Impact van OER op het onderwijs: een internationale literatuurschouw

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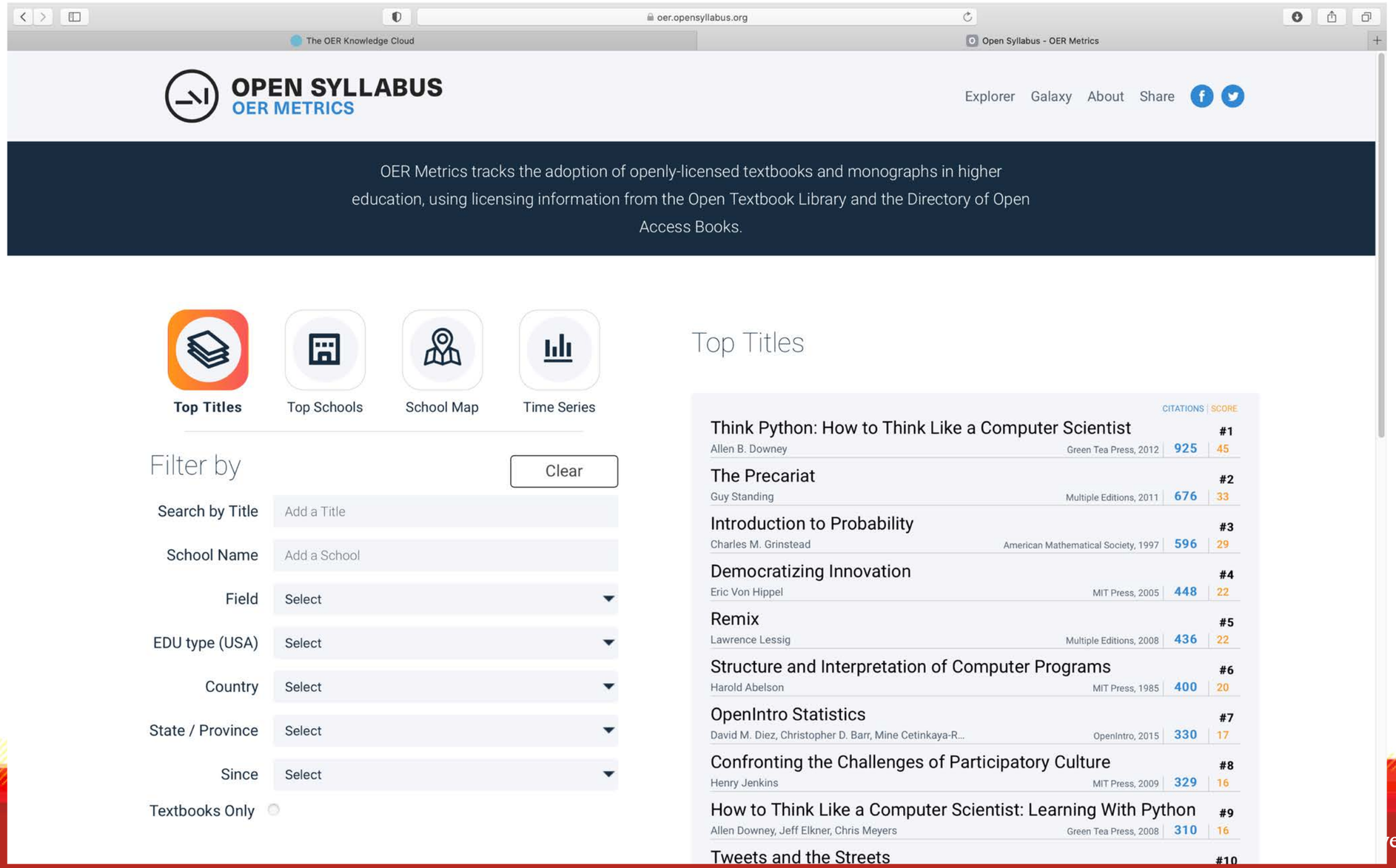
OER aan de Radboud Universiteit

