

Action Research in the E-Learning Environment™ Online

Action Research in the E-Learning Environment Online offers a process of inquiry and reflection in which educators use research techniques to systematically examine their personal instructional practice. In the e-learning environment, action research takes on a new dimension as educators integrate technology into traditional research methodologies. This course focuses on online data collection techniques, interpreting the data to affect change in the online classroom, and developing a research plan that integrates and makes effective use of e-learning technology.

To the right are the key areas of focus for the eight-week online asynchronous course. For more information, refer to the syllabus, which provides a detailed outline of the course material as well as a bibliography of research on which the course is based.

In this course, participants will

- ▶ Describe the characteristics of action research and its role in an e-learning environment and explain the four phases of the action research cycle.
- ▶ Identify an action research topic and create a data collection plan for an action research project.
- ▶ Conduct data collection in an e-learning course.
- ▶ Analyze different types of data collected during an action research project.
- ▶ Write an action research report.
- ▶ Identify ethical issues related to action research.

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Course Description

Action research is a process of inquiry and reflection in which educators examine their personal instructional practice systematically, using the techniques of research. This online course addresses concepts associated with action research and the processes and procedures for conducting action research, culminating in the development of an action research plan.

Course Outcomes

Upon completion of this class, the learner is expected to be able to:

1. Define the characteristics of action research.
2. Compare and contrast action research with other types of research.
3. Relate action research to current teaching practices.
4. Describe the phases of the action research cycle.
5. Identify an action research topic.
6. Explain what constitutes an excellent action research question.
7. Define various data collection methods.
8. List online resources available for data collection, including online survey Web sites, instant-messaging services, and discussion boards.
9. Develop a data collection plan for an action research project.
10. Conduct data collection in an e-learning course.
11. Analyze different types of data collected during an action research project.
12. Explain various methods used to interpret action research data.
13. Write an action research report.
14. Present conclusions from an action research project to a specific audience.
15. Identify ethical issues related to action research.

Required Text

McNiff, J., Lomax, P., & Whitehead, J. (2003). *You and your action research project*. New York: RoutledgeFalmer.

Instructors and learners will also use instructor-generated materials, learner-generated materials, and Web-based resources to facilitate learning.

Topical Outline

List of Concepts

Action Research Overview

Defining action research; how action research relates to other types of research; how action research relates to teaching practices

The Action Research Cycle

Observing; reflecting; planning; acting; various theories of action research; identifying an action research topic

Developing Research Questions

Qualities of a good action research question; phrasing action research questions; ethical issues related to action research questions

Planning Data Collection

Data collection methods; observation protocols; interview protocols; surveys

| | |
|---|---|
| Collecting Data | Data collection ethics; observations; interviews; surveys |
| Analyzing Data | Observation-data analysis; interview-data analysis; survey-data analysis |
| Interpreting Findings | Data triangulation; interpretive statements; over- and under-interpretation |
| Reporting Action Research Findings | Writing reports; potential audiences; disseminating reports; reporting ethics |

Course Assessments and Links to Course Outcomes

Throughout the course, the learner will be assessed and evaluated on the completion of the following assessments. Learning activities include large- and small-group discussions and assessments for a total of 1136 points.

| Modules | Topics of Modules | Points | Correlation With Course Outcomes |
|--------------|------------------------------------|-------------|-----------------------------------|
| Module 1: | Action Research Overview | 107 | 1, 2, 3 |
| Module 2: | The Action Research Cycle | 132 | 4, 5, 6, 7, 9, 10, 11, 12, 13, 14 |
| Module 3: | Developing Research Questions | 146 | 5, 6, 9, 15 |
| Module 4: | Planning Data Collection | 146 | 7, 8, 9, 10 |
| Module 5: | Collecting Data | 146 | 10, 11 |
| Module 6: | Analyzing Data | 108 | 11 |
| Module 7: | Interpreting Findings | 156 | 12 |
| Module 8: | Reporting Action Research Findings | 195 | 13, 14, 15 |
| Total | | 1136 | |

Criteria specific to each assessment will be explained in conjunction with the instructional activities.

