | | Using reliable research as basis for implementing change |
| 19 | Define ebp | As practicing methods/techniques that have been previously researched. The methods are evident that the research holds some validity | The integration of research completed by experts that is utilized in the delivery of instruction |
| | 2 features sbr | Data and… | Data<br>Empirical findings<br>Peer-reviewed articles |
| | Define 1 type research des | Case studies: the study of a topic or issue over a certain period of time. the study comprises of various elements to be determined by the individual performing the study. However, the result is to examine if change has taken place. | Correlational: testing whether there are links between variables and outcomes |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Diff exp & control group | Exp: not controlled by researcher<br>Control: is a chosen group that the researcher controls | Exp: is a group exposed to a new approach<br>Control: group is not exposed to new approach |
| | Random assign import? | Get better results | You get a diverse group which allows one to examine the different variables presented in the sample group |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | Library and websites | Library and web |
| | ?s ask about partic study | | Does the validity or reliability decrease if the research isn't scientific? |
| | Key concept take away | | Research is not as daunting as introduced in graduate school. |
| 20 | Define ebp | Daily activities and program design informed by research | Practice based on a combination of research and professional wisdom |
| | 2 features sbr | It begins with a thesis<br>It tests the thesis | Peer review<br>Rigorous statistical analysis |
| | Define 1 type research des | Case studies: evaluates a setting using primarily qualitative methods | Correlational: evaluate the relationship of paired variables |
| | Diff exp & control group | The experimental receives the method being evaluated while the control receives a method that may be typically used | Exp: receive the trial activity or teaching style<br>Control: receives the standard or established activity against which to compare results with the experimental group |
| | Random assign import? | Research validity is based on a comparison to underlying variation in the population | So that each group is equally representative of the total population |
| | Now use/like to use eviden | 6 | 6 |
| | How access research | Internet, print | Internet, print |
| | ?s ask about partic study | Is it relevant to my situation? Does it solve a problem in my setting/ | Is it appropriate to my setting? Is the research valid? |
| | Key concept take away | | Evidence-based practice |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 21 | Define ebp | Instruction "practice" based on results of research, best practice, etc. of what is effective, results producing, and indicative of student and instructor growth | Practice based on combination of professional wisdom, research findings |
| | 2 features sbr | Design based on accepted methodology | Peer review<br>Replicable |
| | Define 1 type research des | True experiments carried out as a result of posed hypothesis, research of literature, structured design with outcomes measured against hypothesis | |
| | Diff exp & control group | Exp: typically is the "done to" group<br>Control: no intervention related to research? | Exp: done to<br>Control: not |
| | Random assign import? | Assures an unbiased or representative sample | Replicates to extent possible the "target population" |
| | Now use/like to use eviden | 5 | 6 |
| | How access research | Internet, publications, workshops, professional meetings | Internet, workshops, journals, classrooms |
| | ?s ask about partic study | How are results similar to population and impact designed? What was research designed to do? | Does it match criteria needed to improve practice? |
| | Key concept take away | | Integration of research to support best practices |
| 22 | Define ebp | Teaching and program implementation that is based on research findings that are relevant to the program | Employing professional wisdom with empirical evidence in making decisions on instruction |
| | 2 features sbr | Population used<br>Instrument used to assess finding | Research conducted meeting particular criteria<br>Using a population assessed with statistics |
| | Define 1 type research des | Research based on the study and assessment findings on specific, particular events, actions | Research studies constructed with particular groups |
| | Diff exp & control group | Control: group that is the norm<br>Exp: group that is used to test and present new and different information or actions | Control: the basic population group<br>Exp: given new situation/matched against control |
| | Random assign import? | | Finds better, more accurate evidence |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Now use/like to use eviden | 3 | 3 |
| | How access research | Pretest/post testing, internet, judgment of methods used to outcomes | Plan assessment, testing |
| | ?s ask about partic study | | Will this research improve my program or instruction? |
| | Key concept take away | | Scientific research can improve programs and teaching |
| 23 | Define ebp | Using practices with instruction/retention/recruitment, etc. that has been proven through research to be effective | A method that is used that has been researched and accepted by professionals in the area |
| | 2 features sbr | Quantitative data<br>Pre-post assessments | Peer review of articles<br>Control group/experimental group |
| | Define 1 type research des | Correlational: following two groups as they perform the same<br>True: experimental and control groups | Case studies: studying of a group of people or single person in context<br>True exp: control group/experimental |
| | Diff exp & control group | Exp: the one that is having something done to or changed<br>Control: one that remains untouched | Exp: something is changed, added, etc.<br>Control: stays the same |
| | Random assign import? | If you do not choose randomly, you will have biases and the research will not… | If random assignment is not used, exp will be skewed because person may know something about subject or be familiar with or want to do it for some reason |
| | Now use/like to use eviden | 5 | 6 |
| | How access research | Through staff development workshops, professional readings, and research done in classes for program use | Internet, articles in journals, NCSALL |
| | ?s ask about partic study | I would ask to see what %... | Was it peer reviewed? |
| | Key concept take away | | Professional wisdom/empirical evidence |
| 24 | Define ebp | Using results of research to guide practice | No post-test data (left early) |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | 2 features sbr | Select theory or issue to study<br>Sampling of universe (study smaller group) | |
| | Define 1 type research des | Case studies: look at in-depth descriptions of people, situations, etc., to make conclusions | |
| | Diff exp & control group | Exp: try something new with<br>Control: do nothing different | |
| | Random assign import? | It is more like "real life". You don't get skewed results | |
| | Now use/like to use eviden | 5 | |
| | How access research | Internet, conferences, books | |
| | ?s ask about partic study | Was the sample big enough to be effective? Will the implementation be cost effective? Will it produce the desired outcomes/ | |
| | Key concept take away | | |
| 25 | Define ebp | No pre-workshop questionnaire completed (arrived late) | Using informed instructional CR strategies so you read and judge research which you can use to make decision about what you do in the classroom |
| | 2 features sbr | | Requires data analysis<br>Multiple tools for collecting data |
| | Define 1 type research des | | Case studies: narrative which describes question, issue and what you did to address it |
