Action Research

Gathering evidence for change

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“Teacher researchers studying their own practices... are committed to taking action and effecting positive educational change... based on their findings” (Mills, 2018)
Action Research: Personal Motivation

- AASL’s Research on Causality
  - Every Student will Succeed Act
    - Causality relationship
- MSLA Equity Research
- School Librarian Equity Research Meeting
Action Research: Personal Motivation

What Now?
How Can I Make a Difference?
School Library Traditional Research

- Impact Studies: Lead by Academic Institutions
- Joint Efforts: School Librarians & Academic Institutions
- Associations & Organization Lead Research

Generate Threads of Understanding
Research in Education

But... what about research from the field?
Reluctance

Why are educators not researching?

- **Tradition & the Culture of Education**
  - Culture of research not familiar

- **“Limitations in Awareness, Beliefs, Skills & Knowledge”**
  - Research seems out of range
  - Doubt of technical knowledge

- **Funding**
  - Time, pay and resources

- **Demotivators**
  - Fear
  - Feeling undervalued

(Hancock, 1997; Yen et al, 2017)
Yet... Education Data Will

- Supports problem solving processes
- Informs on our practice
- Creates opportunity for developing solutions
Action Research: History

Origins

- Kurt Lewin 1946 “Action Research” Term First Used
- Bruce Buckingham 1926 published Research for Teachers.

(Tripp, 2005)
“Action Research is a form of action inquiry that employs recognised research techniques to inform the action taken to improve practice”

(Tripp, 2005)
Action Research: Fitting In

- Experienced
- Response Driven
- Individual
- Natural to Education
- Unexamined

- Deliberated
- Strategy Driven
- Interventionist
- Immediate Change
- Location Specific

Routine Practice

Action Research

Traditional Education Research

- Argued
- Method Driven
- Theorized
- Experimental
- Researcher is observer
- Generalized

Putman & Rock, 2018; Tripp, 2005
Action Research: Legitimate or Not

The Argument

- **Con**
  - Research is not grounded in theory
  - Not conducted by academic expert
  - Findings not published peer-reviewed

- **Pro**
  - Considered atheoretical, drawing upon theory as needed
  - Findings relevant to existing problems
  - Data is persuasive and authoritative
  - Findings are documented, assessed & shared locally
Action Research: When To Use

- Solve an educational problem
  - Developing immediate solutions
- Reflect upon individual practice
- Generate collaborative opportunities
  - Assess a school or district change
  - Justify a school or district change
Conducting Action Research

What do I do?
Action Research: Recursive Process

Plan an Improvement
Act - Implement Plan
Observe - Monitor
Reflect - Describe
Evaluate
Repeat

Mills, 2018; Tripp, 2005
**Action Research: Ethics**

- Assure a Trusting Environment
- Do No Harm; Physical, Mental or Social
- IRB process- Traditional Research
- Action Research
  - Can use IRB but... not readily available
  - **Self-Check**
    - Duty to Disclose Methods
    - Duty to Seek Consent
    - Duty to Keep Confidential
Action Research: Action Plan

Begin With A Plan

Summarize Action Research Thoughts
Action Research: Action Plan

Identify Problem
Guiding Research Questions
Background Knowledge
Engage in Data
Analyze Data
Reflect on Results
Develop Action Plan

Action Plan
Putman & Rock
Action Research: Mills’ Action Plan

Action Plan

- Mills

Determine Focus
- Variables
- New Method
Define Research Questions
- Membership
- Permissions Needed
Develop a Timeline
List Resources
Data Collection Methods
Action Research: The Basic Plan

Identify Problem
Background Information
Research Questions
Method, Materials, Participants, & Data Collection
Analyzing Results
Sharing
Action Research: Identify Problem

To Better Identify the Problem

- **Select a Topic**
  - Consider Experiences

- **Statement of the Problem**
  - Identify Who, What, and How

- **Research Question**
  - Open Ended & Clear
  - Based on Librarian or Educator Experiences
  - Professionally Challenging

- **Importance & Educational Appeal**

- **Personal Connection**
Action Research: In Practice

Topic: Lack of complex search skills among 11th & 12th grade students.
Minnechaug Regional High School 11th & 12th grade students display limited complex search skills when conducting research. The skills developed in 9th and 10th grade are not transforming into complex research skills. Students in 11th & 12th grades will need to demonstrate understanding of complex search techniques paired with conceptual research themes.
How will students further trained in understanding complex database and search engine techniques affect peer comprehension of subject matter concepts?
Action Research: In Practice

Importance & Educational Appeal

- Research systematic, tasks.
- Collaborative Instruction 9th & 10th grade
- Pairing of conceptual critical thinking between:
  - Researching
  - Themes
Action Research: In Practice

Personal Connection

I chose this area of research because...

