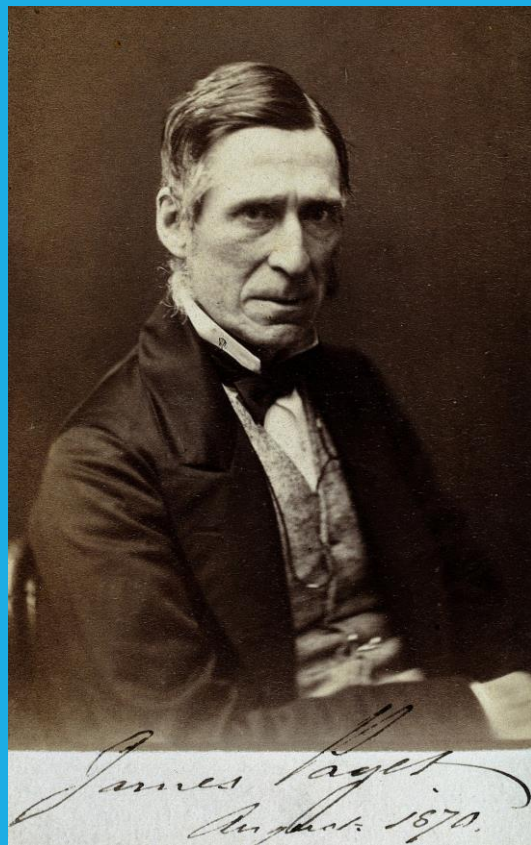


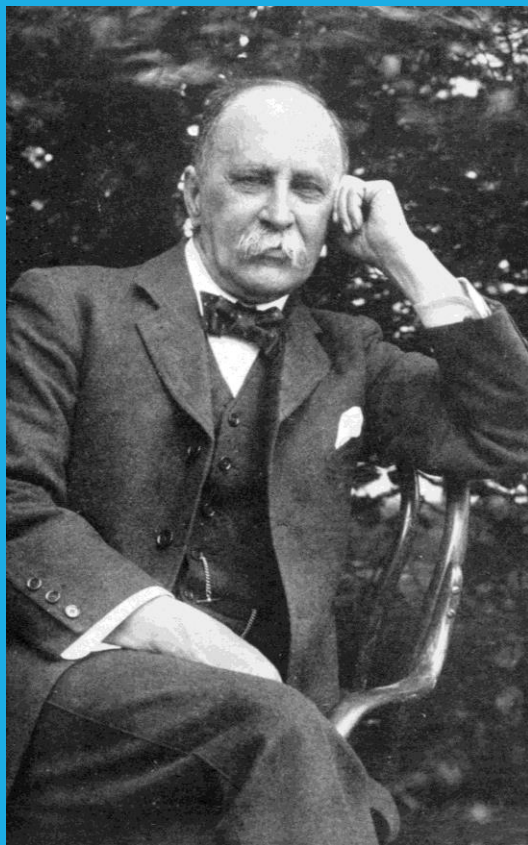
工养在：人素建和究构部研和乐育式俱教模刊训训期培培在线具的社在用能向实使智走线

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林晶晶博士  
助理教授  
IT活用教育中心  
日本丰桥技术科学大学