| | Diff exp & control group | | Exp: intervention<br>Control: conditions remain the same |
| | Random assign import? | | So you do not have as many variables |
| | Now use/like to use eviden | | 6 |
| | How access research | | I will look at statistics |
| | ?s ask about partic study | | Who did the research? description of protocol? |
| | Key concept take away | | The need to keep sending research articles to staff and start discussion groups. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 26 | Define ebp | No pre-workshop questionnaire completed (arrived late) | Practice that is rooted in proven methods, not just common wisdom |
| | 2 features sbr | | Clear research design, including questions, methodology, data analysis, results/findings<br>Peer reviewed |
| | Define 1 type research des | | Case studies: qualitative research method involving close study/analysis of subject(s), often analyzed for themes or against qualitative findings<br>True exp: exp and control group, introduces a dependent variable, random sampling, sample size |
| | Diff exp & control group | | Control group does not receive an intervention/dependent variable. It's a baseline basis for comparison. The experimental group receives intervention; hypothesis is applied (illegible) |
| | Random assign import? | | Because self-selection biases the results of experiments by confounding results. Random sampling eliminates or reduces the bias people have when they choose to enroll in a study |
| | Now use/like to use eviden | | 5 |
| | How access research | | University and college libraries, Google scholar, professional publications (TESOL and NCSALL) |
| | ?s ask about partic study | | Is it GENERALIZABLE? Is it reliable? Does it specifically address the needs of my program? Is it a well-designed study? |
| | Key concept take away | | That I'm not a "nerd" for always referring back to research. I'm glad NC supports this behavior. |
| 27 | Define ebp | Program design, delivery, eval and modification based on research-derived evidence that is relevant to the program (continuous…process) | Integration of empirical results from scientific research with "professional wisdom" in program practices |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | 2 features sbr | Formulate a hypothesis<br>Use of controls<br>Emperical observations | Random sampling, hypothesis and testable design, quantitative analysis |
| | Define 1 type research des | Case studies: assessment of particular population and time frame and study problem and results<br>Correlational studies: attempt to relate 2 or more trends, characteristics, or outcomes—in relational results—not limited to cause and effect<br>True experiments: testing a hypothesis | Case studies: descriptive study of actual individuals, populations or events, designed to look at/answer "what's going on here"? |
| | Diff exp & control group | The control group is not subjected to the experimental regime but is assessed carefully by same measures | Control and experimental groups are the same/have same characteristics but experimental group is subjected to changes/interventions and compared with control |
| | Random assign import? | Avoids "self-selected" cases or populations; essential for statistical validity (a foundation) | Avoid biases in the results |
| | Now use/like to use eviden | 4 | 6 |
| | How access research | Google, prof. trainings, books and lit | Same way (google, books/journals/prof. mtgs) |
| | ?s ask about partic study | Is it relevant, feasible to apply, result in improved outcomes? Plus resource prioritization/allocation | Sample size, degree of statistical significance, methodology and limitations re: validity |
| | Key concept take away | [redacted] | Refer to the websites more often for review/reinvigoration of evidence-based practice strategies |
| 28 | Define ebp | Outcome by tasks studied | Instructor experience/observation AND research |
| | 2 features sbr | Analysis, compiling results-evaluation | Control group/experimental group |
| | Define 1 type research des | Case studies: examples of studies in your area of interest | LEFT BLANK |
| | Diff exp & control group | A control group is part of an experiment | One is acted upon; one is not. |
| | Random assign import? | Cover larger segment for study | Random says it all! No collection or grouping of like samples |
| | Now use/like to use eviden | 2 | 5 |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | How access research | Staff workshops | Journals, conference |
| | ?s ask about partic study | Participation success | Why? Who are your subjects? How were they selected? |
| | Key concept take away | | Research is not the end all. Instructor experience counts! Yeah. |
| 29 | Define ebp | The way of doing "something" which is defined/designed by the results of studying the success and unsuccessful practices | EBP has some science (research) behind it plus evidence of best practice |
| | 2 features sbr | Controlled studies, observations | Data driven |
| | Define 1 type research des | Case study: descriptive analysis of a situation | Case studies: answers "what's going on" Correlational studies: answers "what works" |
| | Diff exp & control group | Experimental group is "acted upon", while the control group is not | Control group is not "acted upon" |
| | Random assign import? | Prevents skewing results | Prevents skewing data/results |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Computer (google; library; literature; professional data) | Pay more attention to journals; utilize links provided for suggestions |
| | ?s ask about partic study | Who conducted, what controls | Was it published? Was it replicated? Supported by other research (significant amount)? |
| | Key concept take away | | Utilize the NIFL and NCSALL websites |
| 30 | Define ebp | Reviewing the literature, understanding the data, and implementing into current system. | Taking one's own wisdom and research-based material and implementing a goal-oriented plan. |
| | 2 features sbr | (1) A goal or directive for the research, (2) system to study the goal to produce outcomes | (1) goal, (2) data |
| | Define 1 type research des | Case studies-DFS; Correlational-Pavloff's dog; True experiments-drug studies | Case studies-DFS |
| | Diff exp & control group | The research is using control as the baseline (placebo); experimental do not know what is being given or studied | Experimental group has an intervention; control group has no intervention |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Random assign import? | Then the researcher doesn't know who is receiving what and the sample doesn't know. Truer data collection | You have a variety of people: age, sex, knowledge |
| | Now use/like to use eviden | Daily | Daily |
| | How access research | Internet, networking | Internet, journals |
| | ?s ask about partic study | (1) Does the study give a good representation of the goal of our program? (2) How long ago was the study? (3) Does the study provide a good narrative about the findings? | Is it relevant? What is the goal of the research? |
| | Key concept take away | | To keep reading and focused on making improvements. |
| 31 | Define ebp | Teaching practices based on research | Practices that are arrived at by practice, knowledge of the students, experiences |
| | 2 features sbr | Control group, hypothesis | Control group, random sampling, consistency |
| | Define 1 type research des | (No Answer) | Case studies—following or studying several cases; correlational—studies that compare or find a correlation or connection |
| | Diff exp & control group | A control group? | Experimental group—changes are made and then compared to control group, which no changes are performed on. |
| | Random assign import? | In order to get true and accurate scientific results. | In order to not skew or contaminate the research outcome |