- Less focused thesis statements
- Limited conceptual thinking
- Low upper grade educator & librarian collaboration
Try-It

Topic

Statement of the Problem
Identify Who, What, and How

Research Question

Importance & Educational Appeal

Personal Connection
Action Research: Background

Why Build Background?

● Create a foundation for understanding the...
  ○ Problem
  ○ Phenomenon

● Reviewing past research
  ○ Identifies previously tried ideas
  ○ Generates new ideas to implement
Action Research: Background

What type of information...

- Practitioner Research & Articles
  - What are educators actually doing?
  - What are educators researching?
- Traditional Research
  - Generalized concepts
- Local Understandings
  - What can my peers report? Interview
Action Research: In Practice

Build Background

Literature about...
- Student advisory groups
- Student library helpers
- Building critical thinking
- Understanding concepts

Interviewed Teachers about...
- 11th & 12th grade research skills
- Inclusion of research supports
Action Research: Research Questions

- Provide Focus
- Guide & Shape the Research
- Supports the Data Collection Plan

Mills, 2018
Action Research: In Practice

1. How will students further trained in understanding complex database and search engine techniques affect peer comprehension of subject matter concepts?
   a. How will educators utilize students who have been trained in understanding complex database and search engine techniques?
   b. Will student modeling of complex searches have an effect on peer understanding of subject matter concepts?
Try-It

● Think Back...
  ○ In “Identify the Problem” does the original research question fully represent the problem?

● If Not...
  ○ Create additional narrow questions that consider how data is collected.
Action Research: Methods, Materials, Participants, & Data Collection

- **Methods**
  - Qualitative or Quantitative (non scientific)
  - State how the Planned Improvement will be implemented? (Hint- RQ)
  - Develop Timeline

- **Materials**
  - List Necessary Materials

- **Participants**
  - Determine Participants
  - Complete all Ethical Protections

- **Data Collection & Source**
  - State the method of collecting data (Hint- RQ & Methods)
  - Test of Trustworthiness (Guba, 1981)
    - Four step examination to improve the quality of data
      - Credibility, Transferability, Dependability, & Confirmability
Action Research: In Practice

Methods
- Library Advisory student training
- 11th & 12 grade teachers awareness of training
- September- May

Materials
- After school training/ Certification
- Computer lab

Participants
- MRHS 11th grade Library Advisory students
- Permissions to join library advisory

Data Collection & Source
- Teacher Assessed Student Work
- Teacher Interview for Anecdotal Experiences
- Credibility, Transferability, Dependability, & Confirmability
Try-It

Methods, Materials, Participants, & Data Collection
Action Research: Analyzing Results

Step 1: Read the Results

Step 2: Develop Analyzation System
- Identifying Emerging Themes
- Coding
- Conceptual Mapping
- Determine Cause & Effect

Step 3: Organize the Analysis
- Tables, Charts & Graphs
Action Research: In Practice

**Analyzing Results**

- Identify teacher comments indicating the learning of concepts within student work.
- Review teacher interviews for emerging themes that indicate student understanding of concepts.
- Review teacher interviews for how library advisory students supported searching.
- Compare to determine if library advisory students may have influenced peer understanding of concepts.
Try-It

Analyzing Results

How would you analyze your results?
Action Research: Sharing

● Considerations
  ○ Did the research benefit children?
  ○ Do the results lead to change or further research?
  ○ Can the results lead to cultural change?

● Delivery
  ○ District or school opportunities
  ○ Professional Development Presentation
  ○ Blog- with consideration for IRB

● Take Action
Action Research: In Practice

Sharing

- Discussion at Leadership Meeting
- Present at Department Meetings
- Speak to Individual Teachers
- Determine Action
Try-It

Sharing

How would you share?
References


Thank you