

El estado de la cuestión en los trabajos académicos: Las revisiones sistemáticas de literatura

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Índice

1. Introducción a las revisiones sistemáticas
2. Revisiones sistemáticas de literatura vs. Revisiones de mapeo de literatura y Revisiones de alcance
3. Marcos metodológicos de referencia para la realización de revisiones sistemáticas de literatura
4. Fase de planificación
5. Fase de realización
6. Fase de informe
7. Caso de estudio
8. Colección de flujos de trabajo y herramientas para realizar revisiones de literatura
9. Bibliometrix
10. Conclusiones

Artículo recomendado

- Developing robust state-of-the-art reports: Systematic Literature Reviews / Desarrollo de estados de la cuestión robustos: Revisiones Sistemáticas de Literatura
<https://doi.org/10.14201/eks.28600> [1]

i n t r o

1. Introducción a las revisiones sistemáticas

Tipos de documentos científicos

- Trabajos académicos (trabajos fin de grado, trabajos fin de máster, tesis doctorales)
- Artículo de investigación
- Artículo de datos (*data paper* – publicación académica de documento etiquetado con metadatos que describe un conjunto particular de datos accesibles, o un grupo de ellos, publicados de acuerdo a las prácticas académicas) [2]
- Artículo metodológico
- Artículo sobre aplicaciones *software*
- Letter (expone un resultado de investigación importante y novedoso, pero es menos sustancial que un artículo)
- Ensayo (texto escrito, en general por un solo autor, en el cual se exponen de manera argumentativa, el punto de vista, opiniones o posiciones del escritor ante un tema determinado)
- Artículo de divulgación científica
- Informes técnicos
- Post
- Presentaciones científicas
- Artículo de revisión sistemática de literatura
- Meta-análisis (proceso de combinar los resultados de diversos estudios relacionados con el propósito de llegar a una conclusión) [3]

Trabajos de revisión [4]

- Los trabajos de revisión tienen una gran aceptación en el ámbito académico
- Una revisión de literatura es una descripción general, con un enfoque analítico y/o crítico, de los principales trabajos publicados con anterioridad en un ámbito del conocimiento
- El objetivo fundamental de una de revisión de literatura es intentar identificar qué se conoce del tema, qué se ha investigado y qué aspectos permanecen desconocidos. Es decir, proporcionar una síntesis eficiente del conocimiento existente sobre el tema de interés
- Últimamente, se está utilizando cada vez más el término *revisión sistemática* para denominar a las revisiones bibliográficas que deben preceder o justificar un estado de la cuestión o en general cualquier estudio de revisión

Trabajos de revisión plasmados en artículos de revisión

- El artículo de revisión se considera como un estudio detallado, selectivo y crítico que integra la información esencial en una perspectiva unitaria y de conjunto [5, 6]
- La revisión se puede reconocer como un estudio en sí mismo, en el cual el revisor tiene un interrogante, recoge datos (en la forma de artículos previos), los analiza y extrae una conclusión
- La diferencia fundamental entre una revisión y un trabajo original o estudio primario es la unidad de análisis, no los principios científicos que se aplican [7]

Tipos de revisión de la literatura

Revisiones

Narrativas o Tradicionales

Revisan un tópico de forma exhaustiva, incluyendo diversos aspectos. Se presenta el tema en un formato narrativo, sin justificar los métodos utilizados para obtener y seleccionar la información presentada. Adecuadas para responder preguntas de preparación [8]

Sistemáticas

Resumen y analizan la evidencia respecto de una pregunta específica en forma estructurada, explícita y sistemática (aplicando métodos rigurosos reconocidos internacionalmente gracias a protocolos y marcos bien definidos). Se tiene que explicitar el método utilizado para encontrar, seleccionar, analizar y sintetizar las fuentes primarias (*evidence synthesis*)

Diferencias entre las revisiones narrativas y las sistemáticas [9]



| Característica | Revisión narrativa | Revisión sistemática |
|--|---|--|
| Pregunta de investigación | Amplia. No estructurada | Estructurada, clara, concreta y centrada en un problema clínico bien definido. |
| Búsqueda bibliográfica. Selección de fuentes de información. | No detallada. No sistemática. No orientada a localizar todos los estudios disponibles. Probabilidad alta de sesgo | Búsqueda detallada, sistemática y explícita. |
| Selección de artículos. | No hay criterios de selección. No reproducible. Probabilidad alta de sesgo. | Selección basada en criterios explícitos. Aplicación uniforme de los criterios de selección/exclusión a todos los artículos. |
| Valoración de la calidad de los estudios. | No hay valoración. | Valoración / evaluación crítica de la calidad metodológica de los estudios. |
| Síntesis. | A menudo resumen subjetivo, cualitativo, sin un estimador estadístico. | Basada en la calidad metodológica de los estudios. A menudo resumen cuantificado por un estimador estadístico |
| Interpretación. | A veces basada en la evidencia. Frecuentemente basada en opiniones personales. | Generalmente basada en la evidencia |

Tipos de revisión [10]

- **Critical review.** Tiene como objetivo demostrar que se ha investigado ampliamente la literatura y ha evaluado críticamente su calidad. Va más allá de la mera descripción para incluir un grado de análisis e innovación conceptual. Suele dar lugar a una hipótesis o a un modelo. Ejemplos: [11]
- **Literature review.** Término genérico: materiales publicados que proporcionan un examen de la literatura reciente o actual. Puede abarcar una amplia gama de temas con distintos niveles de exhaustividad y amplitud. Ejemplos: [12-15]
- **Mapping review/ systematic map.** Traza y categoriza la literatura existente a partir de la cual encargar nuevas revisiones y/o investigaciones primarias, identificando las lagunas en la literatura de investigación. Ejemplos: [16-20]
- **Meta-analysis.** Técnica que combina estadísticamente los resultados de los estudios cuantitativos para proporcionar un efecto más preciso de los resultados. Ejemplos: [21-24]

Tipos de revisión [10]