Instructional Methodology

The instructional methodology of this course focuses on developing, enhancing, and improving the instructional expertise and pedagogical knowledge base of practicing educators. Strategies include presentation of new content through online readings, active construction of knowledge through practice and problem solving, collaborative group work, personal reflection, structured small-group or whole-class discussion, analysis of assigned reading, and the application of course content and skills to participant's individual grade level, subject area(s), and classroom.

Grading Scale

The course facilitator will post the grading scale.

Performance Learning Systems' Late Policy

There will be a 10% deduction of points per day for all posts and submitted assignments which are late. Replies posted after the due date will earn no points. In rare cases,

partially or poorly completed assignments may be resubmitted for partial credit at the discretion of the instructor. The following exceptions apply:

- If a participant is sick/hospitalized or has a death in the family, the timing of makeup work may be arranged with the course facilitator. No points will be deducted if the work is completed according to the agreement.
- If a participant is on vacation/traveling/etc., the participant must contact the course facilitator ahead of time to avoid a penalty. This type of absence may occur only once during a course. All posts should be submitted for the missed module before leaving; replies may be completed according to agreed-upon timing when the participant returns.
- If a participant has difficulty completing everything in a week, an extension can be granted if the participant contacts the facilitator during the week (not at the last minute).

Performance Learning Systems' Participant Drop Policy

- Participants are eligible to receive a refund if they attend class for one week or less. This means participants must withdraw by the end of Module 1 to receive a refund.
- Refunds of the balance of tuition paid will be given, minus the \$50 deposit.

Performance Learning Systems' Academic Integrity Policy

Performance Learning Systems expects absolute academic honesty and integrity from every course participant. The specific Academic Integrity and Honor Code policies of our partner colleges and universities are embraced and enforced by PLS instructors. The following are considered to be serious violations:

- Plagiarism: the use of another's ideas, data, or words without proper acknowledgment.
- Fabrication: the use of invented information or the falsification of research or other findings with the intent to deceive.
- Collusion: improper collaboration with another in preparing assignments or projects.
- Cheating: an act of deception by which a student misrepresents that he or she has mastered information on an academic exercise that he or she has not mastered.
- Academic Misconduct: tampering with grades, or taking part in obtaining or distributing any part of student work that is not his or her own.

Violation(s) or suspected violation(s) will be investigated and pursued according to specific college/university procedures.

Identity Authentication

The college/university, Performance Learning Systems (PLS), and students share a joint responsibility to ensure that each student's contribution in an online course activity comes from that student alone. For the student, this responsibility has two parts:

1. Students are responsible for positively ensuring that every contribution to an online course created with the students' computer account is made by the student alone. Contributions covered under this policy include: written assignments; quiz and exam submissions; discussion forum postings; live participation in text-based chat sessions, phone conferences, and videoconferences. If a student allows another person to write or make any kind of submission to an online activity in

2. Students are responsible for ensuring the integrity of their computer account security by following the actions required of them by the PLS Acceptable Use Policy. These actions include keeping passcodes private, updating passcodes when required by Performance Learning Systems, and reporting breaches of the security policy to the IT Helpdesk.

Course Evaluation

The evaluation of learner work will be based on the defined criteria for learner assessments. The criteria for learner assessments will be outlined for students prior to instructional activities and engagement with student learning targets (outcomes). Grading is based solely on the evaluation of student learning targets and defined criteria for learner assessments.

Formative assessment of learning outcomes is conducted throughout the course, using a variety of means that include the following: completion of assessments; constructive contributions to class discussions (whole-class as well as small-group); sharing of valuable, pertinent, and/or applicable ideas and experiences; and active participation in online interactions. It is expected that each participant will contribute to the academic quality of the course.

Summative assessment includes the completion of weekly learning activities and assignments for which the participant will need to synthesize class content, apply it to his or her own practice, and complete a plan for implementing the major components of content and skill acquired during the course.