| | Now use/like to use eviden | 2 | (No Answer) |
| | How access research | Seminars | Websites |
| | ?s ask about partic study | Size of group or population study. How big was the study? | Was the research a true experiment? |
| | Key concept take away | | Evidence-based research and empirical research are both important. Evidence-based, in education, is cheaper and probably very good in helping implementation. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 32 | Define ebp | Teaching practices that are based on research that's "proven" effective | Practiced based on both research and own experiences |
| | 2 features sbr | Meta-analysis. Case studies have been performed | Published? Replicated? |
| | Define 1 type research des | Correlational—seeing how a variable change will create a drop or increasing in learning | Correlational—seeing if a variable correlationally changes an outcome of a random sample |
| | Diff exp & control group | Exp group includes the variable. Control group remains the same | Control group doesn't change variables. Experimental group does. |
| | Random assign import? | We deal with "random" students in our classrooms | No prior experience specific to the study is expected |
| | Now use/like to use eviden | 4.5 | 4.5 |
| | How access research | Library, internet, books, other research | Web/periodicals/own/peers |
| | ?s ask about partic study | Is what were doing working? Do we see positive changes? | Has it worked for others? Does it make sense to our population? |
| | Key concept take away | [redacted] | Sites/ideas from others/charged again |
| 33 | Define ebp | Classroom instruction that mirrors what current research says works in a given curricular areas | Professional knowledge and empirical evidence that drives instruction |
| | 2 features sbr | Meta-analysis. ? | Peer Review, replication |
| | Define 1 type research des | Correlational—studies that look at similar interventions or practices, compare and contrast | Correlational--studies that compare what to what |
| | Diff exp & control group | Control group—no intervention. Experimental—intervention | Experimental—intervention. Control group—no intervention |
| | Random assign import? | It gives "true" results. Prevents "setting up" a group to succeed or fail. Anonymity. | Takes away bias, gives more "true results". |
| | Now use/like to use eviden | 3 | 4+ |
| | How access research | Web, library, UW | Connect research to school improvement goals—GREAT resources given!! |
| | ?s ask about partic study | Who, what, why, results | Who is being studied, why? What are the research questions? Outcomes? Implications? |
| | Key concept take away | [redacted] | Connecting research to data leading to effective intervention |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 34 | Define ebp | Research that proves or disproves the use of instructional strategies | Professional experience + research-based practices = interventions and strategies |
| | 2 features sbr | Hypothesis. Conclusion based on data | Experiment, hypothesis, conclusion |
| | Define 1 type research des | Case studies—track individual. Correlational—compare two studies. True experiments—have experiment and control group | Case studies—individual studies. Correlational—discover external, internal influences in a study. True experiments—control and experimental group. |
| | Diff exp & control group | Exper—change is introduced. Control—status quo. | Exper—implement a change. Control—no changes |
| | Random assign import? | Reduces bias in data | Eliminates bias |
| | Now use/like to use eviden | 5 | 5 |
| | How access research | Conferences, internet, books | Internet: provided on handout. Books |
| | ?s ask about partic study | (1) what is the agenda of the research? (2) size of group? (3) valid conclusions? (4) where published, (5) studies to support this one? | (1) type of study, (2) results, (3) group, (4) # in study |
| | Key concept take away | | Improved knowledge in analyzing data and research. |
| 35 | Define ebp | How things are done in classroom using empirical evidence gathered by legitimate sources concerning best ways to present materials | Integrate professional wisdom with good, empirical evidence to make decisions on material delivery |
| | 2 features sbr | ? | Random sample, control group |
| | Define 1 type research des | Correlational—do your research and compare to similar studies | Correlational—outside studies for comparison |
| | Diff exp & control group | Exper—changing way of delivering services. Control—maintain current standards of delivery | Experimental—experience the changes being incorporated. Control—everything stays same |
| | Random assign import? | So as not to hand pick clients which could skew results | So sample will not be skewed by a certain characteristic |
| | Now use/like to use eviden | 3 | 3 |
| | How access research | ? I don't think we do. We let Betty do it. | Use web sites, journals |
| | ?s ask about partic study | Who? When? What? Where? Population make up | Who, what when, where, why? |
| | Key concept take away | | Use "(illegible) look" of wisdom being presented |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 36 | Define ebp | To use what has been professionally proven | Something I may use |
| | 2 features sbr | Scientific studies over a period of time with changes in study to prove facts | Number. Proven |
| | Define 1 type research des | True experiments will use a new drug (vs) placebo | Case studies are watched and monitored. |
| | Diff exp & control group | Control group will have guidelines. Experimental will figure out a way to make it work | Control group needed to practice. The experimental group skunked them after practice. |
| | Random assign import? | It's unknown. However, many people will have the mental feeling of wellness simply by suggestions. | Keeps the odds even. |
| | Now use/like to use eviden | 5 | 5 |
| | How access research | Internet, educational outreaches | Internet or educational facility |
| | ?s ask about partic study | What are the proven facts? | Outcome, who are researchers |
| | Key concept take away | [redacted] | I can help to prove my thoughts. |
| 37 | Define ebp | Teaching based on research | Based on research, professional wisdom, experience |
| | 2 features sbr | Methodology and replication | Research question, data |
| | Define 1 type research des | Case studies—looking at individuals whole self before, during and after applying or using a variable to create change | Correlational—telling what is going on |
| | Diff exp & control group | Control group is the comparison group. One would use after applying a variable to an experimental group | The experimental gropu has an intervention done to it; the control group does not. |
| | Random assign import? | A better generalization of the population as a whole can be made with the outcome. Accounts for a variety of factors with less bias from researcher. | Random assignment accounts for limitations in the general population and "evens the odds". |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Google, Focus on Basics, MPAEA journal | Through all the websites and their links |
| | ?s ask about partic study | Who—the researcher and participants. What—what is the variable and action done to the participants? | Is it valid, is it relevant to our situation, did that research suggest program help or improvement? |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Key concept take away | | We're doing things right, research is easily accessible on the web. |
| 38 | Define ebp | Evidence-based practice is use of research proven strategies to improve instructional practices | Professional wisdom combined with scientific evidence on how to deliver instruction |
| | 2 features sbr | Proven research with case studies—results/outcomes. Control group as defining group | Believe that new evidence critical to work effectively with students. Integrate what have learned with previous knowledge |