Sir James Paget



Sir William Osler

使用在线期刊俱  
乐部和人工智能研  
究工具培养训练智  
育走向和社会新  
构区

一群人定期开会来进行批判性评估学术文献的活动。通常在基础或应用研究中围绕预定的主题进行组织。

研究素养

领域

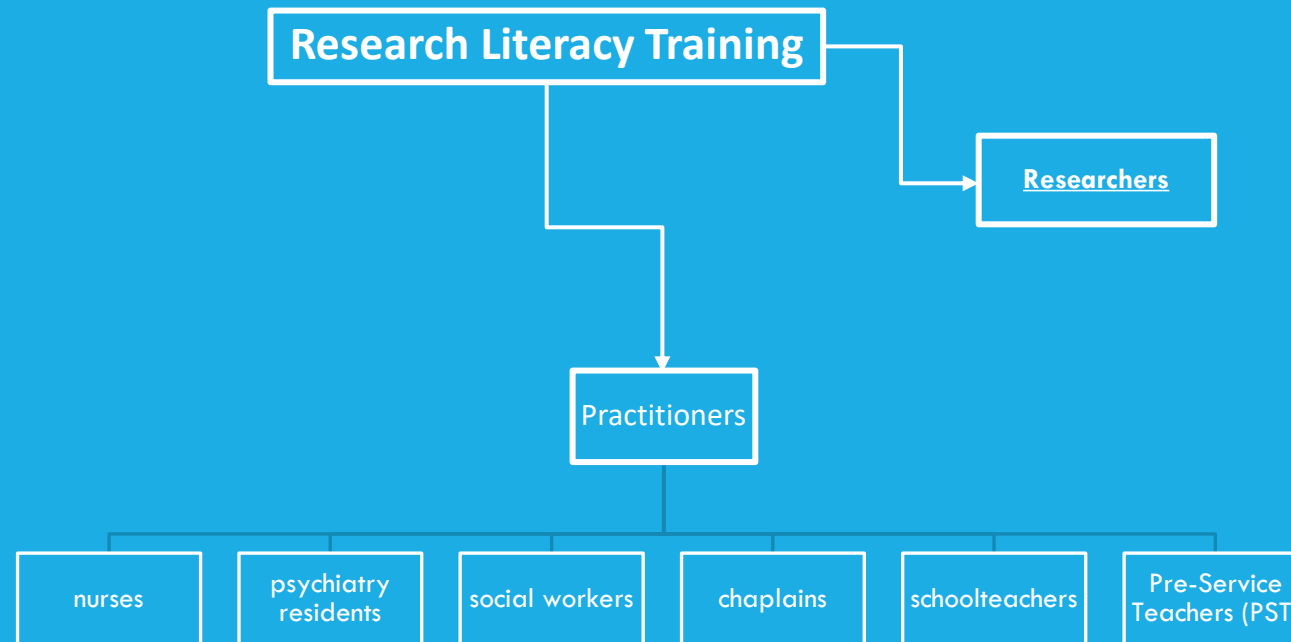
教育

健康医药护  
理

其它领域

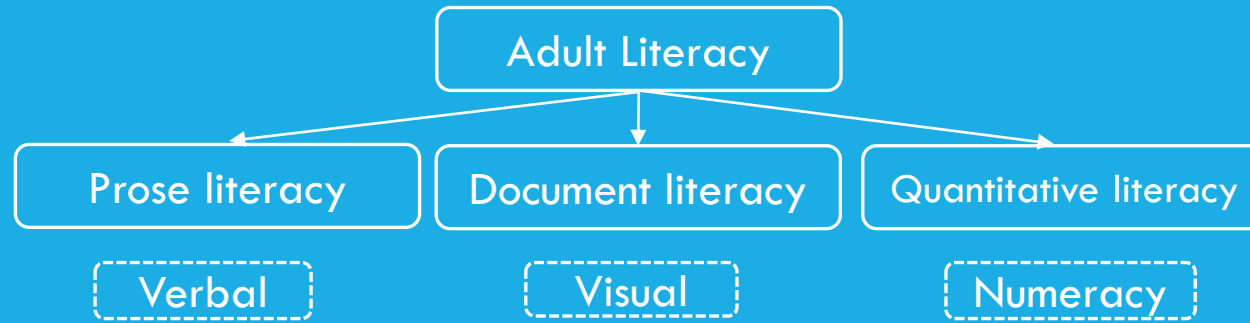
俱能研新构区  
刊智育和社  
期工教走向和  
线人训：模式  
在和培：模实  
用部具素培在  
使乐工研的建

研究素养是定位、理解、讨论和评估不同类型研究的能力，并准确地就这些研究进行有效沟通，将研究结果用于学术和专业的能力。

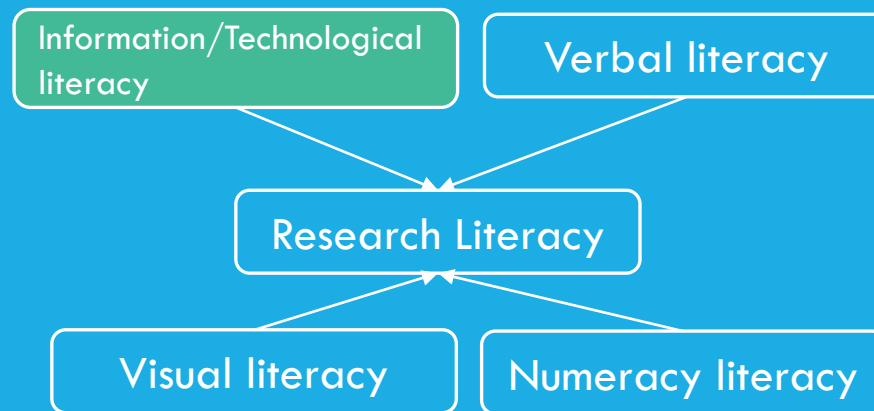


## Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

Research literacy is the ability to locate, understand, discuss, and evaluate different types of research; to communicate accurately about them; and to use findings for academic and professional purposes.