- **Mixed studies review/mixed methods review.** Se refiere a cualquier combinación de métodos en la que un componente significativo es una revisión de la literatura (normalmente sistemática). Dentro de un contexto de revisión, se refiere a una combinación de enfoques de revisión, por ejemplo, combinando la investigación cuantitativa con la cualitativa. Ejemplo: [25]
- **Overview.** Término genérico: resumen de la literatura que intenta hacer un estudio de la misma y describir sus características. Ejemplo: [26]
- **Qualitative systematic review/qualitative evidence synthesis.** Método para integrar o comparar las conclusiones de los estudios cualitativos. Busca "temas" o "constructos" que se encuentran en los estudios cualitativos individuales o entre ellos. Ejemplo: [27]
- **Rapid review.** Evaluación de lo que ya se sabe sobre una cuestión política o práctica, utilizando métodos de revisión sistemática para buscar y evaluar críticamente la investigación existente. Ejemplo: [28]
- **Scoping review** (Revisiones de alcance). Evaluación preliminar del tamaño y el alcance potencial de la literatura de investigación disponible. Tiene como objetivo identificar la naturaleza y el alcance de las pruebas de investigación (normalmente incluye la investigación en curso). Ejemplo: [29]

Tipos de revisión [10]

- **State-of-the-art review.** Tienden a abordar asuntos más actuales en contraste con otros enfoques retrospectivos y actuales combinados. Pueden ofrecer nuevas perspectivas sobre el tema o señalar un área para seguir investigando. Ejemplo: [30]
- **Systematic review.** Intenta buscar, evaluar y sintetizar sistemáticamente las pruebas de la investigación, a menudo siguiendo las directrices sobre la realización de una revisión. Son una forma de estudio secundario que usa una metodología bien definida para identificar, analizar e interpretar todas las evidencias relacionadas con una pregunta de investigación específica de una forma que es imparcial y (hasta cierto punto) repetible [31]. Ejemplos: [32-38]
- **Systematic search and review.** Combina los puntos fuertes de la revisión crítica con un proceso de búsqueda exhaustivo. Por lo general, aborda preguntas amplias para producir una "síntesis de la mejor evidencia". Ejemplo: [39]
- **Systematized review.** Intenta incluir elementos del proceso de revisión sistemática, pero sin llegar a ser una revisión sistemática. Ejemplo: [40]
- **Umbrella review.** Se refiere específicamente a la revisión que recopila la evidencia de múltiples revisiones en un documento accesible y utilizable. Se centra en una condición o problema amplio para el que existen intervenciones que compiten entre sí y destaca las revisiones que abordan estas intervenciones y sus resultados. Ejemplos: [41-42]

Tipos de revisiones sistemáticas [43]

Revisiones sistemáticas

Cualitativas

Las evidencias se presentan en forma descriptiva sin un análisis estadístico

Cuantitativas o meta-análisis

Se combinan cuantitativamente los resultados usando técnicas estadísticas

Revisión sistemática de literatura – Systematic Literature Review (SLR)



- Una SLR es un tipo de revisión de la literatura que **recopila** y **analiza críticamente** múltiples estudios o trabajos de investigación a través de un **proceso sistemático**
- Es un **método sistemático** para **identificar**, **evaluar** e **interpretar** el trabajo de investigadores, académicos y profesionales en un campo elegido [44]
- El objetivo de una SLR es proporcionar un **resumen exhaustivo de la literatura** disponible pertinente a una **pregunta de investigación**

Revisión sistemática de literatura – Systematic Literature Review (SLR) [45]



- Una revisión sistemática es aquella en la que existe una búsqueda exhaustiva de estudios relevantes sobre un tema. Una vez identificados y obtenidos los estudios, los resultados son sintetizados de acuerdo con un método preestablecido y explícito
- Esta forma de revisión da al lector una gran ventaja sobre otras revisiones: la posibilidad de replicarla y verificar si se llega a la misma conclusión

Revisiones sistemáticas como investigaciones científicas [46]



Las revisiones sistemáticas **son** investigaciones científicas en sí mismas, con métodos prefigurados y un ensamblaje de los estudios originales, que sintetizan los resultados de estos

Características de una revisión sistemática [31]

- Las revisiones sistemáticas comienzan definiendo un protocolo de revisión que especifica la pregunta de investigación que se aborda y los métodos que se utilizarán para llevar a cabo la revisión
- Las revisiones sistemáticas se basan en una estrategia de búsqueda definida que tiene como objetivo detectar la mayor bibliografía relevante posible
- Las revisiones sistemáticas documentan su estrategia de búsqueda para que otros investigadores puedan evaluar su rigor, exhaustividad y la posible repetición del proceso (teniendo en cuenta que las búsquedas en las bibliotecas digitales son casi imposibles de replicar)

Características de una revisión sistemática [31]

- Las revisiones sistemáticas requieren criterios de inclusión y exclusión explícitos para evaluar cada potencial de estudio primario
- Las revisiones sistemáticas especifican la información que pueden obtener de cada estudio primario, incluyendo los criterios de calidad por los que evaluar cada estudio primario
- Una revisión sistemática es un requisito previo para un meta-análisis cuantitativo

Ventajas de las revisiones sistemáticas [31, 43]