| | Define 1 type research des | Case studies—specific study with hypothesis, procedures and outcomes | Case studies: detailed description of individual or small groups: "What's going on?" |
| | Diff exp & control group | Experimental group—large group. Control group—specific cohort (average diversity) | Experimental group learns through experience and practice. Pre- and post-assess to determine gains as result of practice. Control group is static group—not influenced. |
| | Random assign import? | So that "truer" results are achieved across a population | Gives a better cross-section of general population without bias or pre-conceived experience. Truer results. |
| | Now use/like to use eviden | 3 | 3 |
| | How access research | NIFL, NCSALL, LINCS, conferences | NIFL, NCSALL, LINCS, abstracts/research |
| | ?s ask about partic study | Feasibility, practicality, and demonstrated outcomes | (No answer) |
| | Key concept take away | | Use evidence-based research and practice to guide program improvement |
| 39 | Define ebp | Research based on actual practice | Implementing practices which are based on both research and teacher knowledge |
| | 2 features sbr | (1) statistics, (2) examination and/or inclusion of other research | (1) control group vs. experimental group, (2) stats |
| | Define 1 type research des | Case studies—research designed around and with a specific set of criteria (i.e., with a control group) | Case studies—examines/studies a particular group/individual and reports on observed characteristics |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Diff exp & control group | Control group is a "group" in which the experimental group results are compared to` | Experimental—group which "experiences"/participates/tests hypothesis. Control—group which "maintains status quo". |
| | Random assign import? | Because it allows for a truer "picture" | Because it provides for a wider distribution/comparison to the actual population |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | Through the internet and journals | Utilize links given |
| | ?s ask about partic study | How the research was set up: methodology used; statistics: was random sampling used? | Was it published and recognized? Was it replicated? |
| | Key concept take away | | Utilize concepts/websites, etc., given |
| 40 | Define ebp | Practices that have been proven to work | Scientifically based research using scientific method |
| | 2 features sbr | Scientific method; follow up | Practice; control group |
| | Define 1 type research des | Case studies: numerous comparisons about the same topic | Case studies: look at different studies to see if a correlation can be made about the outcomes. |
| | Diff exp & control group | Experimental: use of the e xperimental object. Control: not using the thing, given a placebo | Control group doesn't use any remediation or change. Experimental group practices or changes something |
| | Random assign import? | So that the research is not biased | There is no bias; the group is better representative of the population |
| | Now use/like to use eviden | 3 | 3 |
| | How access research | Reading, computer | By looking at other research out there and trying new methods |
| | ?s ask about partic study | Outcomes? Cost. Ease of use | How long has this practice been in use; findings? |
| | Key concept take away | | Ways to implement better reading strategies |
| 41 | Define ebp | A practice that is developed based on research | A practice based on research or "evidence" that has been tried/proven |
| | 2 features sbr | Valid. Tested | Validity and reliability |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Case studies are research based on a specific item or group. The study would have a research question and then explain the process used | Correlational studies compare the effect of different "interventions" on a subject |
| | Diff exp & control group | The experimental group is exposed to whatever you're researching. The control group is not exposed. | The experimental group receives an intervention. The control group does not. |
| | Random assign import? | Random assignment helps to keep the results more valid. Someone could "stack the deck" if they "choose" the sample | Allows for a more accurate representation of the population |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Journals, meetings, and the internet | Through specific websites/journals |
| | ?s ask about partic study | Is it applicable to my students? Is it practical (in terms of cost, time, outcomes)? | Are the results valid, reliable and practical? |
| | Key concept take away | | That research can be valuable. |
| 42 | Define ebp | Putting into practice, implementing procedures that have been proven to work | Integration of research and professional wisdom. Then make decisions about services and practice. |
| | 2 features sbr | Been implemented in several settings. Placebos have been used so that research wasn't manipulated. | Been researched in more than 1 research. Published. |
| | Define 1 type research des | Case studies: look at particular groups and gathering information | Case studies: study specific case; not broad. |
| | Diff exp & control group | Experimental: the variables aren't taken into account. Where control they try to account for variables that might be present. | Experimental implement the change to compare to the control group. |
| | Random assign import? | If not random selection, you could prove anything by manipulation | So can't manipulate outcomes. |
| | Now use/like to use eviden | 3 | 3 |
| | How access research | Internet: literacy materials and information. Training, conferences. From ABE/GEd leaders and industry | NCSALL, NIFL, CAL, TESL, ETS.org |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | ?s ask about partic study | How many groups and where were the groups studied that "prove" this works? | How many projects/people have proven this to be true? |
| | Key concept take away | | Websites with research. |
| 43 | Define ebp | Practice that is based on good research and proven to get the results needed | Integrates professional knowledge with research practices to determine the best way to do things. |
| | 2 features sbr | Statistical analysis. Reliability. | Reliability and validity |
| | Define 1 type research des | Case studies: study individuals and how they respond to programs/intervention | Case studies: study of indiv to determine effect of practices on outcomes |
| | Diff exp & control group | Control group is randomly selected and does not receive/participate in intervention. Experimental one does. | Exp: participants in intervention. Cont: doesn't part |
| | Random assign import? | So the study is not biased and provides better data | Gives you an unbiased selection |
| | Now use/like to use eviden | 5 | 5 |
| | How access research | Journals, internet, Dept Ed | Same way |
| | ?s ask about partic study | Was group similar to mine? Was the study conducted in a reliable scientific manner? Is it something we can mimic and implement with success based on what we know now. | How was it done and does it apply to corrections? |
| | Key concept take away | | Mean, media and mode! Using research better to help me improve program delivery. |
| 44 | Define ebp | A practice that has been put into use because research has shown that it works. | Combination of empirical evidence and professionalism in practice. |
| | 2 features sbr | A control group. A need for the type of research done. | Published in an accredited journal. Have results of study been replicated by other scientists. |
| | Define 1 type research des | Case studies: looking at groups in their natural settings to do the research | True experiments: randomized tests that answer what works |