Course Outcome Correlations With INTASC Standards for Teachers

| | Course Outcomes |
|--|---|
| <p>Standard 1: Subject Matter</p> <p>The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.</p> | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 |
| <p>Standard 2: Student Learning</p> <p>The teacher understands how children and youth learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.</p> | 1, 2, 3, 12, 13, 14 |
| <p>Standard 3: Diverse Learners</p> <p>The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.</p> | 12 |
| <p>Standard 4: Instructional Strategies</p> <p>The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.</p> | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 |
| <p>Standard 5: Learning Environment</p> <p>The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.</p> | 1, 2, 3, 4 |
| <p>Standard 6: Communication</p> <p>The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.</p> | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 |
| <p>Standard 7: Planning Instruction</p> <p>The teacher plans and manages instruction based upon knowledge of subject matter, students, the community, and curriculum goals.</p> | 7, 8, 9, 10, 11, 12, 13, 14 |
| <p>Standard 8: Assessment</p> <p>The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.</p> | 7, 8, 12, 13, 14 |
| <p>Standard 9: Reflection and Professional Development</p> <p>The teacher is a reflective practitioner who continually evaluates the effects of her/his choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.</p> | 11, 12, 13, 14, 15 |
| <p>Standard 10: Collaboration, Ethics, and Relationships</p> <p>The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being</p> | 11, 12, 13, 14 |

The Interstate New Teacher Assessment and the Support for Consortium (INTASC) standards were developed by the Council of the Chief State School Officers and member states. Copies may be downloaded from the Council's website at <http://www.ccsso.org>.

© Council of Chief State School Officers. (1992) Model standards for beginning teacher licensing, assessment, and development: A resource for state dialogue. Washington, DC: Author. <http://www.ccsso.org/content/pdfs/corestrd.pdf>.

Course Outcome Correlations With National Board for Professional Teaching (NBPTS) Propositions and Standards

| Proposition 1: Teachers are Committed to Students and Their Learning. | Course Outcomes |
|--|---|
| NBCTs are dedicated to making knowledge accessible to all students. They believe all students can learn. | 1, 3, 4, 12, 13, 14 |
| They treat students equitably. They recognize the individual differences that distinguish their students from one another and they take account for these differences in their practice. | 12, 13, 14 |
| NBCTs understand how students develop and learn. | 1, 2, 3, 12, 13, 14 |
| They respect the cultural and family differences students bring to their classroom. | 12, 13, 14 |
| They are concerned with their students' self-concept, their motivation and the effects of learning on peer relationships. | 3 |
| NBCTs are also concerned with the development of character and civic responsibility. | 3, 15 |
| | |
| Proposition 2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students. | |
| NBCTs have mastery over the subject(s) they teach. They have a deep understanding of the history, structure and real-world applications of the subject. | 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 |
| They have skill and experience in teaching it, and they are very familiar with the skills gaps and preconceptions students may bring to the subject. | 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 |
| They are able to use diverse instructional strategies to teach for understanding. | 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 |
| | |
| Proposition 3: Teachers are Responsible for Managing and Monitoring Student Learning. | |
| NBCTs deliver effective instruction. They move fluently through a range of instructional techniques, keeping students motivated, engaged and focused. | 2, 3, 5, 6, 9, 10 |
| They know how to engage students to ensure a disciplined learning environment, and how to organize instruction to meet instructional goals. | 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 |
| NBCTs know how to assess the progress of individual students as well as the class as a whole. | 7, 9, 12, 13, 14 |
| They use multiple methods for measuring student growth and understanding, and they can clearly explain student performance to parents. | 1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 |
| | |
| Proposition 4: Teachers Think Systematically about Their Practice and Learn from Experience. | |
| NBCTs model what it means to be an educated person – they read, they question, they create and they are willing to try new things. | 1, 2, 3, 6, 8, 12, 13 |
| They are familiar with learning theories and instructional strategies and stay abreast of current issues in American education. | 2, 3, 8, 11 |
| They critically examine their practice on a regular basis to deepen knowledge, expand their repertoire of skills, and incorporate new findings into their practice. | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 |

Proposition 5: Teachers are Members of Learning Communities.

| | |
|--|--------------------------|
| NBCTs collaborate with others to improve student learning. | 8, 10, 12, 13, 14 |
| They are leaders and actively know how to seek and build partnerships with community groups and businesses. | 8, 10, 13 |
| They work with other professionals on instructional policy, curriculum development and staff development. | 12, 13, 14 |
| They can evaluate school progress and the allocation of resources in order to meet state and local education objectives. | 10, 11, 13 |
| They know how to work collaboratively with parents to engage them productively in the work of the school. | 12, 13, 14 |