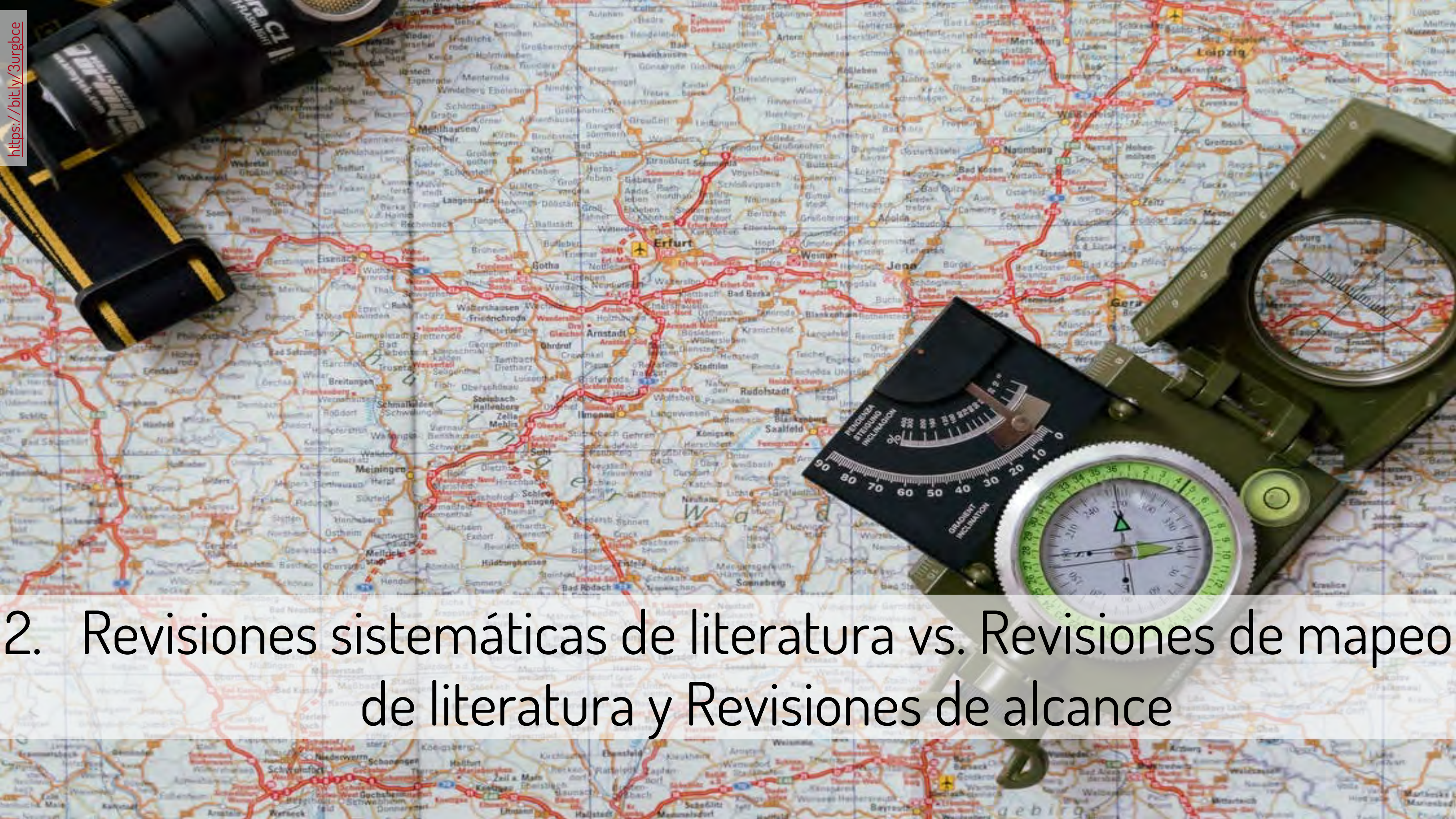
- Su principal ventaja es la síntesis de información respecto de una pregunta de investigación específica que permite resolver las dudas en forma eficiente
- Una metodología bien definida hace que sea menos probable que los resultados de la literatura estén sesgados, aunque no protege contra el sesgo de publicación en los estudios primarios
- Pueden proporcionar información sobre los efectos de un fenómeno a través de una amplia gama de configuraciones y métodos empíricos
 - Si los estudios dan resultados consistentes, las revisiones sistemáticas proporcionan evidencia de que el fenómeno es robusto y transferible
 - Si los estudios dan resultados inconsistentes, se pueden estudiar las fuentes de variación
- Evitan el riesgo de repetir investigaciones o de utilizar teorías obsoletas
- En el caso de los estudios cuantitativos es posible combinar los datos utilizando técnicas de meta-análisis. Esto aumenta la probabilidad de detectar efectos reales que los estudios más pequeños individuales son incapaces

Limitaciones de las revisiones sistemáticas [31, 43]

- Son estudios retrospectivos por lo cual están sujetos a un sesgo en las diversas etapas del proceso: búsqueda, selección, análisis y síntesis de la información
- No está garantizada la calidad de este tipo de estudios, por lo que el lector deberá ser capaz de evaluar críticamente su validez
- La realización de revisiones sistemáticas está limitada por la cantidad y calidad de los estudios previamente realizados
- Requiere un esfuerzo mucho mayor que una revisión tradicional de bibliografía, el proceso es largo, requiere tiempo y dedicación

Objetivos para hacer una revisión

- Alcanzar un conocimiento más profundo en su campo del conocimiento
- Sentar las bases del estado de la cuestión de un trabajo académico (fin de máster, tesis doctoral, etc.)
- Obtener información sobre las tendencias actuales y los desafíos futuros
- Identificar los autores más importantes
- Identificar las revistas y conferencias más importantes
- Tener la base sobre la que realizar buenas publicaciones



2. Revisiones sistemáticas de literatura vs. Revisiones de mapeo de literatura y Revisiones de alcance

Revisiones de mapeo de literatura (*mappings*)

- Enfoque transparente, riguroso y sistemático para identificar, describir y catalogar las pruebas y las lagunas existentes en un tópico de un área con una perspectiva amplia
- Recopilan, describen y catalogan las evidencias disponibles sobre la cuestión de interés [47]
- Intentan responder a estos tipos de preguntas “¿qué sabemos de un tema?”, o “¿qué y dónde se ha investigado sobre un tema”
- Suele extraer solo información descriptiva sobre los estudios y aplica códigos predefinidos (datos de alto nivel). En este sentido, pueden estar una lógica “agregativa” (sumar datos para responder a la pregunta de revisión) [48]

Revisiones de mapeo de literatura (*mappings*) [10]

- El objetivo es mapear y categorizar la literatura existente sobre un tema en particular, identificando las lagunas en la literatura a partir de las cuales se pueden encargar nuevas revisiones y/o investigaciones primarias
- Los *mappings* se distinguen de las revisiones sistemáticas de literatura en que el resultado posterior puede implicar un trabajo de revisión adicional o una investigación primaria y este resultado no se conoce de antemano

Revisiones de mapeo de literatura (*mappings*) [10]

- Son una herramienta valiosa para ofrecer a los responsables de las políticas, profesionales e investigadores un medio explícito y transparente para identificar los aspectos clave del *mapping*
- Los *mappings* pueden caracterizar los estudios de diferentes formas, por ejemplo, según la perspectiva teórica, el grupo de población o el entorno en el que se realizaron los estudios
- También pueden proporcionar la base para tomar la decisión informada sobre si se debe realizar la revisión en profundidad y la síntesis de todos los estudios o solo de un subconjunto

Revisiones de mapeo de literatura (*mappings*)

- Las técnicas y resultados de los mapeos de literatura son muy diferentes dependiendo del propósito
 - Escribir palabras, frases y tópicos relacionados con el tema principal en un libro blanco para recopilar conceptos y temas clave
 - Resumir los hallazgos clave de revistas, libros y documentos de trabajo para crear mapas conceptuales
 - Presentar un resumen de las revistas, conferencias, años de publicación, autores más importantes, etc.
 - Etc.