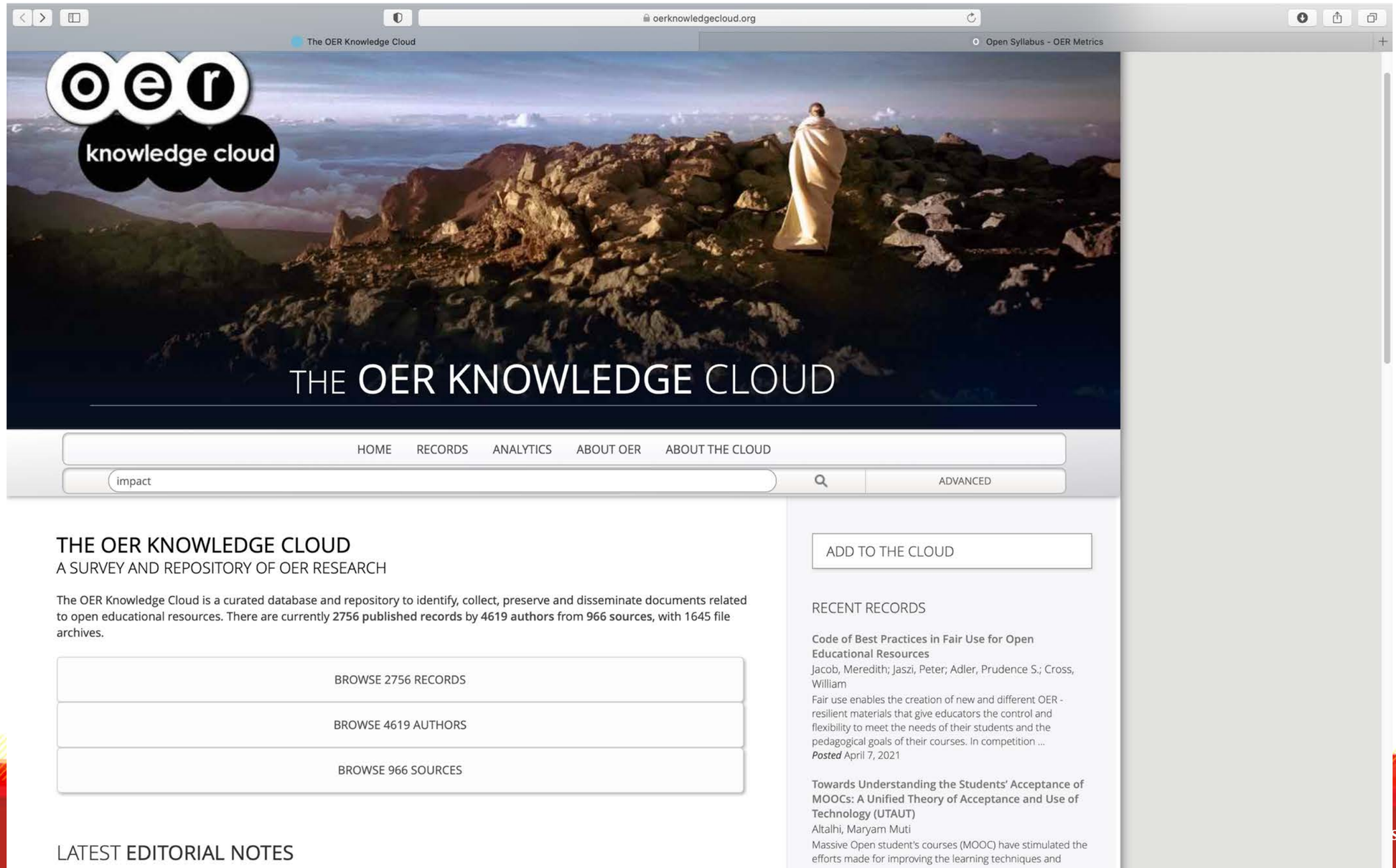
- Nog in opstartfase
- Radboudumc al verder in adoptie van OER (Nicolai van der Woert)
- Informatievaardigheden (Monique Schoutsen)

- Geen beleid tav OER
- Kan wetenschappelijke literatuur bijdragen aan adoptie OER?

Hoe meet je impact?



Waar vind je literatuur over OER?



