

How are virtual schools calculating course completion rates?

Abigail Hawkins
Brigham Young University

Dr. Michael K. Barbour
Wayne State University

Introduction

There has been a rapid proliferation of virtual schools throughout the United States. One challenge of such rapid growth has been adopting common metrics across virtual schools to measure quality. Currently, no common metrics exist to calculate course completion rates (Pape, Revenagh, Watson, and Wicks 2006; Smith, Clark, and Blomeyer 2005; Watson and Ryan 2006). Unfortunately completion rates are a key indicator commonly used to measure the quality of virtual schools (Blomeyer and Dawson 2005). The absence of a common metric makes it difficult to draw comparisons on student retention and attrition among virtual schools.

Policies that may affect completion rates

Trial period policy: Period when students can withdraw from a course with no penalty and not be counted as officially being enrolled (Watson et al., 2008).

Completion definition policy: Determination of students who are officially counted as successfully completing a course. Some schools define a student as completing a course if they master the material, others if they pass the course with a 60% or better, and others if they simply remain in the course.

Research Questions

1. What are the trial period policies for US virtual schools?
 - a. How much variability exists across different types of virtual schools and regions of the country?
2. How do US virtual schools define course completions?
 - a. How much variability exists across different types of virtual schools and regions of the country?

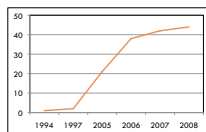


Figure 1. States with Significant K-12 Online Programs

Methods

- Surveyed 159 schools taken from NACOL's 2007 Online Learning Clearinghouse List and state-led schools listed in Watson's (2007) *Keeping Pace with K12 Online Learning*.
- Emailed three-question survey directly to principal, director, or registrar when possible.
- Made 4 contact attempts (2 by email, fax, telephone) to increase response rates.
- Sampled only K-12 virtual schools that were state approved regionally accredited.

Results

Of the 159 sampled, 86 schools responded to the survey, a 54.1% response rate varying by school type and region.

Percentage of schools sampled & respondents

Characteristics	% of Sample	% of Respondents
School Type		
Cyber Charter	21.1	18.6
For Profit	5.6	1.2
Multi-district / Consortium	6.8	8.1
Private	13.0	14.0
Single-district	30.4	30.2
State-led	14.9	18.6
University-led	6.8	9.3
Total Percentage	100%	100%
Region		
Central States	25.5	26.7
Northeastern States	11.2	9.3
Southeastern States	20.5	22.1
Western States	41.6	41.9
Total Percentage	100%	100%

Prevalence of trial periods

- Majority of schools sampled had trial periods (59 out of 86).
- All but 1 state-led school had trial period.
- Cyber charter and private schools were evenly split.
- Northeastern states least likely to have trial periods (only 28.6% compared to 70% Western and 83.3% Southeastern).

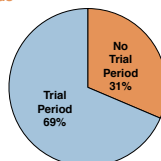


Figure 2. Percent of schools with and without a trial period.

Length of trial periods

- Trial period lengths ranged from 1 day to 185 days.
- Mean length was 19.61, when two extreme outliers were excluded.
- 2 and 4 week trial periods were the most common, accounting for over 50% of trial period lengths. See Figure 3.
- One instance where an event, the submission of the first assignment, marked the end of a trial period.
- No significant difference between trial period length by school type or geographic location according to one-way ANOVA test.

Trial period length by days (n = 57)

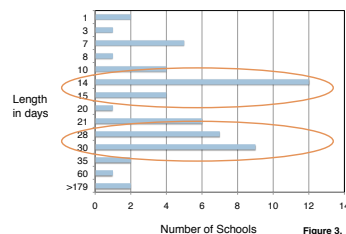


Figure 3.

Course completion definitions

All but two of the 86 schools provided qualitative definitions of a completion. There was wide variation ranging from "remaining in the course regardless of the grade" to passing the course with an A- or better. Responses fell into three main categories: (1) completion of the course within the allotted time frame regardless of the grade received, (2) completion of the course within an allotted time frame with a passing grade, and (3) deferring judgment to the brick and mortar school the student physically attends. Chi Square Test for Independence ($p=.05$) indicated no significant relationships between completion definitions and school type nor geographical location.

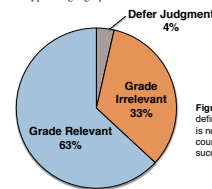


Figure 4. Course completion definitions where grade is or is not a determining factor in counting students as successful completers.

Examples of variation where grade is relevant

Definition	n
Passing course	37
Passing course and final	2
Completing four quarters with 60% or better	2
Passing with D/64% or better	1
Passing with C-/70% or better	6
Passing with B-/80% or better	4
Passing with A-/90% or better	1
Total	53

Conclusions

There was a significant variation in trial period length and course completion definitions. We found that trial periods were a fairly common practice among virtual schools and varied in length. We also found that the majority of schools defined a successful course completion as passing the course, though there was wide variation in what percentage constituted a "passing grade." This documented variability strengthens the call to standardize course completion metrics (Pape et al., 2006; Smith et al., 2005; Watson et al., 2007).

The implications of this study are a need greater transparency and consistency in policies to facilitate meaningful comparisons of retention rates. Though schools can have their internal policies for calculating course completions, for statistical and reporting purposes, all virtual schools should be required to start counting students at the same time and in the same manner. Ideally, when and how students are counted ought to be similar to how brick and mortar schools calculate course completions, thus allowing for meaningful comparisons of retention rates among virtual schools and brick and mortar schools.

Results from this study also provide a scope of policies currently in practice that can aid policymakers' efforts to create common metrics among virtual schools.

Literature cited

- Blomeyer, R. L., and M. Dawson. 2005. Policy context of virtual schools. In *Virtual Schools: Planning for Success*, eds. Z. L. Borgs and T. Clark, 61-76. New York: Teachers College Press.
- Pape, L., M. Revenagh, J. Watson, and M. Wicks. 2006. Measuring outcomes in K-12 online education programs: The need for common metrics. *Distance Learning* 3 (3): 51-59.
- Smith, R., T. Clark, and R. L. Blomeyer. 2005. A synthesis of new research on K-12 online learning. Naperville, IL: Learning Point Associates.
- Watson, J. F., and J. Ryan. 2006. Keeping pace with k-12 online learning: A review of state-level policy and practice. Vienna, VA: North American Council for Online Learning. Available online at http://www.wkpl12.com/downloads/KeepingPace_2006.pdf
- Watson, J. F., and J. Ryan. 2007. Keeping pace with k-12 online learning: A review of state-level policy and practice. Vienna, VA: North American Council for Online Learning. Available online at http://www.wkpl12.com/downloads/KeepingPace_2007.pdf

For further information

Please contact Abby Hawkins at abbyhawkins@gmail.com or Dr. Michael Barbour at mbarbour@wayne.edu.

The entirety and more detailed discussion of the literature, methods, findings, and implications will be printed in the AECT 2009 Conference Proceedings.