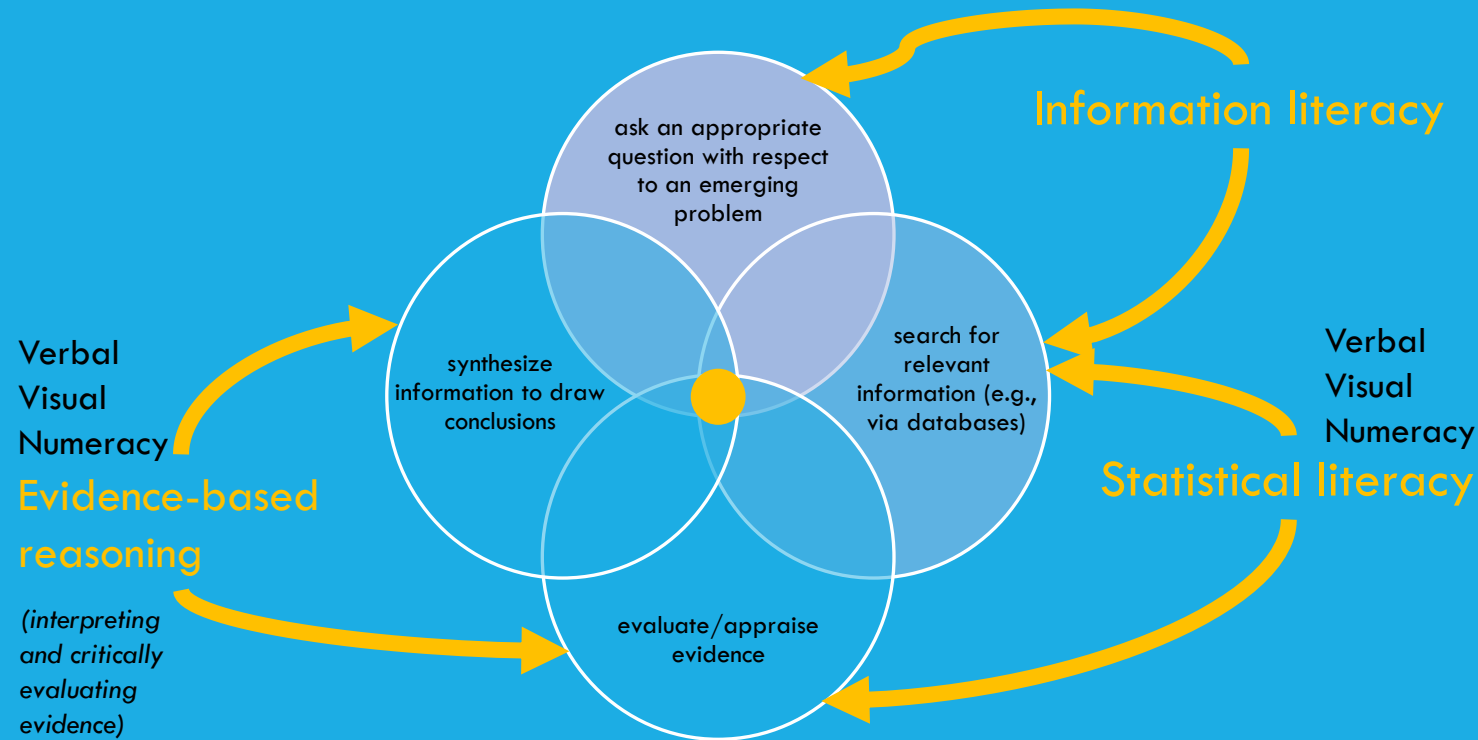
KIRSCH ET AL. (1993) ADULT LITERACY



BEAUDRY & MILLER (2016) RESEARCH LITERACY

**Use Online Journal  
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Train The  
Educational  
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Research literacy is the ability to locate, understand, discuss, and evaluate different types of research; to communicate accurately about them; and to use findings for academic and professional purposes.