Revisiones sistemáticas de literatura vs. Revisiones de mapeo de literatura



Mapping Review

≠

Systematic Literature Review

Revisiones sistemáticas de literatura vs. Revisiones de mapeo de literatura



- Aunque los *mappings* tienen sentido de forma independiente, como medio de descubrir el potencial de un campo de investigación o su estado en un determinado momento, también pueden utilizarse para complementar una SLR
- Las revisiones de mapeo permiten contextualizar las revisiones sistemáticas de literatura dentro de una bibliografía más amplia e identificar las lagunas en la base de pruebas [10]
- Las técnicas de mapeo son útiles al principio de una revisión sistemática de la literatura como una herramienta de tormenta de ideas y contextualización [49]

Revisiones sistemáticas de literatura vs. Revisiones de mapeo de literatura



Mapping in Literature Review

+

Systematic Literature Review

=

Mejores Resultados

Debilidades de las revisiones de mapeo [10]

- Están limitadas en el tiempo y carecen de la síntesis y el análisis propios de las SLR
- Los estudios pueden caracterizarse a un nivel descriptivo amplio y, por tanto, simplificar en exceso el panorama o enmascarar una variación considerable (heterogeneidad) entre los estudios y sus resultados, dependiendo del grado de especificidad del proceso de codificación
- No suelen incluir un proceso de evaluación de la calidad, caracterizando los estudios únicamente en función del diseño del estudio

Scoping reviews

- Este tipo de revisión se ha definido y descrito en la literatura de muchas formas
- Para evitar confusiones se ha propuesto esta definición de *scoping review*
 - Se trata de un tipo de síntesis de la evidencia cuyo objetivo es identificar y mapear sistemáticamente la amplitud de la evidencia disponible sobre un tema, campo, concepto o cuestión concretos, a menudo con independencia de la fuente (es decir, investigación primaria, revisiones, evidencia no empírica) dentro de contextos particulares o a través de ellos. Las revisiones de alcance pueden aclarar conceptos o definiciones clave en la bibliografía e identificar características o factores clave relacionados con un concepto, incluidos los relacionados con la metodología de la investigación [50]

Scoping reviews [51]

- Es un tipo de revisión sistemática aplicada a describir la situación de un ámbito del conocimiento. Por tanto, es una clase de síntesis de la evidencia
- Se caracterizan por partir de preguntas de investigación amplias, bajo formas como las siguientes
 - ¿Cuáles son las principales características de la investigación en el ámbito de conocimiento X?
 - ¿Qué metodologías se usan en el campo X?
 - ¿Qué características y oportunidades de investigación se dan en el campo X?
 - ...
- Son adecuadas para
 - Tesis doctorales
 - Memorias de proyectos de investigación
 - Como primera investigación al inicio de un proyecto de media/larga duración

Scoping reviews [51]

- Análisis
 - Normalmente se utilizan dos clases de esquemas de análisis
 - Tablas de datos
 - Lista general de referencias
 - Lista(s) de características específicas (países, fuentes, métodos, etc.)
 - Resúmenes
 - Narrativos: unas 300 palabras por documento seleccionado
 - Estructurados en los mismos apartados
 - Objetivos
 - Resultados principales
 - Implicaciones
 - Temas
 - etc.

Scoping reviews [51]

- Síntesis
 - Misión
 - Proporcionar una síntesis descriptiva y a poder ser, configurativa o interpretativa, que aporte más que la mera suma de las partes
 - La síntesis ideal debe aportar las claves para interpretar los aspectos principales de un área de conocimiento en cuanto a paradigmas dominantes, corrientes principales y teorías, así como detectar tendencias y orientar nuevas investigaciones
 - Técnicas
 - Tablas para sintetizar los datos de forma que aporten resultados significativos
 - Resúmenes narrativos que presenten una síntesis narrativa global, evitando en la medida de lo posible meras descripciones para aportar una síntesis crítica, ya sea interpretativa o configurativa

Scoping reviews [51]

- Síntesis
 - Las tablas de extracción de datos son en sí mismas una forma de síntesis que pueden ampliarse con intersecciones entre ellas
 - Los resúmenes pueden aportar una síntesis narrativa organizada alrededor de
 - Temas: determinados inductiva o deductivamente
 - Evolución cronológica: cómo ha evolucionado un concepto
 - Metodologías: principales metodologías utilizadas y sus resultados
 - Comparación de líneas de investigación
 - Investigaciones que se oponen: líneas de resultados que muestran contradicciones
 - Investigaciones que apoyan una línea de desarrollo: unión de diferentes resultados de investigación que apoyan una misma línea teórica
 - Investigaciones diferentes que en realidad señalan los mismos resultados con terminologías diferentes

Limitaciones de las scoping reviews [52]

- En primer lugar, una revisión sistemática suele centrarse en una cuestión bien definida en la que pueden identificarse de antemano los diseños de estudio apropiados, mientras que un estudio de alcance se tiende a abordar temas más amplios en los que pueden aplicarse muchos diseños de estudio diferentes
- En segundo lugar, la revisión sistemática pretende dar respuesta a preguntas a partir de una gama de estudios de calidad evaluada, mientras que es menos probable que un estudio de alcance haya preguntas de investigación muy específicas ni, en consecuencia, una evaluación de la calidad de los estudios de los estudios incluidos