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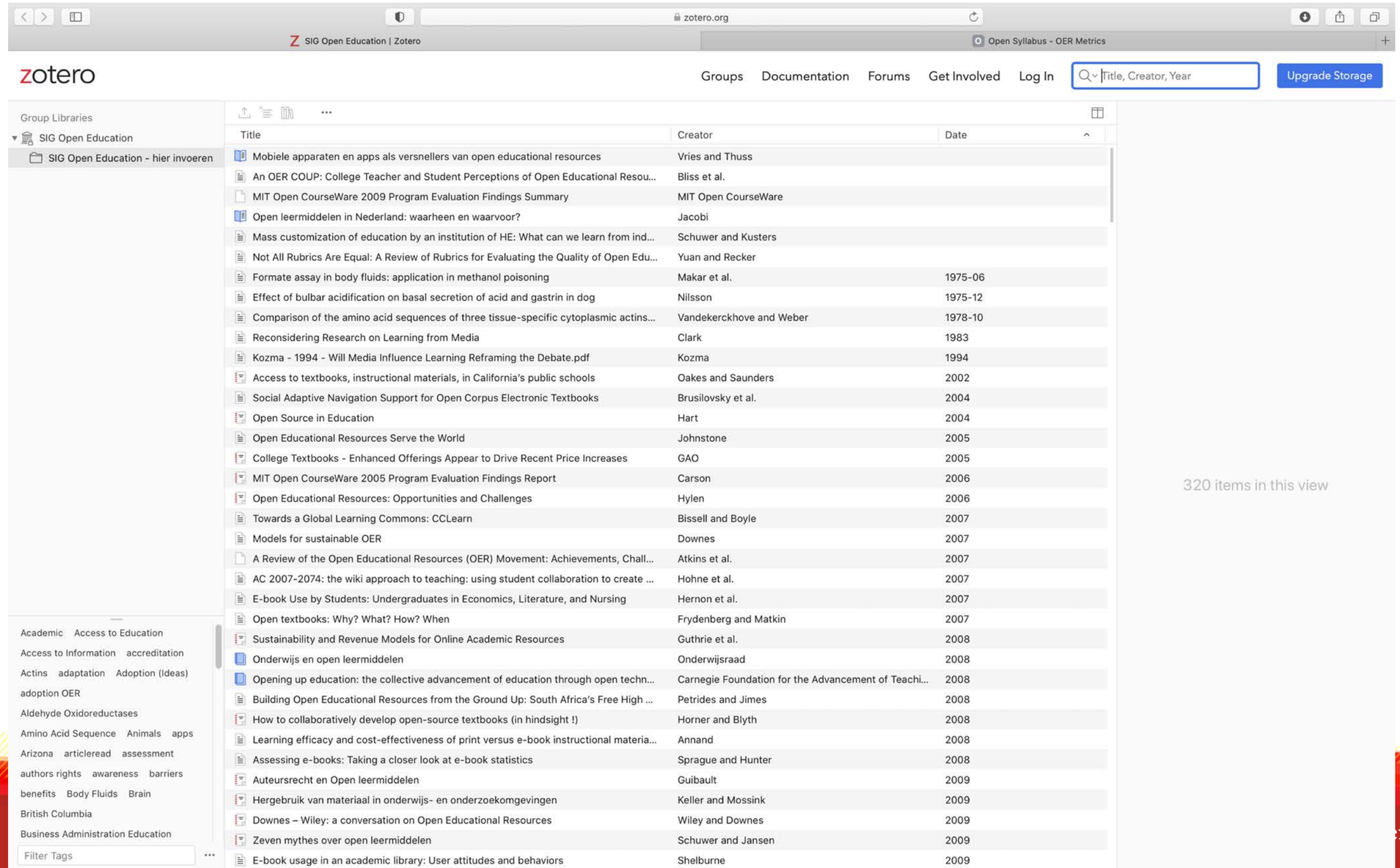
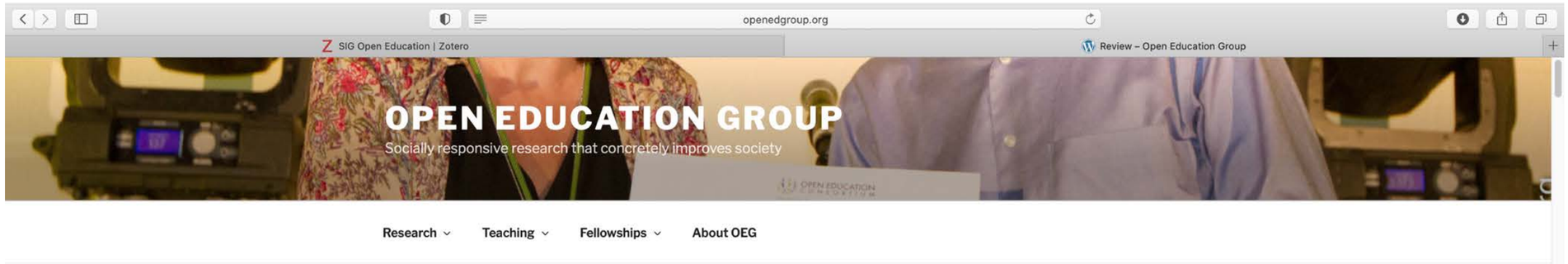