GROB OPHOFF ET AL. (2015):  
EDUCATIONAL RESEARCH LITERACY (ERL)

## Use Online Journal Club Events To Train The **Educational Research Literacy:** Research And Development At ResearchIC

Research literacy is the ability to locate, understand, discuss, and evaluate different types of research; to communicate accurately about them; and to use findings for academic and professional purposes.

*Groß Ophoff et al. (2015)*

### LeScEd booklet

two test sets (avoid testing effect)  
to measure: information literacy,  
statistical literacy, ethical reasoning  
forced-choice tasks

40-minute test time (30% tasks  
were left out on average; it is fine)

Tested and validated using

Pretest–posttest control group or  
cross-sectional/longitudinal surveys

large samples of PST students  
(e.g., 2,113 in one study and  
1,655 in another study)

*Veilleux and Chapman (2017b)*

### Psychological Research Inventory of Concepts (PRIC)

20-item vignette-based multiple  
choice measure

to measure: research methodology  
and statistics knowledge  
either yes/no or mostly open-ended  
responses to the questions

30 minutes per test

Tested and validated using

cross-sectional and longitudinal  
surveys

971 participants of both psychology  
and non-psychology backgrounds

*Gutman and Genser (2017)*

### Research Literacy Inventory

18 self-report statements, based on  
the work by Shank & Brown (2013)  
five-point Likert scale

Tested and validated using

Pre-test and post-test with control  
group

62 PST students

*Han and Schuurmans-Stekhoven (2017)*

### Research literacy survey

15-item self-report survey

to measure: source/literature search (SLS)  
and research integration methods (RIM)

Tested and validated using

Pre-test and post-test with control group  
48 PST students

## Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

Research literacy is the ability to  
locate, understand, discuss, and  
evaluate different types of  
research; to communicate  
accurately about them; and to  
use findings for academic and  
professional purposes.

Long-term evidence suggests that **self-regulated asynchronous learning** benefits students' retention of RL skills more than synchronous learning (Gutman & Genser, 2017).

“**Short-term intensive training** may have provided theoretical knowledge of what information to process and how to process it, but it **is insufficient** for students to fully comprehend its application in their own practice” (Han & Schuurmans-Stekhoven, 2017, p. 38).

The most validated instruments is **LeScEd booklet**.

The interventions were mostly for **PST students** in education science.

The interventions were often **general research education**, introducing research process and methods as a general experience.

**Online journal club is not a common training intervention format** in ERL training interventions; **How to read scientific literature was not a focus for any of the examined eight interventions.**

## Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

Research literacy is the ability to locate, understand, discuss, and evaluate different types of research; to communicate accurately about them; and to use findings for academic and professional purposes.







### **LITERATURE REVIEW**

To develop Educational Research Literature Reading Test (ERLRT) to measure a person's capability of reading educational research literature.

2022-2023



### **INTERVIEWS**

Elucidate the literature locating, reading, and organizing strategies of experienced educational researchers using video interviews.

2022-2023



### **SURVEYS**

To run ERLRT tests among all participants of OJC events on the ResearchIC platform.

2023-2024



### **EXPERIMENTS**

Organize a series of OJC events with educational researchers as hosts and research students as attendees between 2023 and 2024

2023-2024

## **Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC**

ResearchIC is funded by JSPS Grant-in-Aid for Early-Career Scientists (22K13755) to conduct R&D between April 2022 and March 2025.