| | Diff exp & control group | A control group is a group where no new practices are applied or tried, whereas an experimental group is subjected to different or new practices. | A control has no outside influences whereas an experimental group has some new or different aspect to it. |
| | Random assign import? | So that there is no bias | So that there is no bias or predisposition |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Now use/like to use eviden | 1 | 3 |
| | How access research | N/A | Online |
| | ?s ask about partic study | Whether the results of the research are significant and if they apply to my situation. | Whether there is a useful aspect from the results of the research |
| | Key concept take away | | That research can make a difference in instructional practices |
| 45 | Define ebp | Statistics that show what really works in classrooms | Promotes teaching/learning in a fashion that has been tested. |
| | 2 features sbr | Outcome. Using same text/time factor | Research that is credible and useable. |
| | Define 1 type research des | Correlational studies: determine how different types correlate as studies unfold | Correlational: collecting data, studying outcomes and connecting the data for instructional practices |
| | Diff exp & control group | Experimental: all parties know. Control group: one group is being observed/one isn't. | Exp: performance with no control. Control: is controlled by instructor. |
| | Random assign import? | Yes, because of fairness. Less bonding, less becoming emotionally involved | Random sampling addresses a more accurate conclusion while… |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Based on past successes | Research, evaluate and apply to classroom setting |
| | ?s ask about partic study | How does one conclude the true learning success of non-English speakers? | Would this be applicable to our region? How might we implement this with the time factor of part-time teachers? |
| | Key concept take away | | Involvement-interaction with groups. |
| 46 | Define ebp | Practice that has been proven to work | Using personal wisdom with empirical evidence to make decisions |
| | 2 features sbr | Surveys. Control group. Factual data. | Systematic. Rigorous data. |
| | Define 1 type research des | Case studies: people. Information on individuals recorded and studied over a period of time. Correlational: comparison of case studies. | Case studies: individual/group descriptions. Correlational: tests links between variables and outcomes. True experiment: randomized trials that answer "what works" questions |
| | Diff exp & control group | Control group: specific gender, age, etc., regimented | Experimental group is random group |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Random assign import? | Random assignment will include variables to…(not finished) | Needed for comparison |
| | Now use/like to use eviden | Left blank | 4 |
| | How access research | Internet | Internet with specific given addresses: ncsall.net, NIFL |
| | ?s ask about partic study | Will this change be relevant for my students? | Size of group, gender ,age |
| | Key concept take away | | Use common sense in applying research to students. Use what is relevant to them or what is a "good fit" to help students improve. |
| 47 | Define ebp | Practice based on evidence/research | Practice based on research |
| | 2 features sbr | Well researched—based on, grounded in previous research/plus actual happenings. Tries to remove research biases. Findings similar to other studies. | Same answer. |
| | Define 1 type research des | Case studies: individual studies, thorough findings based on correlations, can't show cause and effect | True experiments: based on scientific method, control on variables, and strongly based on former research |
| | Diff exp & control group | Exp: receive the orange drink/poison. Control group: does not receive the orange drink/poison | Exp: receives treatment. Control: does not. |
| | Random assign import? | Minimize bias | Minimize variables/other factors |
| | Now use/like to use eviden | 2 | 4 |
| | How access research | No. We had really the best workshop recently that brought in research | Adult ed research/NCSALL |
| | ?s ask about partic study | Try to find out how similar the exp group is to my population and conditions. Also how sig finding are. | How similar population is to my population |
| | Key concept take away | | Research locations: where to find it. |
| 48 | Define ebp | A practice based on evidence which would be a step further than the "research" based | Personal wisdom and best available evidence. "What should drive practice" |
| | 2 features sbr | Needs lots of time. Needs lots of participants. | Systematic. Rigorous data. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Case studies: studies of particular cases for a particular reason/research | Case studies: "What's going on" – detailed description of individual/small groups |
| | Diff exp & control group | Exp: not assigned. Control: assigned. | Exp: random. Control: not random |
| | Random assign import? | So you can get a more accurate reading | You get a better cross-section. |
| | Now use/like to use eviden | 2 | 3 |
| | How access research | Left blank | Web; given sites |
| | ?s ask about partic study | In what particular cultures does this seem to work? Age group? Socio-eco? | What were the findings? Will they work with/in my areas? |
| | Key concept take away | | Left blank |
| 49 | Define ebp | Practice that is conducted which is based upon current research findings | Practice that grounded in the theory of the field. |
| | 2 features sbr | Use of inductive research. Use of deductive research | Has a question that is researched for an answer. Involves the systematic review of literature. |
| | Define 1 type research des | Case studies: qualitative methodology where a group is studied according to the parameters established by Merriam, Lincoln and Denizen. Includes triangulation for the establishment of firm controls and gives credence to findings. | Case study: study of a collection of subjects for the study of thoughts, feelings and perceptions in a structured format (Lincoln, Guba, Merriam, Denizen) |
| | Diff exp & control group | Exp: has treatment performed on them. Control: no treatment | Exp: receives the treatment. Control: does not receive treatment. |
| | Random assign import? | Random assignment is important to establish the measurable variable. I also believe that a purposeful sample is valid for case study research. | The results are more likely to reflect the population sample. |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | Books and periodicals in the field, research reports form NCSALL and NIFL, National on-line discussion lists, discussion with others in the field. | Through books and periodicals in the field, online searches, professional organizations, national listserves, TCALL, NCSALL, NIFL, LINCS |
| | ?s ask about partic study | Is this something that can help the teachers and students with in my region? | What will the benefit be to the students and/or teachers? |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Key concept take away | | Better understanding of how to get a pilot research project started and subsequent follow-up. Thanks! Great workshop. |
| 50 | Define ebp | Evidence-based practice is the use of things that "work" for one and have been show (evidence) to "work" | Same as before |
| | 2 features sbr | You have an experimental group and a control group. In a controlled setting. | Same as before |
| | Define 1 type research des | Case studies: provide documentation of research from start to finish. Correlational: study whether this variables covary with each other. True experiments: (science based) contain a control and experimental group in a controlled setting are closely monitored. | A correlational study is a study that provides evidence that two variables co-vary together. |