Waar vind je literatuur over OER?



The Review Project

Led by John Hilton III, with additional contributions from Stacie Mason and Virginia Clinton-Lisell

This review provides a summary of all known empirical research on the impacts of OER adoption (including our own). The version below will be periodically updated with new articles as we become aware of them. If you know of an empirical research study on the impacts of OER adoption that is not included in this review, please leave a comment below. ***An in-depth article focusing on empirical research relating to perceptions and efficacy at the college level was published by the journal*** **Educational Technology Research and Development** ***in August of 2019. Please access the open-access version of this article or a summary video based on an earlier version.*** *You can also access overview slides that summarize this research, although the overall impact numbers have significantly increased since the slides were created.*

Introduction

Open Educational Resources are teaching and learning materials that provide users with (1) free and unfettered access and (2) 5R legal permissions to retain, reuse, revise, remix, and redistribute them, that can be used to replace traditional expensive learning resources (such as textbooks). A recent nationally representative survey of 2,144 faculty members in the United States found that "most faculty remain unaware of OER" (Babson Survey, 2014).

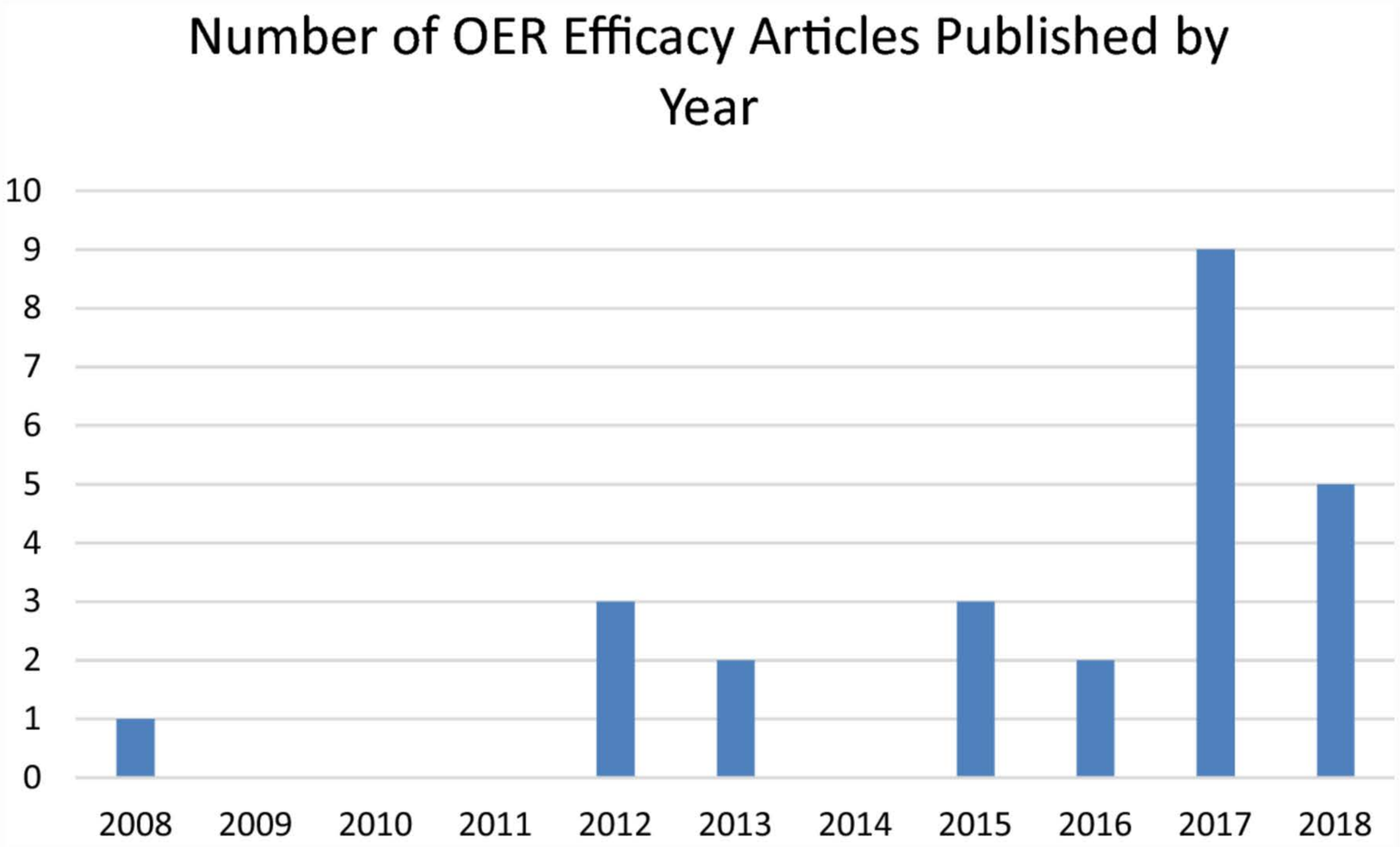
This same survey found that college professors rate "proven efficacy" and "trusted quality" as the two most important criteria for selecting teaching resources. Thus we believe that for OER to gain traction it is important to gather empirical research demonstrating its efficacy and quality.

