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AUTHOR Kallenbach, Silja; Viens, Julie

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#### **ABSTRACT**

The Adult Multiple Intelligences Study was the first systematic effort related to multiple intelligences (MI) theory in adult literacy education. The study's findings regarding MI theory served as the foundation for a study of MI theory's implications for adult literacy practice, policy, and research. The study was conducted across 10 different adult literacy contexts with different teacher and learner populations. Data were collected through on-site observations, qualitative interviews, and teacher journals. Key findings were as follows: (1) MI efforts can result in high levels of adult learner engagement; (2) choice-based activities increased students' confidence about learning; and (3) connecting MI reflections activities to broader learning goals is important. The following were among the study's implications: (1) teachers must understand MI theory, be able to access it, and be willing to implement diverse learning activities based on it; (2) programs must express institutional support for teachers to engage in and sustain MI-based practices; (3) to reflect MI theory, a policy and accountability system would move beyond current federal funding criteria; (4) the outcome of improved self-efficacy or metacognitive skills could be considered a secondary criterion of an accountability system; and (5) the impact of MI-based interventions on students' self-efficacy and teacher change merit further study. (MN)



# Open to Interpretation: Multiple Intelligences Theory in Adult Literacy Education

# **NCSALL** Research Brief

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# Open to Interpretation: Multiple Intelligences Theory in Adult Literacy Education A NCSALL Research Brief

Silja Kallenbach • Julie Viens

ultiple Intelligences (MI) theory presents a concept of intelligence, not specific educational approaches or activities. Yet it offers promising opportunities for adult literacy instruction and assessment, as this study involving teachers as research partners demonstrates.

The Adult Multiple Intelligences Study was the first systematic effort related to multiple intelligences (MI) theory in adult literacy education. Introduced by Dr. Howard Gardner, this theory proposes that there are at least eight intelligences (linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, naturalist, interpersonal, and intrapersonal); intelligences operate in combination; and every person has a profile of intelligences that is manifested as different areas of strength.

We hypothesized that MI theory would be useful in responding to four well-documented needs and conditions in adult literacy education: the high incidence of learning difficulty and low selfefficacy among adult learners; need to improve learner retention rates; and limited professional development opportunities for adult literacy educators.

Prompted by positive experiences with MI theory at the pre-K-12 level and the lack of MI research, practices, and resources in adult literacy education, we considered the following: How can MI theory support instruction and assessment in adult basic education (ABE), adult secondary education (ASE), and English for speakers of other languages (ESOL) programs?

#### Findings from a Cross-Site Study

We incorporated two interwoven qualitative research projects focused on applying MI theory in practice. The focus here is on the second project, a study across 10 different adult literacy contexts with different teacher and learner populations, using such methods as on-site observations, qualitative interviews, and teacher journals.

Data analysis revealed two broad categories of teachers' understanding and application of MI theory, which we termed MI-Inspired Instruction and MI Reflections. MI-Inspired Instruction focused on classroom practices and materials, whereas the MI Reflections focused on using MI to engage students in reflecting about their own strengths, weaknesses, interests, and preferences.

The findings suggested that the teachers' MI efforts paid off in high levels of student engagement. In particular, choice-based activities—prominent in the study settings—allowed students to identify, use, and demonstrate their particular areas of strength, increasing their confidence about taking greater control of their learning and encouraging teachers to allow this.

#### **Key Findings**

- MI efforts can result in high levels of adult learner engagement.
- Choice-based activities increased students' confidence about learning.
- Connecting MI Reflections activities to broader learning goals is important.

#### Implications for Practice

- There is now a foundation of MI practice in adult literacy education that practitioners can examine and apply.
- Teachers need an understanding of MI theory as well as the access and willingness to implement diverse learning activities.
- Programs must express institutional support for teachers to engage in and sustain MI-based practices.

#### Implications for Policy

- To reflect MI theory, a policy and accountability system would move beyond current federal criteria.
- The outcome of improved self-efficacy or metacognitive skills could be considered a secondary criterion of an accountability system.

#### Implications for Research

- Additional research related to learning gains and other Mlbased practice outcomes is needed.
- The impact of specific MI-based interventions, how MI-inspired practices improve students' self-efficacy, and teacher change merit further study.



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The study affirmed the value of student reflection in building self-confidence and learning skills. However, it also strongly suggested that developing adult literacy learners' associated metacognitive skills—their ability to think about and assess their learning processes and preferences—requires active work by both teachers and students.

The range of the teachers' experiences with MI Reflections and the differences and similarities among their experiences indicated the importance of teachers making explicit connections between the purposes of MI Reflections activities and students' broader learning goals. At the same time, the study also suggested that no matter how carefully planned, relevant, and wonderful the activities, what will work with a particular group of students often cannot be predicted.

#### **Implications for Practice**

The study illustrated how MI theory can be used well and substantively in adult literacy education, creating a foundation of MI practice in adult literacy that can serve other practitioners in the field. However, individual teachers need an understanding of the theory as well as the willingness to implement diverse learning activities. A curriculum that offers students at the beginning literacy levels multiple pathways to learning a particular skill, concept, or subject also requires educators to develop students' metacognitive skills. At the same time, teachers need to anticipate that not all students will embrace MI-inspired lessons or reflections. In addition, teachers need to be willing to get to know their students as adults with talents, interests, and life experiences as well as academic strengths and weaknesses, all of which can be considered when planning lessons.

The study also demonstrated that teachers need their literacy program's support to engage in and sustain MI-based practices. Programs can express support by ensuring that teachers have adequate paid preparation time, access to staff development, permission to purchase a wide variety of supplies, and the ability to make the learning environment conducive to different activities and groupings.

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#### **Implications for Policy**

A policy and accountability system that speaks to what was learned through the AMI Study would capture a broader range of goals and more multidimensional ways to gauge student progress than found in the federal government's National Reporting System criteria. For example, improvement in students' sense of self-efficacy or metacognitive skills could be considered legitimate secondary outcomes of adult literacy education, joining such criteria as registering to vote, reading to one's children, and getting off welfare.

#### **Implications for Research**

More definitive research is needed to investigate learning gains and other impacts of MI-based practice. The Adult Multiple Intelligences Study sets the stage for this research. Another logical outgrowth would be studies examining the impact of specific MI-based interventions. How MI-inspired practices improve students' self-efficacy is another area that merits more investigation. Another potentially fruitful area of study is teacher change. It also would be instructive to do a follow-up study with the same teachers to ascertain the extent to which they made lasting changes in their teaching practice as a result of their participation in the Adult Multiple Intelligences Study.

Silja Kallenbach is the director of the New England Literacy Resource Center at World Education, Inc. She also served as a co-researcher on the national Equipped for the Future (EFF) lifelong learning content standards project. Julie Viens is a Harvard Project Zero researcher and a consultant to schools and programs adopting multiple intelligences theory and practices.

For a full report on the Adult Multiple Intelligences Study or to learn about other NCSALL efforts connecting research and practice to strengthen adult literacy education programs, visit http://ncsall.gse.harvard.edu. Also visit the Adult Multiple Intelligences Study's Web site at http://pzweb.harvard.edu/ami.

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