Mapping reviews y Scoping reviews no son el mismo tipo de revisiones sistemáticas [48]



- Aunque a veces se usan estos términos de forma intercambiable o complementaria (algunas definiciones tienden a utilizar los términos de que sugieren que el mapeo es un enfoque específico o viceversa), realmente se utilizan para describir diferentes tipos de síntesis y son, por tanto, diferentes tipos de revisiones sistemáticas [10, 53]
- Las *scoping reviews* pueden ser más exploratorias que los *mappings*, ya que no requieren un conjunto de códigos a priori para describir los datos y pueden recurrir a diversas fuentes de fuentes de información (investigación primaria, revisiones, pruebas no empíricas, etc.) en contextos concretos o a través de ellos. El enfoque puede ser más iterativo, inductivo (una teoría o marco desconocido que debe desarrollarse) o deductivo (una teoría o marco preexistente que debe ponerse a prueba) [50]
- En cambio, los *mappings* abordan cuestiones más amplias, utilizan una codificación predefinida y adoptan una estrategia de extracción de datos menos profunda [48]

Similitudes y diferencias entre Mapping reviews y Scoping reviews [48]



- Abordan preguntas de investigación amplias (de imagen global)
- Son propuestas metodológicas sistemáticas y transparentes para el localizar, extraer y analizar datos
- Se basan en el desarrollo de un protocolo predefinido
- Se soportan por una guía metodológica
- Pueden incluir una variedad de diferentes tipos de evidencias o focalizarse solo en un tipo de evidencia
- Tendencia más hacia la descripción que hacia la síntesis o el agrupamiento de evidencias
- Incluyen resúmenes descriptivos y numéricos



- Enfoque inductivo o deductivo
- Extracción de datos más detallada
- Enfoque más estrecho para una cuestión amplia
- Menos de 40-80 estudios
- Puede incluir procesos iterativos en la búsqueda, extracción y análisis de los datos
- Puede incluir análisis cualitativo

- Enfoque deductivo
- Extracción de datos de más alto nivel con categorías de codificación predefinidas
- Marco de codificación predefinido
- Enfoque más amplio para una cuestión amplia
- Generalmente más de 80 estudios
- Uso exhaustivo de elementos visuales para representar los resultados

3. Marcos metodológicos de referencia para la realización de revisiones sistemáticas de literatura

Características de una revisión sistemática [4]

- **Sistemática** significa que no es arbitraria: ni sesgada ni subjetiva, sino que, por el contrario, se ha examinado la mejor producción científica disponible utilizando las mejores fuentes de información
- **Completa** significa que se han usado sistemas de información de los que se presume que facilitan el acceso al grueso de la producción de calidad de una disciplina a nivel internacional; y que no se ha descartado ni se ha incluido nada sin seguir otros criterios que los que se han hecho explícitos
- **Explícita** implica que se dan a conocer tanto las fuentes utilizadas como los criterios de búsqueda y de selección y exclusión
- **Reproducible** al ser sistemática y explícita. Se permite que otros investigadores comprueben el trabajo y, si lo desean, seguir los pasos y contrastar los resultados obtenidos para determinar su exactitud o su grado de acierto

Marcos metodológicos para la realización de revisiones sistemáticas



- Principales marcos metodológicos de referencia para determinar los protocolos de búsqueda que se debe seguir en los diferentes tipos de revisiones sistemáticas
 - Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [54-58]
 - Search, Appraisal, Synthesis, and Analysis (SALSA) [10]
- Otros marcos
 - Protocol and Reporting result with Search, Appraisal, Synthesis, and Analysis framework, and develop (PSALSAR) [59]
 - ReSiste-CHS (Revisiones Sistematizadas en Ciencias Humanas y Sociales) [60]

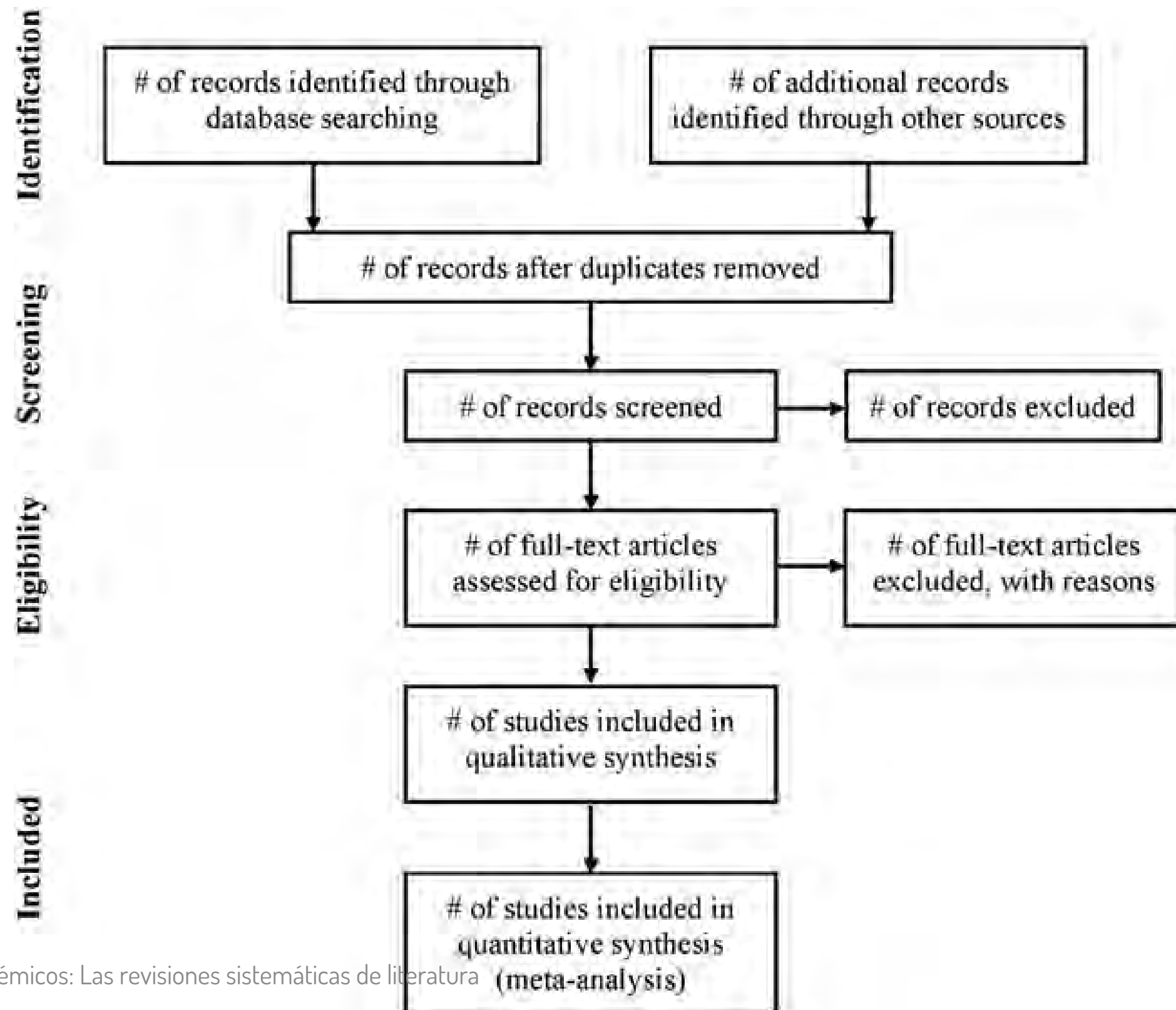
PRISMA (<http://www.prisma-statement.org/>)