| | Diff exp & control group | Exp: is introduced the independent variables. Control: is not introduced to the independent variable. | Whether you introduce the independent variable or not. |
| | Random assign import? | It is important because you do not want your research sample to be contrived. You really want a true representation of your population. | To be able to be sure your sample is representative of the population and generalizability |
| | Now use/like to use eviden | 5 | 5 |
| | How access research | Through various resources- library, TCALL, various databases | Same as before: TCALL, NCSALL, etc., and Academic Search Premier |
| | ?s ask about partic study | Were the findings significant? Were there any significant findings relevant to my particular study? | Is it a true research-based study? Are the findings valid? |
| | Key concept take away | | Accessing, understanding, judging and using research. |
| 51 | Define ebp | Research that has been applied and evaluated in the classroom | Practice based on solid evidence that it will work. Evidence gathered methodically and analyzed appropriately. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | 2 features sbr | Identify an area of investigation. Apply findings to real situations. | Left blank |
| | Define 1 type research des | Case study: observation a nd study of a specific research situation | Case study: indepth study of a particular subject (individual) |
| | Diff exp & control group | Left blank | The experimental group receive the intervention strategies. |
| | Random assign import? | Left blank | To get a true picture of the reality. |
| | Now use/like to use eviden | 4 | 3 |
| | How access research | Through publications, internet, conference presentation, and from researchers in the field | Through the various alphabet soup sites: TCALL, NCSALL, NIFL, etc. |
| | ?s ask about partic study | Who conducted the study, how was it implemented, what were the results, what follow-up was done after the study was completed, will there be ongoing study? | Is it pertaining to what I am trying to achieve? |
| | Key concept take away | | Left blank |
| 52 | Define ebp | Teaching practice which a foundation in research theory (sic). Teaching based on what research has demonstrated “works”. | Practice based on research and professional wisdom both. |
| | 2 features sbr | That it is objective and based on verifiable data. | Random sampling. Reviewed by a peer journal and accepted as viable. |
| | Define 1 type research des | Case studies: studying one segment of a field, for example, one adult ed program in order to learn more about what practices work. | Case studies: detailed study of a limited group of people can be quantitative or qualitative. |
| | Diff exp & control group | With a control group, variables are fixed and you know exactly who you are researching. With experimental, there is no known “control” to base your variances on. | Exp group is “put to the test” and then results are compared to control group who is not being evaluated. |
| | Random assign import? | So as to not skew or favor an outcome. Random assignment =objectivity | For purposes of objectivity and unbiased dta. |
| | Now use/like to use eviden | 2 | Left blank |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | How access research | Reading materials | Left blank |
| | ?s ask about partic study | Who were the participants and how many were there? | Left blank |
| | Key concept take away | | Left blank |
| 53 | Define ebp | NA | NA |
| | 2 features sbr | NA | NA |
| | Define 1 type research des | Case studies: the life and experience of a followed individual within a time frame, whether it is a short or a long time frame. Correlational: two factors are evidence and reveal a correlation that is parallel and impacts one another. | Same as before |
| | Diff exp & control group | Experiment is not an exercise; it is usually an empirical approach that monitors cause and effect. A control group is a group is exposed (sic) and has no tampering with material while other group is exposed and a certain level of control is maintained. | Whether you introduce an independent variable or not. |
| | Random assign import? | So that you can have a healthy range of participants from various backgrounds impact the research instead of a specific gender, ethnic group, educational exposed. This instead allows an accurate range of reality-based evidence. | It takes a range of various backgrounds and places them in an experiment that can be controlled or uncontrolled/blind or double blind. |
| | Now use/like to use eviden | 6 | 6 |
| | How access research | I use empirical research. | There are a number of different websites out there that we can look and evaluate information from. |
| | ?s ask about partic study | NA | Can it be replicated? Is there sufficient evidence that support these findings or can it be researched further? |
| | Key concept take away | | What are you going to look at, how is it going to be implemented, and understanding/assessing. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 54 | Define ebp | Practice in teaching where choices for instruction are founded in evidence of effectiveness for students. | Same as before |
| | 2 features sbr | Theory. Control groups. | Control group. Pilot projects. |
| | Define 1 type research des | Case studies detail the background and experience of an individual participating in research. | Same as before |
| | Diff exp & control group | Exp: tries the new procedure. Control group follows procedure practices previously. | Same as before |
| | Random assign import? | So that a research sample represent as wide a range as possible of student characteristics, needs. | Same as before |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | Through professional development workshops | Internet websites. Thank you for these! |
| | ?s ask about partic study | Whether participants were native speakers of English. Whether results of the study had impact on retention. | Thank you for handout on evaluating research. |
| | Key concept take away | | The availability of research findings on the internet, as with www.ncsall.net. Thank you for a very informative, well-organized presentation. |
| 55 | Define ebp | Practicing or re-defining your actual practice in the classroom based on evidence we discover to meet the students' needs. | Working to make changes through research evidence. |
| | 2 features sbr | Left blank | It is well documented. The sample group is large. |
| | Define 1 type research des | Case study: looking at all aspects of a particular situation. | True experiments are like seeing if the little ball can be popped into the cup. |
| | Diff exp & control group | A control group is a separate group from the actual one we are studying to help us maintain perspective. | For purpose of comparison. |
| | Random assign import? | So as not to be personally prejudiced as a researcher | So there is no bias. |
| | Now use/like to use eviden | 2 | 4 |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | How access research | Not on a formal basis but we as teachers are constantly evaluating and making changes. | I will look at things differently, thinking how we can improve. Research can help us. |
| | ?s ask about partic study | Is it applicable to our situation? | Accepted by colleagues (published). |
| | Key concept take away | | There is a lot of research out there that can help us do a better job, if we will use it. |
| 56 | Define ebp | Practice that results in valid and reliable data that support or represent change in student skills/knowledge/abilities | Practice based in empirical research |
| | 2 features sbr | Replicable. Valid. | Replicable. Valid. |
| | Define 1 type research des | Case study: based in qualitative data and represent actual or couples. Correlational: that relate data from one group to that of another. | Case study: qualitative data |