#### **PUBLISHED PAPERS:**

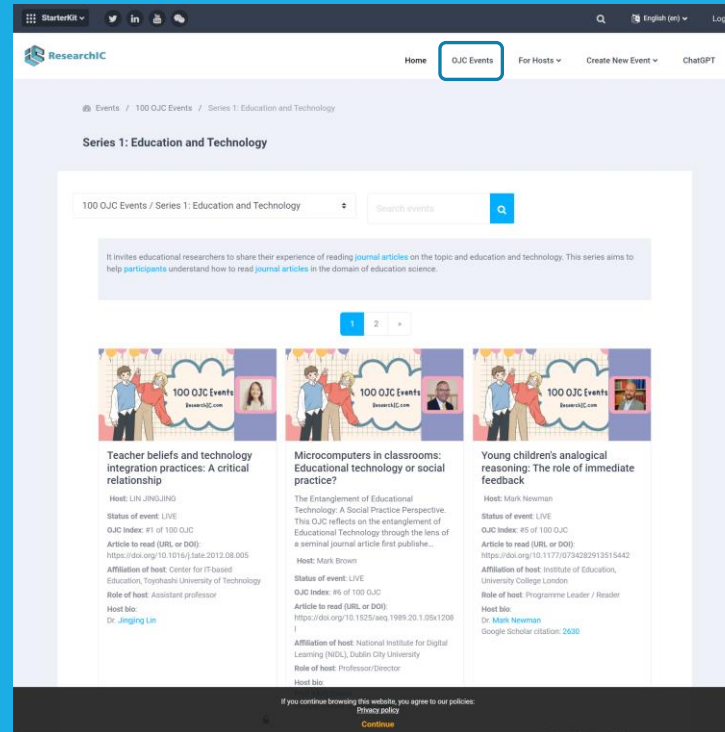
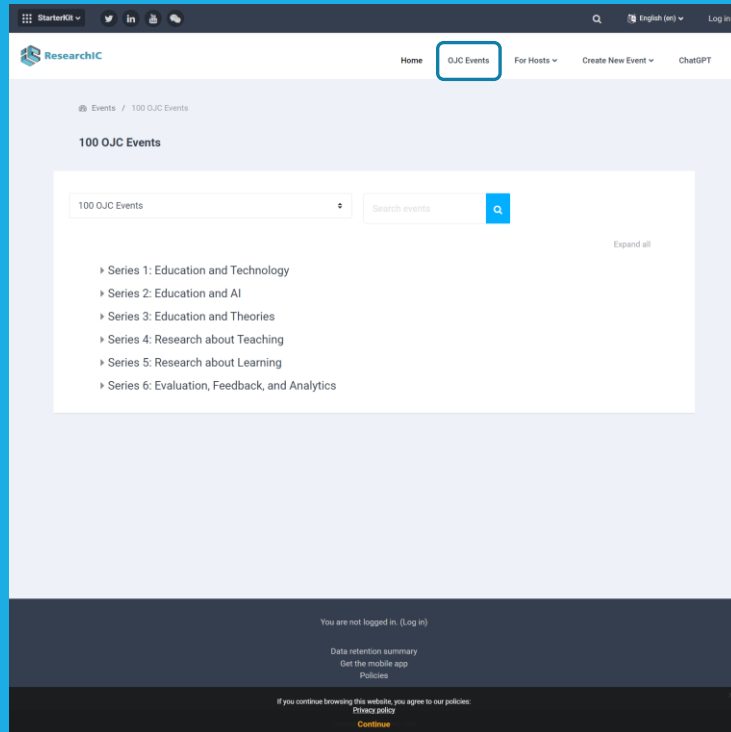
1. Lin, J. (2023). Use Online Journal Club Events to Train the Educational Research Literacy: Research and Development at ResearchIC. *Proceedings of annual conference of JSET 2023*. March 25-26, 2023, Tokyo, Japan.
2. Lin, J. (2023). Hosting Online Journal Club Events on a Global Scale using Moodle: A Report from the ResearchIC Project. *Proceedings of Moodle Moot Japan 2023*. February 15-17, 2023, Ibaraki Christian University, Japan
3. Lin, J. (2022). Measuring and Evaluating Research Literacy in Higher Education: A Synthesis of Mechanisms and Discoveries. *Proceedings of The 14th Asian Conference on Education (2022)*. November 28–December 02, 2022, Toshi Center Hotel, Tokyo, Japan (and Online).  
<https://papers.iafor.org/submission65228/>
4. Lin, J. (2022). Impact of Online Journal Club On Educational Research Literacy: Introducing An Ongoing Project. *Proceedings of 2022 IEEE International Conference on Engineering, Technology & Education (TALE)*. Dec.4-7, 2022. Hong Kong.