To this end, we have gathered articles that focus on the efficacy of OER or teacher/student perceptions of such resources in actual practice. We have limited our studies to those in which OER

Waar vind je literatuur over OER?

Fig. 1

From: Open educational resources, student efficacy, and user perceptions: a synthesis of research published between 2015 and 2018

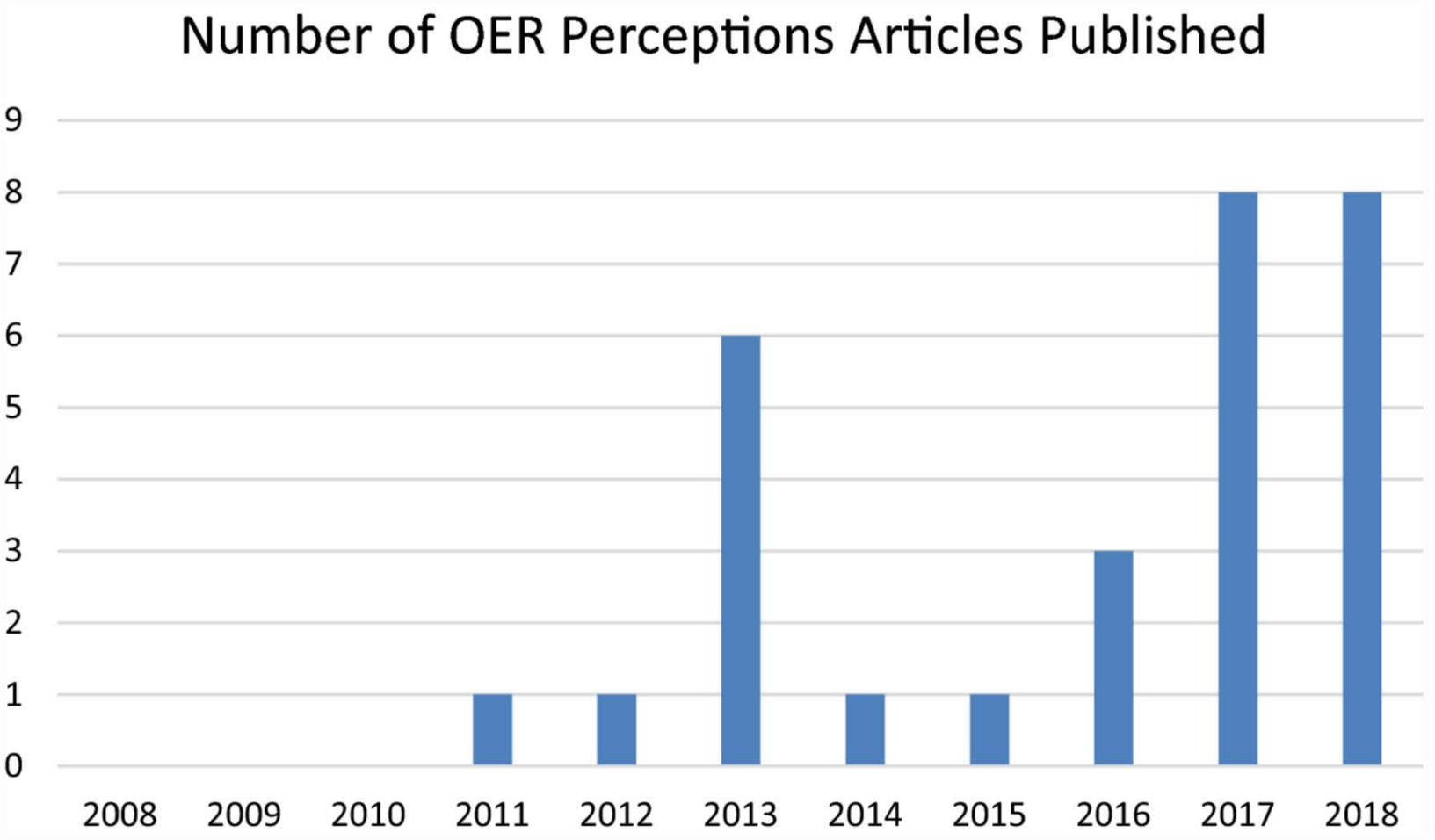


OER efficacy studies published 2008–2018

Back to article page ›

Fig. 2

From: Open educational resources, student efficacy, and user perceptions: a synthesis of research published between 2015 and 2018



OER perceptions studies published 2008–2018

Back to article page ›

Study	*N* treatment	*N* control	Attempted to control for teacher variables	Attempted to control for student variables	Measurement	Results
Wiley et al. (2016)	(Included in Hilton et al. 2016)	(Included in Hilton et al. 2016)	No	No	Drop rates	Statistically significant results favoring OER
Hilton et al. (2016)	2014	43,223	No	No	DFW rates	Statistically significant results favoring OER
Croteau (2017)	3847	Not provided	No	No	Withdrawal and completion rates, grades, final exam scores	No significant differences
Ozdemir and Hendricks (2017)	Not provided	Not provided	No	No	Exams, course grades, withdrawal rates	Potentially favorable, but statistical significance not discussed
Chiorescu (2017)	159	447	Yes	No	Pass and withdrawal rates, final grades	Statistically significant results favoring OER
Hendricks et al. (2017)	811	2400	Yes	No	Grade distribution, final exam score, CLASS survey	No significant differences in grade distribution, significantly higher final exam score, significantly lower in one of eight CLASS categories, no difference in CLASS overall