- El objetivo del marco PRISMA es ayudar a los autores a mejorar la información de las revisiones sistemáticas y los meta-análisis
- PRISMA también puede ser útil para la evaluación crítica de las revisiones sistemáticas publicadas
- La declaración PRISMA consta de una lista de comprobación de 27 elementos y un diagrama de flujo con las fases de la revisión
- La lista de comprobación que se incluye en PRISMA no es un instrumento de evaluación de la calidad de una revisión sistemática
- Dos revisiones: PRISMA 2009 [54-56] y PRISMA 2020 [57, 58]

Lista de comprobación de PRISMA 2009 [55]

| Section/topic | # | Checklist item | Reported on Page # |
|------------------------------------|----|---|--------------------|
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | |
| Abstract | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | |
| Introduction | 3 | Describe the rationale for the review in the context of what is already known. | |
| Rationale | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | |
| Methods | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis. | |
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | |
| Results | | | |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome-level assessment (see Item 12). | |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group and (b) effect estimates and confidence intervals, ideally with a forest plot. | |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression). | |
| Discussion | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., health care providers, users, and policy makers). | |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review level (e.g., incomplete retrieval of identified research, reporting bias). | |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | |

Diagrama de flujo de PRISMA 2009 [55]



Lista de comprobación de PRISMA 2020 [57, 58]



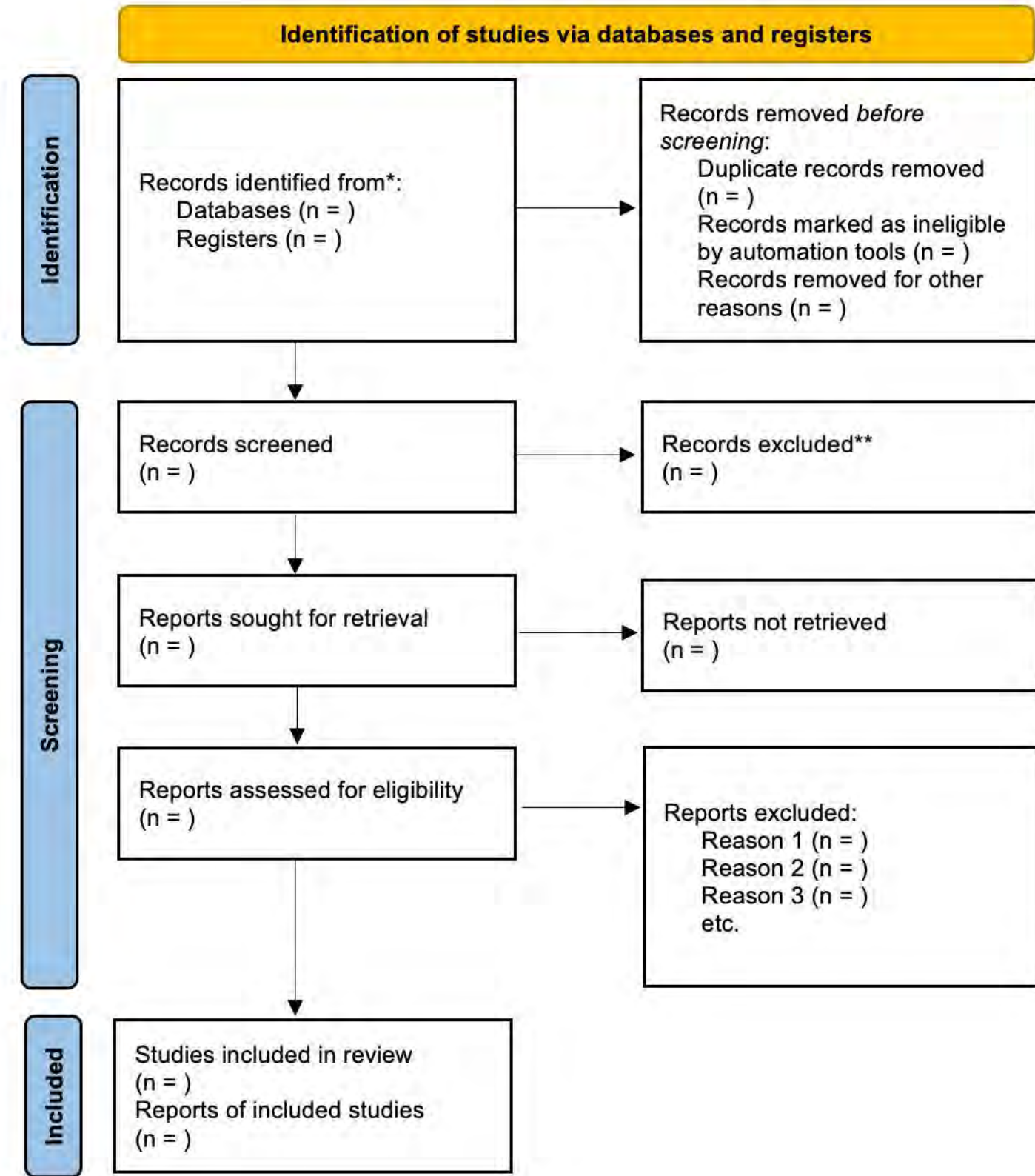
http://www.prisma-statement.org/documents/PRISMA_2020_checklist.docx