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Bibliography

- Altrichter, H. (2005). The role of the professional community in action research. *Educational Action Research, 13*(1), 11–16.
- Berliner, D. (2002). Educational research: The hardest science of all. *Educational Researcher, 31*(8), 18–20.
- Bridges, D. (2003). A philosopher in the classroom. *Educational Action Research, 11*(2), 181–196.
- Brown, H. (2004). Action research in the classroom: A process that feeds the spirit of the adolescent. *International Journal of Qualitative Methods, (3)*1. Article 3. Retrieved September 27, 2007, from http://www.ualberta.ca/~iiqm/backissues/3_1/html/brown.html
- Brydon-Miller, M., Greenwood, D., & Maguire, P. (2003). Why action research? *Action Research, 1*(1), 9–18.
- Burnafor, G. E., Fischer, J., & Hobson, D. (2001). *Teachers doing research: The power of action through inquiry*. Mahwah, NJ: Erlbaum.
- Calhoun, E. F. (2002). Action research for school improvement. *Educational Leadership, 59*(6), 18–24.
- Chandler, D., & Torbert, B. (2003). Transforming inquiry and action. *Action Research, 1*(2), 133–152.
- Chant, R. H., Heafner, T. L., & Bennett, K. R. (2004). Connecting personal theorizing and action research in preservice teacher development. *Teacher Education Quarterly, 31*(3), 25–42.
- Christenson, M., Slutsky, R., Bendau, S., Covert, J., Dyer, J., Risko, G., et al. (2002). The rocky road of teachers becoming action researchers. *Teaching and Teacher Education, 18*(3), 259–272.
- Dana, N. F., & Yendol-Silva, D. (2003). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry*. Thousand Oaks, CA: Corwin.
- Davis, B., & Sumara, D. (2005). Complexity science and educational action research: The pragmatics of transformation. *Educational Action Research, 13*(3), 453–466.
- Gravett, S. (2004). Action research and transformative learning in teaching development. *Educational Action Research, 12*(2), 259–272.
- Greenwood, D. (2002). Action research: Unfulfilled promises and unmet challenges. *Concepts and Transformation, 7*(2), 117–139.
- Haggarty, L., & Postlethwaite, K. (2003). Action research: A strategy for teacher change and social development? *Oxford Review of Education, 29*(4), 423–448.
- Kemmis, S., Weeks, P., & Atweh, B. (1998). *Action research in practice: Partnership for social justice in education*. London: Routledge.
- Koch, J., & Burghardt, M. D. (2002). Design technology in the elementary school: A study of teacher action research. *Journal of Technology Education, 13*(2), 21–33.

- Marsh, M. M., & Vagliardo, M. (2002). The commingling of teacher researcher identities: A mediated approach to teaching action research. *Educational Action Research, 10*(2), 275–290.
- McNiff, J., Lomax, P., & Whitehead, J. (2003). *You and your action research project*. New York: RoutledgeFalmer.
- Merrill, C. (2004). Action research and technology education. *The Technology Teacher, 63*(8), 6–8.
- Mertler, C. A. (2005). *Action research: Teachers as researchers in the classroom*. Thousand Oaks, CA: Sage.
- Miskovic, M., & Hoop, K. (2006). Action research meets critical pedagogy: Theory, practice, and reflection. *Qualitative Inquiry, 12*(2), 269–291.
- Pike, M. A. (2001). Action research for English teaching: Ideology, pedagogy and personal growth. *Educational Action Research, 10*(1), 27–44.
- Rossmann, G. B., & Rallis, S. F. (2002). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, CA: Sage.
- Sankaran, S. (2005). Notes from the field: Action research conversations. *Action Research, 3*(4), 341–352.
- Schmuck, R. A. (2006). *Practical action research for change*. Thousand Oaks, CA: Corwin.
- Stringer, E. T. (2004). *Action research in education*. Upper Saddle River, NJ: Pearson.
- Winter, R. (2002). Truth or fiction: Problems of validity and authenticity in narratives of action research. *Educational Action Research, 10*(1), 143–154.