#### **IN-PROGRESS PAPERS:**

5. Lin, J. (Ongoing). ChatGPT and Moodle Walk into a Bar: A Demonstration of AI's Mind-blowing Impact on E-Learning. *International Journal of Artificial Intelligence in Education*. Stage: Editor assigned
6. Lin, J. & Gross Ophoff, J. (Ongoing). Commons and Differences between Disciplines in Research Literacy Research: A Systematic Literature Review. *Educational Research Review*. Stage: Manuscript in progress.
7. Lin, J. (Ongoing). Educational researchers reading educational research. *Studies in Graduate and Postdoctoral Education*. Stage: Data collection and analysis.
8. Lin, J. (Ongoing). Measuring educational research reading literacy: Development and validation of the ERLRT scale. *Asia-Pacific Education Researcher*. Stage: Research planning.

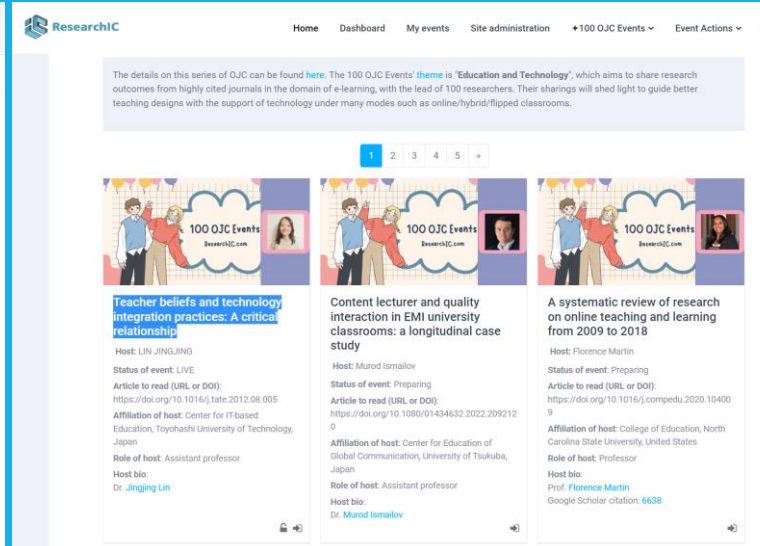
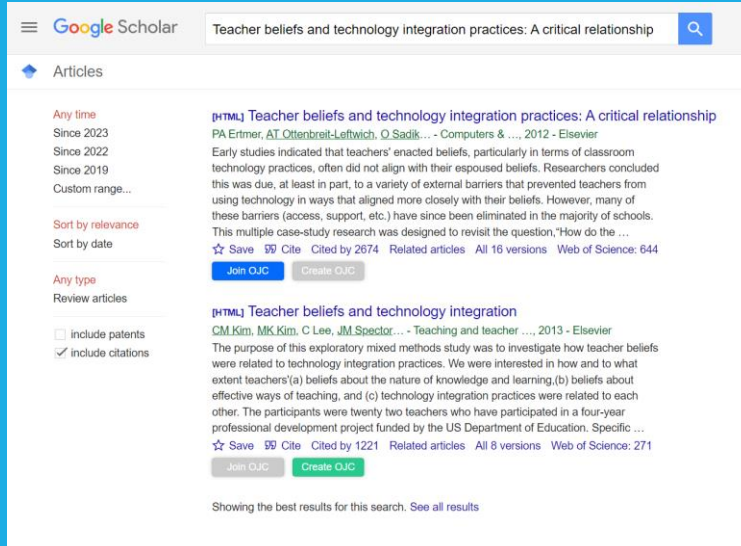
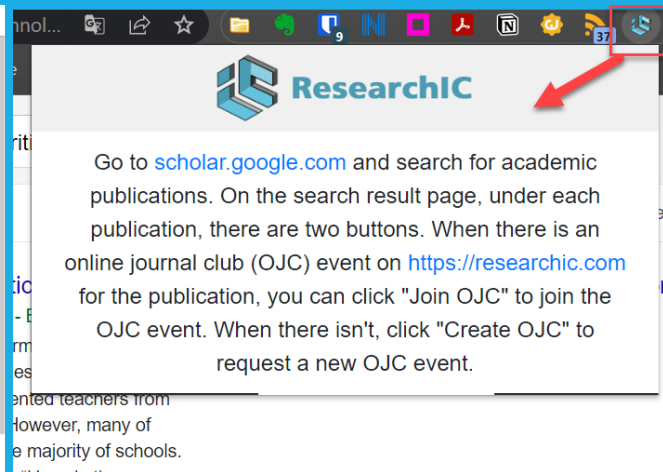
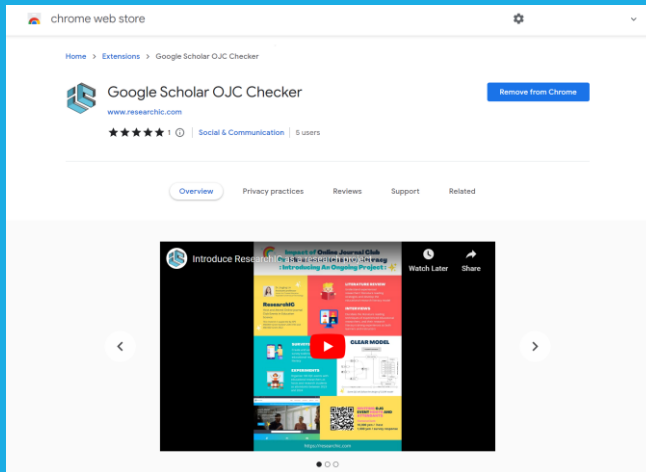
## **Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC**

