

RESEARCH AND PRACTICE IN VIRTUAL SCHOOLING: A REVIEW OF LITERATURE

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Virtual Schooling Literature

A fundamental challenge for program developers, managers, and instructors is locating **guidance from successful practice and from research**.

The current literature includes **practitioner reports and experimental and quasi-experimental studies**, both published and unpublished.

Many previous reviews reported on **general effectiveness because of insufficient data** to analyze specific success factors.

Virtual Schooling Literature

The literature **dates to the mid-1990s** and builds upon a century of research and practice from K-12 distance education.

While K-12 online learning programs have evolved and grown over the past decade, the amount of published research on virtual schooling practice and policy is **limited**.

Based on the first ten years of virtual schooling data, reviews can move beyond **endorsements** of virtual schooling.

Our Purpose and Approach

We summarized and integrated the findings of **all known Internet-available reports in K-12 online learning** over its full history

We examined **226 reports published online** in 1997-2008 using qualitative synthesis.

This study integrates **themes and insights** from individual reports to establish an understanding of the entire body of literature.

Document Coding

The **exploratory content analysis** interpreted the meaning and message of each document and summarized outcomes thematically (Merriam, 1998).

The **categories** revealed patterns of an emerging and maturing field of educational study. From the categories, an inductive process was applied for drawing **inferences about the body of literature and about practice in the field** (Merriam, 1998).

Document Coding

The categories were drawn from current emphases and standards within the field:

- the **models** of virtual schooling (seven categories)
- the **roles of professionals** in virtual schools (seven categories)
- **benefits and challenges** of virtual schooling (ten categories)
- **NACOL standards** for virtual school courses (six categories)
- **NACOL standards** for virtual school teaching (thirteen categories)

Document Sample

From an initial sample of over 500 sources, 226 documents were found to meet the inclusion criteria:

- relating directly to K-12 online learning
- openly Internet-accessible

The documents included refereed journals articles and conference papers, books and chapters, evaluation reports, dissertations, and online publications.

Each document was coded by two of the three coders. There was 83% inter-coder agreement.

Document Sample

The pace of publication of all document types:

Year	Number of Documents
1997	8
1998	12
1999	14
2000	14
2001	20
2002	25
2003	18
2004	28
2005	32
2006	28
2007	24

Results: Virtual School Types

Type of Virtual School	Percent of Literature
Statewide	53
University	15
Consortium, multi-district	38
Single-district, LEA	32
Charter	26
Private	13
For-profit provider	15
Other	7

Based on Clark (2001) and Watson (2004)

Results: Professional Roles

Role	Percent of Literature
Teacher	83
Designer	33
Site facilitator	34
Administrator	54
Guidance counselor	15
Technology coordinator	20
Library media specialist	6

Based on Professional Development for Virtual Schooling and Online Learning, NACOL.org

Results: Benefits and Challenges

Benefit or Challenge	Percent of Literature
Motivation	35
Expanding educational access	60
High quality learning opportunity	45
Improving student outcomes and skills	38
Educational choice	33
Administrative efficiency	22
Start-up costs	37
Access issues	41
Approval/accreditation	22
Student readiness/retention	27

Based on Barbour, 2007

Results: Online Course Standards

Online Course Standard Area	Percent of Literature
Content	53
Design	43
Assessment	52
Technology	78
21 st century skills	18
Management	33

Based on National Standards for Quality Online Courses . NACOL.org

Results: Teaching Standards

Online Teaching Standard	Percent of Literature
Teaching A-Credentials	37
Teaching B-Tech skills	20
Teaching C-Strategies-active	43
Teaching D-Leadership, feedback	49
Teaching E-Legal, ethical, safety	8
Teaching F-Experiential OLL	5
Teaching G-Special needs	36
Teaching H-OL assessment	27
Teaching I-Goals & standards	42
Teaching J-Data in instruction	14
Teaching K-Frequent assessment	7
Teaching L-Collaborate w/colleagues	17
Teaching M-Media & materials for education	30

Based on *National Standards for Quality Online Teaching*, NACOL.org

Recommendations for Research

1. research on effective online teaching practices
2. research on success factors for online learning and remediation
3. research on effective K-12 learning communities
4. research that examines the quality of student learning experiences in virtual school environments, especially those of lower performing students

Implications for Schools

- Partner with researchers and evaluators to answer your questions
- Share your results in a written archive, in forms of quantitative or qualitative reports
- Seek funding for sponsored research
- Join with other schools in a study across multiple settings

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