| | Diff exp & control group | Experimental gets the "treatment" exposure. Control gets status quo. | Exp: treatment. Control: no treatment |
| | Random assign import? | Depends on type of research. If an experimental design, it tends to assure that results are due to some intervention other than chance. | Allows researchers to lower probability of change driven by variables other than the treatment or by chance. |
| | Now use/like to use eviden | 4 (but I'm primarily a qualitative researcher) | 3 |
| | How access research | Peer reviewed journals, research reports. Listserve announcements/discussions | Same as before |
| | ?s ask about partic study | Did the methodology choice math the research question? How was the methodology process applied? How were the data analyzed? Did the researcher draw reasonable conclusions from the data? Are the results/conclusions/generalizations applicable to my practice? | Same as before |
| | Key concept take away | | Good idea to use in my grad intro to research analysis course. |
| 57 | Define ebp | Something that has supportive evidence to back it up. | (Wrote "same as before" on the top). True experiences and highly detailed |
| | 2 features sbr | Demographics. Size of sample. Controlled or not. | Evidential research. Control groups. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Correlational studies: studies conducted to prove a theory. | True experiments: done with a control group and an intervention group. |
| | Diff exp & control group | Exp: an open-ended study. A control group is followed all the way through a study. | Control continues same mode. Experimental has intervention. |
| | Random assign import? | If you pick your assignment then results may be more biased. | Because it is less likely to be biased. |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Internet, TCALL, PP | NCSALL, TCALL websites etc. |
| | ?s ask about partic study | Learning disabilities. | Does it work? How was it done? |
| | Key concept take away | | Group work. Exercises 7.2 |
| 58 | Define ebp | In reference to GED programs (one of which we have), it means a practice that we use because we have seen good fruits from in the past. | Scientific basis for the practice. |
| | 2 features sbr | A control group and a group you change modes on | Assessment. Judgment |
| | Define 1 type research des | Correlational: a study that illustrates something like this: studies have show there is a direct correlation between the # of people who eat oatmeal regularly and who die within 20 years. | Correlational: certain aspects of a group correspond to other aspects. |
| | Diff exp & control group | The control group have not had unusual change modes applied to them. | One has change introduced; the other does not |
| | Random assign import? | If you select a related group, you run the risk of error due to factors that relate them | Cleaner data or results |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | In-house mostly. | According to how it is collected |
| | ?s ask about partic study | How does it apply to your program? | Is it case studies, correlation, true exp? |
| | Key concept take away | | How to assess and collect research. |
| 59 | Define ebp | The application of a practice based on tested and proven effectiveness of this practice | The implementation of practices in your program based on research that demonstrates or substantiates its efficacy. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | 2 features sbr | Must not be biased. Must be based on a large enough random sample to support conclusion. | It is structured and systematic |
| | Define 1 type research des | Correlational: evidence indicates strong support for a conclusion based on cause and effect. | Correlational studies: answers the question, what are the similarity or differences? |
| | Diff exp & control group | Exp: the cohort actually tested. Control: the cohort not in test but used for comparison with the experimental cohort | Exp: tests the new idea or practice by putting it into effect. Cont: does nothing. |
| | Random assign import? | To exclude bias from the results | It keeps the results "clean" |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | ERIC articles, NCALL and NIFL and my own research | I'll go to websites: NCSALL, NIFL, TESOL, CAELA |
| | ?s ask about partic study | Does the suggested practice fit into our program? Is the suggested practice compatible with what we want to do? Is it at cross purposes in any way with our prog purposes and goals? Does it help or hinder? | What does professional wisdom indicate we ought to do or not do? |
| | Key concept take away | | Handout 7.2 is very useful! |
| 60 | Define ebp | Evidence-based practice is based on aligning teaching with research. | Instruction aligned with research |
| | 2 features sbr | Validity. | Reliablity. Validity |
| | Define 1 type research des | A case study explores an actual individual or group of individuals involved in a controlled research study. | True experiments: answers "what works" questions |
| | Diff exp & control group | Exp: variable, changes. Control: stays constant, no variables | Control: no variable. Exp: variable |
| | Random assign import? | It allows for a valid sample of subjects. | Validity |
| | Now use/like to use eviden | 4 | 5 |
| | How access research | Eric. Take classes. Member IRA | ERIC, school, TESOL |
| | ?s ask about partic study | Is it applicable to my students and their needs? | Is it applicable to my students? |
| | Key concept take away | | Align teaching with research |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| 61 | Define ebp | Putting into practice something that is proven | Basing what you do (practice) on proven research |
| | 2 features sbr | Must follow a specific "method" | Validity. Reliability. |
| | Define 1 type research des | Case studies: researching "real life" events/people and reporting the findings | Case studies: answers "what's going on" |
| | Diff exp & control group | Exp group lacks pre-arrangement modifications | Control group must follow different guidelines under more control |
| | Random assign import? | Must include all types of the sample | So as to have validation |
| | Now use/like to use eviden | 6 | 5 |
| | How access research | Internet | Different web sites |
| | ?s ask about partic study | Who was the researcher? | Who was asked; what were findings |
| | Key concept take away | | Research is important and should be incorporated into instruction along with past experience |
| 62 | Define ebp | Something that you do "a practice" because you see that it works (successful) | Integration of professional wisdom with the best available empirical evidence in making decisions |
| | 2 features sbr | Experimenting with a new way of doing something. Coming up with ideas or new ways to do something. | Research and conclusions |
| | Define 1 type research des | Correlational: studies done with a group of peole that have certain needs and how your idea relates to their needs | Correlational: test links between variables and outcomes that answers "what influences what"? |
| | Diff exp & control group | A control group doees not change or do anything new or different than previously. The exp group tries new ideas and you can compare the results to the control group | Control group: doesn't change. Exp group undergoes a change. |
| | Random assign import? | This gives you a true outcome of how a new project would affect most other programs. | You get a true group that represents a general population. |
| | Now use/like to use eviden | 2 | 5 |
| | How access research | If something worked and students are successful, then I do it again. If not, I don't. | Utilizing the different sites. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | ?s ask about partic study | What are the students doing now? Did this help their family also? | Who does this help? How does it help them? What is the cost? |