Grewe and Davis (2017)	73	73	No	Yes	GPA	Statistically significant results favoring OER
Gurung (2017)	2016	1312	No	Yes	Score on Psychology Quiz	Statistically significant results favoring CT
Winitzky-Stephens and Pickavance (2017)	7588	26,538	Yes	Yes	Pass and withdrawal rates, GPA	No significant differences for returning students; statistically significant results favoring OER. For new students
Choi and Carpenter (2017)	175	114	Yes	No	Exam scores, course grade	Final exam scores were lower with OER. No significant difference in overall course scores
Westermann Juárez and Muggli (2017)	66	30	No	Yes	Attendance, final exam, overall course score	Students using the Khan Academy OER had lower attendance but higher final exam scores than those using CT. Students using OER had lower final exam scores than those using CT. There were no significant differences overall course score
Jhangiani et al. (2018)	95	83	Yes	Yes	Exam scores	Statistically significant results favoring OER
Lawrence and Lester (2018)	117	162	Yes	No	Overall GPA, DFW rates	No significant differences
Clinton (2018)	204	316	Yes	Yes	Grades, withdrawal rates	No significant differences in grades, students using OER significantly less likely to withdraw
Colvard et al. (2018)	10,141	11,681	Yes	Yes	Grades, overall GPA, DFW rates	Statistically significant results favoring OER
Ross et al. (2018)	404	330	Yes	No	Course grades, completion	No difference in course grades, students using OER were significantly less likely to withdraw from the course
Total	27,710	86,709	Nine yes, seven no	Seven yes, nine no	Attendance, DFW rates, grades, GPA, exam scores, CLASS survey	Nine studies favored OER, two studies reported N.S., three had mixed results, one favored CT, and one did not discuss the statistical significance