| Section and topic | Item # | Checklist item | Location where item is reported |
|-------------------------------|--------|--|---------------------------------|
| Title | | | |
| Title | 1 | Identify the report as a systematic review. | |
| Abstract | | | |
| Abstract | 2 | See the PRISMA 2020 for Abstracts checklist (table 2). | |
| Introduction | | | |
| Rationale | 3 | Describe the rationale for the review in the context of existing knowledge. | |
| Objectives | 4 | Provide an explicit statement of the objective(s) or question(s) the review addresses. | |
| Methods | | | |
| Eligibility criteria | 5 | Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses. | |
| Information sources | 6 | Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted. | |
| Search strategy | 7 | Present the full search strategies for all databases, registers and websites, including any filters and limits used. | |
| Selection process | 8 | Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process. | |
| Data collection process | 9 | Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process. | |
| Data items | 10a | List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect. | |
| | 10b | List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information. | |
| Study risk of bias assessment | 11 | Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process. | |
| Effect measures | 12 | Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results. | |
| Synthesis methods | 13a | Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)). | |
| | 13b | Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions. | |
| | 13c | Describe any methods used to tabulate or visually display results of individual studies and syntheses. | |
| | 13d | Describe any methods used to synthesise results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used. | |
| | 13e | Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression). | |
| | 13f | Describe any sensitivity analyses conducted to assess robustness of the synthesised results. | |
| Reporting bias assessment | 14 | Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases). | |
| Certainty assessment | 15 | Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome. | |
| Results | | | |
| Study selection | 16a | Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram (see fig 1). | |
| | 16b | Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded. | |
| Study characteristics | 17 | Cite each included study and present its characteristics. | |

| | | | |
|---|-----|--|--|
| Risk of bias in studies | 18 | Present assessments of risk of bias for each included study. | |
| Results of individual studies | 19 | For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots. | |
| Results of syntheses | 20a | For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies. | |
| | 20b | Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect. | |
| | 20c | Present results of all investigations of possible causes of heterogeneity among study results. | |
| | 20d | Present results of all sensitivity analyses conducted to assess the robustness of the synthesised results. | |
| Reporting biases | 21 | Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed. | |
| Certainty of evidence | 22 | Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed. | |
| Discussion | | | |
| Discussion | 23a | Provide a general interpretation of the results in the context of other evidence. | |
| | 23b | Discuss any limitations of the evidence included in the review. | |
| | 23c | Discuss any limitations of the review processes used. | |
| | 23d | Discuss implications of the results for practice, policy, and future research. | |
| Other information | | | |
| Registration and protocol | 24a | Provide registration information for the review, including register name and registration number, or state that the review was not registered. | |
| | 24b | Indicate where the review protocol can be accessed, or state that a protocol was not prepared. | |
| | 24c | Describe and explain any amendments to information provided at registration or in the protocol. | |
| Support | 25 | Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review. | |
| Competing interests | 26 | Declare any competing interests of review authors. | |
| Availability of data, code, and other materials | 27 | Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review. | |

Diagrama de flujo de PRISMA 2020 [57, 58]

<http://www.prisma-statement.org/PRISMAStatement/FlowDiagram>

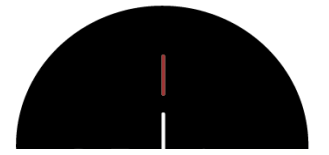


*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/register).

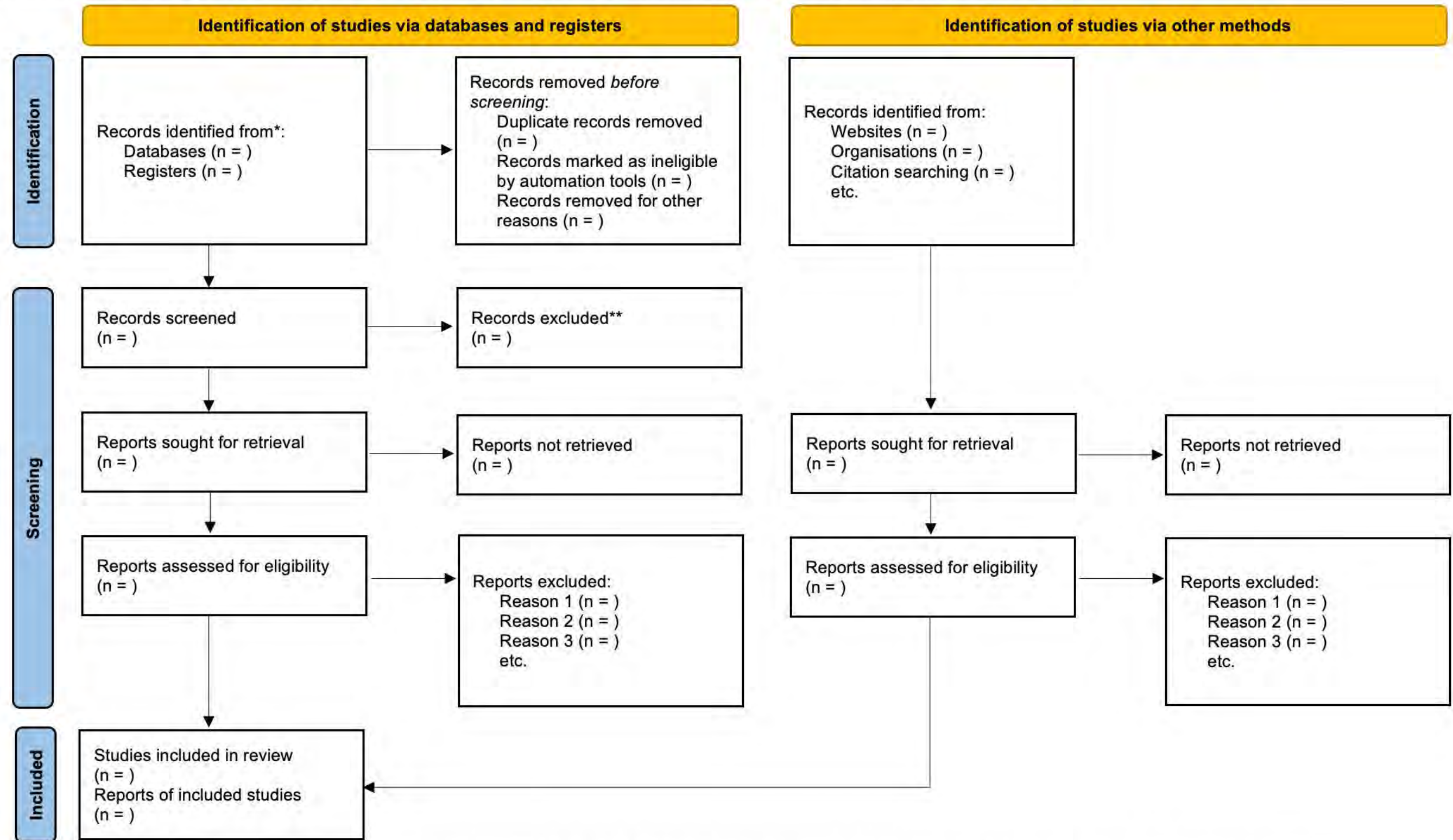
**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Diagrama de flujo de PRISMA 2020 [57, 58]

