

PER – Community Enhancing Network for Teaching, Research and Learning

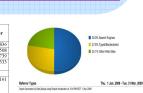
PER-CENTRAL is a cataloged, vetted, and free online collection designed specifically to serve as an informational touch-point and online community for producers and consumers of physics education research. Along with a database of PER articles and dissertations, there are links to research groups, PER-based curricular materials, news and events, and many other things of interest to our community. The latest additions feature the PERWiki, intended to provide a collaborative space for works of interest, and volume two of the reviews in PER, a collection of articles that provides an accessible overview of basic issues related to conducting Physics Education Research. This poster presents both featured content and the tools available to users of PER-CENTRAL.

PER Conferences 1997 - 2009 The Physics Education Research Conference has taken place every year in

conjunction with the AAPT Summer Meeting since 1997. Starting with the Edmonton conference in 2008, PER-CENTRAL is now hosting most of the conference information traffic, including abstract and manuscript submissions, referee reports, and archiving of published articles.



Most Popular Sections	Page Views 2007	2008 (Approximate)	4 ^m Quarter 2007	4 th Quarter 2008	1 st Quarter 2009	
Detail Pages	14,730	13,437	3,415	10,818	17,836	
Search Results	8,988	7,366	1,919	2,638	3,508	
Homepage	4,189	4,583	790	1,177	1,739	
Repository Document	2,280	1,771	1,168	805	1,333	
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PER Programs

The PER Programs page provides links to the known research groups around the world. New groups are always being sought-out and added, and each existing group has its own "synopsis" page (example shown on the right).

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The PER Topical Group of the AAPT also has its communications portal hosted here (below).

The University of Maine Physics Education Research Laboratory	Affaire PER.
Our nissian is to understand and affect student learning of physics.	Publications
Our areas of interest include:	Projenia Annea Da
· student difficulties and productive resources when learning physics	Someng De Rose sec-de research
 models of human reasoning 	
 analysis of research methods 	Program Richard
 survey design and analysis 	and the subscription of the local division o
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click on the links in the sidebar at sight for earn information on publications, projects, and how to jain us.	
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Reviews	in PER
PER has produced a large body of research literature that has powerful implications for physics instruction.	Process to Physical Columbia Research Physical Columbia Columbia Columbia Columbia Columbia Columbia Columbia Research Columbia Columbia Columbia Columbia Columbia Columbia exception Columbia Columbia Columbia Columbia Columbia Columbia Columbia Research Columbia Columbia Columbia Columbia Columbia Columbia Columbia Research Columbia Columbia Columbia Columbia Columbia Research Columbia Columbia Columbia Columbia Columbia Columbia Columbia Research Columbia Columbia Columbia Columbia Columbia Columbia Columbia Columbia Research Columbia Columbia Columbia Columbia Columbia Columbia Columbia Columbia Columbia Research Columbia
In the verticul esticles published	Volume 2: Getting Ranted in PEB A collection of articles that provides an accessible overview of basic issues related to conducting Physics
In the review articles published in this series, researchers help bridge research and practice, bringing the results of extended, multi-year research and	Effective Reserve: A. J. Honorem 11, https://fic.org/ai.f
development projects to the instructional community. This webpage is your introduction to a series of edited collections of peer-reviewed review articles on a related topic.	National Journal Association State (National Association) Provide State (National Association) 1 of other and/other association and provide state (National Association) International Association and provide state (National Association) • Description State (National Association) International Association and provide state (National Association) • Description State (National Association) International Association (National Association) • Construction State (National Association) International Association (National Association) • Construction Association (National Association) International Association (National Association) • Construction (National Association) International Association (National Association) • Construction (National Association) International Association (National Association) • Construction (National Association) International Association) • Construction (Nationa) International Association)

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Thanks to Bruce Mason, Lyle Barbato, Matt Riggsbee, and everyone at comPADRE for numerous discussions and insights, and all aspects of technical and graphical support for the collection.

Special thanks to all of the professional organizations for their generous support, and to the members of the PER community for their continual contributions to expanding and maintaining the quality of the collection.

The PERWiki is intended to p	rovide a	PER Research Tools	Parent Articlo	
		Many offerent research methods are used in PER. The tools needed to carry out offerent kinds of	PERANI	
collaborative space for works of in	iterest to	research are described briefly in this section. This page is meant to address questions often asked by those who are "going shopping" for new equipment. Detailed descriptions of <u>responsible</u> methods		
the PER community. Started in M		mose who are "going shapping" for new equipment. Decived descriptions of research methods	Beforencing Articles (1)	
the PER community. Started in M	lay 2009,	Outre	Article Functions	
currently there are 3 section:	History		pdt this article	
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FRWIX		· 100-00-000	Creete	
		Surveys	Create a new article	
ERWiki	Related Articles	When administering surveys to students, two forms of data pattering exist computer-based and paper-	Upload an image	
elcome to the Physics Education Research WW on PER-Central.	PER. History	based. The easiest to gather (but hordest to create) is a computer-based survey in which entries are	Upload a document	
his wiki is intended to provide a collaborative space for works of interest to the PER community.	PER Journals	immediately put into a clatabase. At this point, you can analyze that using methods described below.	Search the Wild	
EXWIN opened on Manday, May 4, 2022, so we are currently building the initial pages. Peel free to	PER Pasearch Tools	When data are gathered on paper, several variations exist. One can have students fill out answer sheets,	Search the Wild	
ign and contribute.		If but answers on the question sheets themselves, or (when using multiple choice questions) one can use scanner forms which quickly allow many data poets to be processed. Nest inversities and some	04	
FRWM Sections		I net school have readers for the many different basis of scamer forms. Hotable are differences in		
	Edit this article	some surveys: the FCI requires the 5-response sconner farm, while the FMCE requires a 10-response	Special pages	
PER Hatory	Nove/rename.article Recent edita	answer form.)		
PER Assessing	Watch this article	Once clata are collected, one can carry out a quick taily, sarting responses into piles which give a rough		
PER Research Tools		breakdown of student responses. This method is hard to use when sorting individual responses into multipl requires using spreadsheet programs (Excel, Numbers, etc.), data analysis programs (R, SPBS, etc.), or of		
	Create	Create PERL and so on. Many of these tops can be found for free as part of the inovenent, while others are pa		
	create a new article	subs.		
	Upload an image	Interview video		
	Upload a document	For interviews that are videotaped (or, in a more limited sense, audistaped), one should probably use the following		
	Second the Wiki			
		Web 1 3 comment using a line format that is easy transferred to a compare that of the . Inequations in meds are such that many analyse related by brand when its the open mpl allandated. Deraw white 10-00, all others use a bajo formatibut can such there the MEET ISSN called, also called Link and heave(to 2 mind any		
	64			
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	Rendial pages	the carriers mounted at the right angle to observe both interviewer and interviewer persures		

PFRWiki

Top Referring Domains (Homepage)	Instances (October- December 2008)	Percentage	Instances (January- March 2009)	Percentage
google.com	308	41.6	241	50.1
homestead.com	46	6.2		
aapt.org	41	5.5	25	5.2
yahoo.com	37	5.0	21	4.4
umd.edu	32	4.3		
google.ca	18	2.4	13	2.7
google.be	16	2.2	25	5.2
ohio-state.edu	16	2.2		
google.co.id	16	2.2	21	4.4
wikipedia.org	14	1.9		

aps.org

google.com.ph

google.co.th google.com.vn

http://www.compadre.org/per