ResearchIC project has published four conference papers as of March 2023, and has four journal articles in progress. Research progress and outputs can be found on <https://researchic.com/course/view.php?id=20>



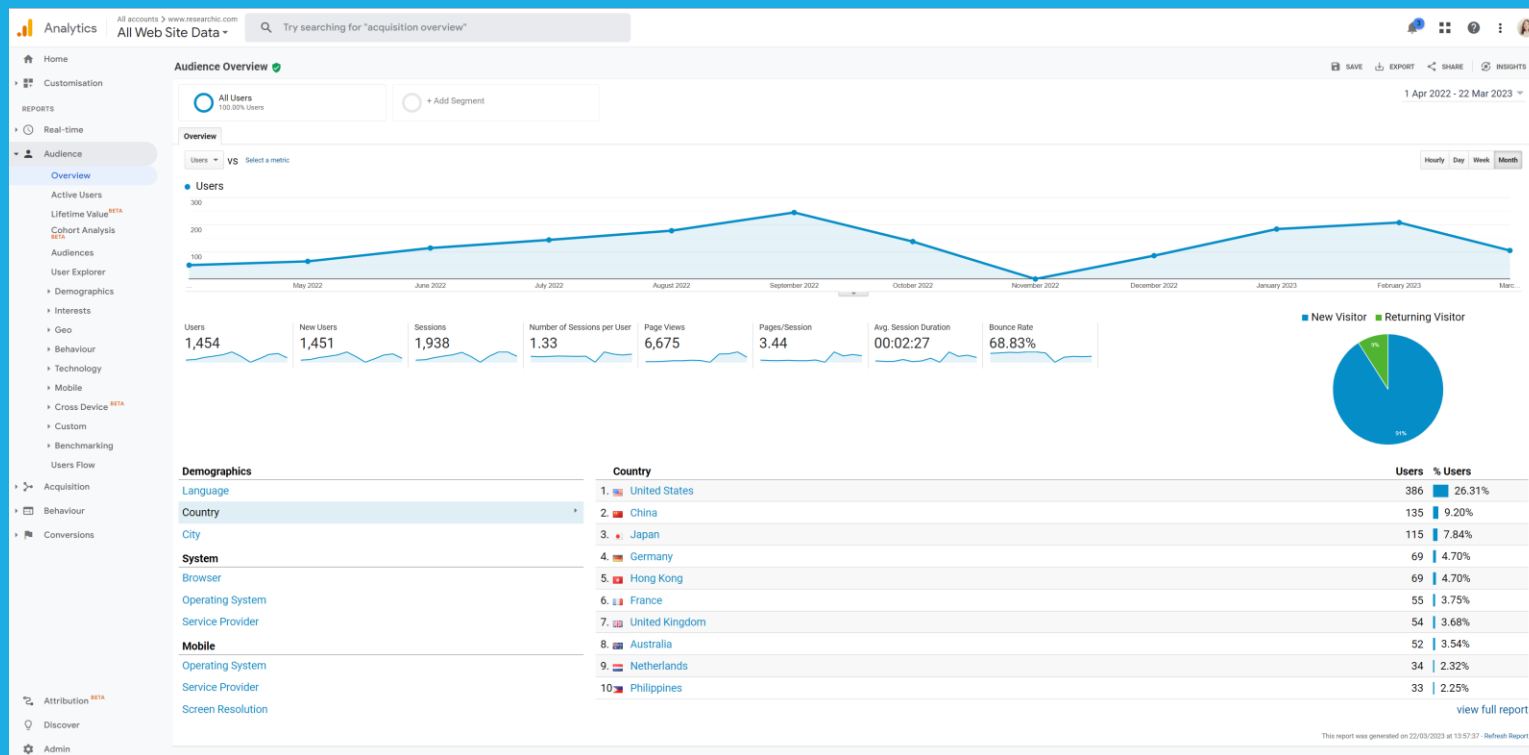
# Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

ResearchIC has created 15 online journal club events. They generated 30 videos to share how they locate, read, and manage educational research articles.



## Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

ResearchIC project created a Chrome browser extension “Google Scholar OJC Checker”, to bridge Google Scholar search results and ResearchIC event database.



1454 visitors, 98 registered users.  
Visitors mainly from United States, China, and Japan.

## Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

ResearchIC project uses Google Analytics to track site performance.

The screenshot displays the ResearchIC web application. The top navigation bar includes a 'StarterKit' dropdown, social media icons, a search bar, a notification bell, a chat icon, and an 'Edit mode' toggle. The main navigation menu lists 'Home', 'Dashboard', 'My events', 'Site administration', 'OJC Events', and 'For Hosts'. A red arrow points to the 'ChatGPT' widget in the right sidebar. The widget shows a query 'what is microcomputers' and a response from 'Dr. RIC' explaining that microcomputers are small, relatively inexpensive computers with a microprocessor as their central processing unit (CPU). Below the ChatGPT widget, the sidebar also contains a 'Twitter hashtag' section with the link 'Tweet #researchic\_ojc', an 'Event Host(s)' section listing 'Prof. Mark Brown', a 'Coordinator(s)' section listing 'Ms. Cindy Liang', and an 'Online users' section. The main content area features a banner for 'Microcomputers in classrooms: Educational technology or social practice?' with a '100 OJC Events' badge and the ResearchIC.com logo. Below the banner, there are sections for 'Welcome to this OJC Event' with links to 'FORUM Announcements' and 'URL User guide and FAQ', and a 'Pre-test of Education Research Literacy' section with a 'Mark as done' button and a 'Hidden from students' label.

## Use Online Journal Club Events To Train The Educational Research Literacy: Research And Development At ResearchIC

ResearchIC integrates ChatGPT into the platform in March 2023, as a collaborative agent for users.



Table		
Table 2. Mapping AI applications for research		
Aa AI applications	Research-relevant functions	Benefits
ChatGPT	x	LLM
Semantic Scholar	Academic Search Engine	Discover hidden cor
ConnectedPapers	Find and explore academic papers	
Elicit	Find research papers	Helps with your liter
Jasper	x	AI Copywriter
Scholarcy	Scientific reading summarization	Reduce the time scr
Scite	Citation Evaluation	Let you see how ma
Trinka	Research Paper Writing	
CopyAI	x	Write better marketi
Rytr	Research Paper Writing	
Writesonic	Research Paper Writing	
GoCharlie	Research Paper Writing	
Writefull	Research Paper Writing	exclusively caters to
Notion	Note-taking, Writing	
GanttPRO	Progress tracking	
Typeset.io	Scientific reading	
Paper Digest	Scientific reading summarization.	Offering three-minu
<a href="#">iris.ai</a>	Researcher's AI workstation	AI tools and applica
SciSpace Copilot	Paper reading and decoding	
<a href="#">System</a>	Literature tree	Help you find, synth
Lex	Writing	AI-empowered editc
GitHub Copilot	Coding assistant	AI coding partner tl
<a href="#">Vizcom</a>	Drawing's rendering	uses AI to create hig
<a href="#">Headline analyzer</a>	x	better titles for your
<a href="#">Penelope.ai</a>	Check academic manuscripts using A	one of the best AI tc
<a href="#">Paperpal</a>	Research Paper Writing	
Galactica	Language Models that Cite	• explore the scienti
Explainpaper	Paper reading and decoding	• Upload a paper • t

New

## Use Online Journal Club Events To Train The Educational Research Literacy: Development At ResearchIC

ResearchIC will further explore the potential of AI applications in supporting research literacy development.





Email to:

[lin@cite.tut.ac.jp](mailto:lin@cite.tut.ac.jp)

## Q & A

Please consider joining ResearchIC.com as users and as OJC hosts.

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