Table 2 Summary of OER perception studies, 2015–2018

From: Open educational resources, student efficacy, and user perceptions: a synthesis of research published between 2015 and 2018

Study	*N* student surveys	*N* teacher surveys	Summary of results
Pitt (2015)	N/A	127	68% of faculty perceived greater student satisfaction with the learning experience when using OER
Delimont et al. (2016)	524	13	Students had a moderate preference for open and alternative textbooks. 12 of 13 teachers favored open and alternative textbooks
CA OER Council (2016)	351	16	44% of faculty felt OER were superior, 31% the same, and 25% worse. 42% of students rated OER higher than CT, 39% the same, and 11% worse
Illowsky et al. (2016)	325	N/A	64% of students said OER had equal quality to CT, 24% felt OER were higher quality, 12% felt OER were lower quality
Ozdemir and Hendricks (2017)	N/A	51	Most faculty felt the quality of OER was as good or better than CT. Only 15% of faculty who discussed student perceptions reported negative student comments
Jung et al. (2017)	N/A	137	62% of OpenStax adopters said the textbooks had the same quality as traditional textbooks; 19% thought the quality was better, and 19% thought it was worse
Hendricks et al. (2017)	143	N/A	72% of students said the OER had the same quality as CT. 21% said OER were better and 7% worse than CT
Cooney (2017)	67	N/A	42% said OER were much better that CT, 39% somewhat better, 16% neutral, and only 3% somewhat or much worse
Jhangiani and Jhangiani (2017)	320	N/A	56% of students would rather use OER than purchasing a CT, 24% were neutral, 20% preferred purchasing a CT to using OER
Watson et al. (2017)	1299	N/A	64% rated OpenStax textbooks as having the same quality as CT, 22% said they had higher quality, 14% lower quality.
Ikahihifo et al. (2017)	206	N/A	80% of students said the students said the OER was better than CT, 15% the same, 5% worse
Gurung (2017)	3328	N/A	Students rated the CT to be of overall higher quality than OER
Jhangiani et al. (2018)	178	N/A	The print OER was rated significantly higher than the CT. Both electronic and print formats of OER were rated higher than CT in some sub-categories
Abramovich and McBride (2018)	662	35	86% of students rated OER as either as useful or more useful than materials used in their other courses. 57% of instructors rated OER as better than CT, 40% the same, 3% worse
Lawrence and Lester (2018)	279	N/A	Students rated the CT to be of higher quality. 74% of students who used the CT said that they were satisfied versus 57% of students who used the OER
Clinton (2018)	458	N/A	Students rated CT and OER to be of equal quality
Griffiths et al. (2018)	2350		34% of students said OER were the same quality as CT, with 29% and 30% reporting respectively that they were slightly higher or much higher. 2% and 5% respectively said they were much or slightly lower quality
Carpenter-Horning (2018)	227	N/A	Students who used OER reported significantly higher levels of perceived cognitive learning in the course, relative to those using CT
Hunsicker-Walburn et al. (2018)	90	N/A	33% of these students said the quality of OER were better than CT, 54% said they were the same with 12% stating OER were worse
Ross et al. (2018)	129		46% said the OER were excellent relative to other textbooks, 27%, above average, 19% average, 6% below average, and 2% very poor
Total	10,807	379	In every study published between 2015 and 2018 that asked students or faculty to directly compare OER with CT, a strong majority said OER were as good or better. In the five studies in which ratings of students using CT were compared with ratings of students who used OER, two studies found higher ratings for CT, two found higher ratings for OER and one showed similar ratings

Amerika vs Nederland: vergelijkbare situaties?