| | Key concept take away | | Pay more attention to research-based studies and let other people's research help my program. |
| 63 | Define ebp | Something you do that is successful | The integration of both empirical evidence and professional wisdom in making decisions |
| | 2 features sbr | ? Experiment | Employ systematic, empirical methods that draw on observations. Involves rigorous data analysis. |
| | Define 1 type research des | ? | Case studies: highly detailed descriptions of individuals or small groups that answer "what's going on" |
| | Diff exp & control group | Exp=you experiment with unknown variables. Control=experiment with known variables (you control the variables) | Exp group has interventions and control group does not. |
| | Random assign import? | ? you have different people doing the same work and getting the same answer. | Different people, different backgrounds |
| | Now use/like to use eviden | 1 | 5 |
| | How access research | ? | Visit the different sites that were given to us. |
| | ?s ask about partic study | ? | Left blank |
| | Key concept take away | | SSR |
| 64 | Define ebp | Instructional practices which may not have scientifically based randomized studies behind them, but at least have some systematic research and are widely accepted by researchers in adult education | Instructional or programmatic changes based on scientifically based research or best available research supported by community of researchers in field. |
| | 2 features sbr | Large, robust samples. Random assignm,ent to experimental and control groups ideally. Double-blind | Randomization. Validity. Reliability. Sample size. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Define 1 type research des | Case studies: qualitative research that can provide an impressionistic and holistic understanding of problem, but not a definitive/ Correlational: statistical correlation between phenomenoa does not necessarily imply a causal relationship between them. True exp: under ideal conditions, allows a more confident determination of causality | Corelational: relationship between variables, ex-post facto not causal. True experiments: randomized |
| | Diff exp & control group | An exp group is randomly assigned to the particular condition or practice that is being tested. The control group does not. | Exp receive the intervention; the other doesn't/ |
| | Random assign import? | To avoid self-selection. People who choose to be in a study are very likely different than the general population. | Avoid self-selection that can create differences in groups being tested. |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | NCSALL, NIFL | NCSALL, NIFL, CAELA |
| | ?s ask about partic study | Methodology. Relevance of research question. | Methodology. Support by other studies. Quality of data. Peer reviewed. |
| | Key concept take away | | Importance of promoting research within programs. Innovation comes from within. |
| 65 | Define ebp | Practices based on research data. | Supporting data that supports a concept or idea |
| | 2 features sbr | Tested over time (reliable). Implementable (valid) | Empirical. |
| | Define 1 type research des | Case studies: based on actual situations | Case studies: based on actual situations |
| | Diff exp & control group | Exp; no common elements. Control: some elements are. | Control group will be observed with specific common elements to evaluate results or change |
| | Random assign import? | To provide a "fair sampling" of a large group | Helps understand a larger group. |
| | Now use/like to use eviden | 4 | 4 |
| | How access research | Through our Far West Great Center and other conferences | Different websites. |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | ?s ask about partic study | What impacts student learning most? Other than purposeful and meaningful, what keeps adult learners engaged in learning? | Recognize the needs of the center or community. |
| | Key concept take away | | Alignment between research, instruction and assessment. |
| 66 | Define ebp | Practice based on prior research | Practice supported by prior research |
| | 2 features sbr | Experiments. Methodology. | Examples. Percent of success rate. |
| | Define 1 type research des | Case studies: research based on previous cases with its own set of methods | True experiments: experiments that answer the question "How does it work?" |
| | Diff exp & control group | Control group: one has set rules, methods, criteria, participants. Experimental: there is not an already established criteria. | Control group has set of controls, whereas an exp group is more open. |
| | Random assign import? | Provides different views, ideas, perceptions. Gives a much broader and realistic result. | Given a better view of the perspective of all participants. |
| | Now use/like to use eviden | 3 | 4 |
| | How access research | Through internet, administration, other instructors. | Through websites, instructional coordination and newsletters. |
| | ?s ask about partic study | Success rate? Population used in research study? | Type of research. Type of population. Success rate. Resources needed. |
| | Key concept take away | | Silent reading strategy, evaluation and assessment |
| 67 | Define ebp | Practice that is based upon observed or anecdotally reported results of strategies. | Practice based upon research findings providing evidence of success. |
| | 2 features sbr | Control group data is included. Statistics are garnered through accepted research-based method | Published in peer journal. Rigorously data-based. |
| | Define 1 type research des | In case studies, history and current practice are included and results are compared and controlled to other methods with comparable histories. | True experiments: Control group, participant group—measure results of methods used. Random selection of both groups. |
| | Diff exp & control group | Exp is included in the method or strategy being studied. Control is not included in the method. | Exp: receive the method/item, etc. Control; does not receive the method/item |

| RESP. | QUESTION | PRE-WORKSHOP | POST-WORKSHOP |
|---|---|---|---|
| | Random assign import? | It mirrors real-world situations. | No personal bias or other generally occurring "skews". |
| | Now use/like to use eviden | 6 | 6 |
| | How access research | Internet! Library, co-workers, referral, periodicals | Websites provided, trusted sources primarily |
| | ?s ask about partic study | Do our students have needs that can be met through these findings and are not currently being met? Do we have the capacity to make this change? | Does this address a local need? Is it reasonable within this structure? |
| | Key concept take away | | Importance of moving from "by the seat of your pants" instruction |
| 68 | Define ebp | Utilizing teaching techniques based on research | Utilizing techniques based on research and professional wisdom |
| | 2 features sbr | Scientifically calculated. Research/experiment | Left blank |
| | Define 1 type research des | True experiments: set up experiment with control group and experimental and compare results | True exp: random selected group with both exp and control groups. The group (n) must be large enough to have statistically true readings. |
| | Diff exp & control group | Exp is given the "instruction/medicine" and control group hasn't | Exp: receive the modification. Control group: blind, no |
| | Random assign import? | Take out bias; make it objective | Take out, reduce bias and increase objectivity. |
| | Now use/like to use eviden | 2 | 4 |
| | How access research | Texts, periodicals, sharing stories with other teachers | TCALL and all resources on handout |
| | ?s ask about partic study | Can you teach an adult a language or to read if they never went to school and had limited communication throughout childhood? Does the brain atrophy? | None at this time. |
| | Key concept take away | | You can use research to make change. |