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources



<http://www.prisma-statement.org/PRISMAStatement/FlowDiagram>



*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Diagrama de flujo de PRISMA 2020 [57, 58]

<http://www.prisma-statement.org/PRISMAStatement/FlowDiagram>

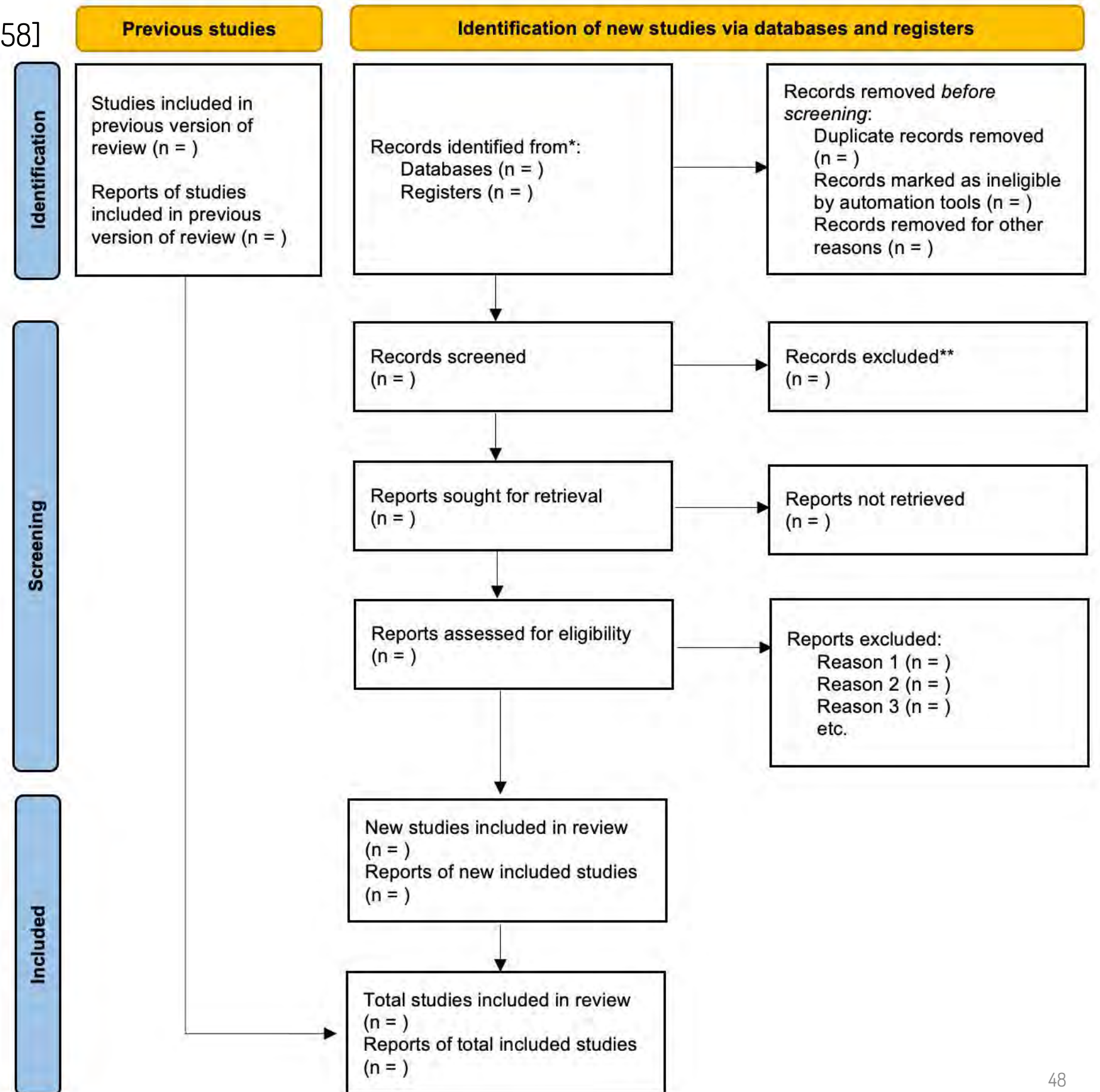


Diagrama de flujo de PRISMA 2020 [57, 58]

<http://www.prisma-statement.org/PRISMAStatement/FlowDiagram>

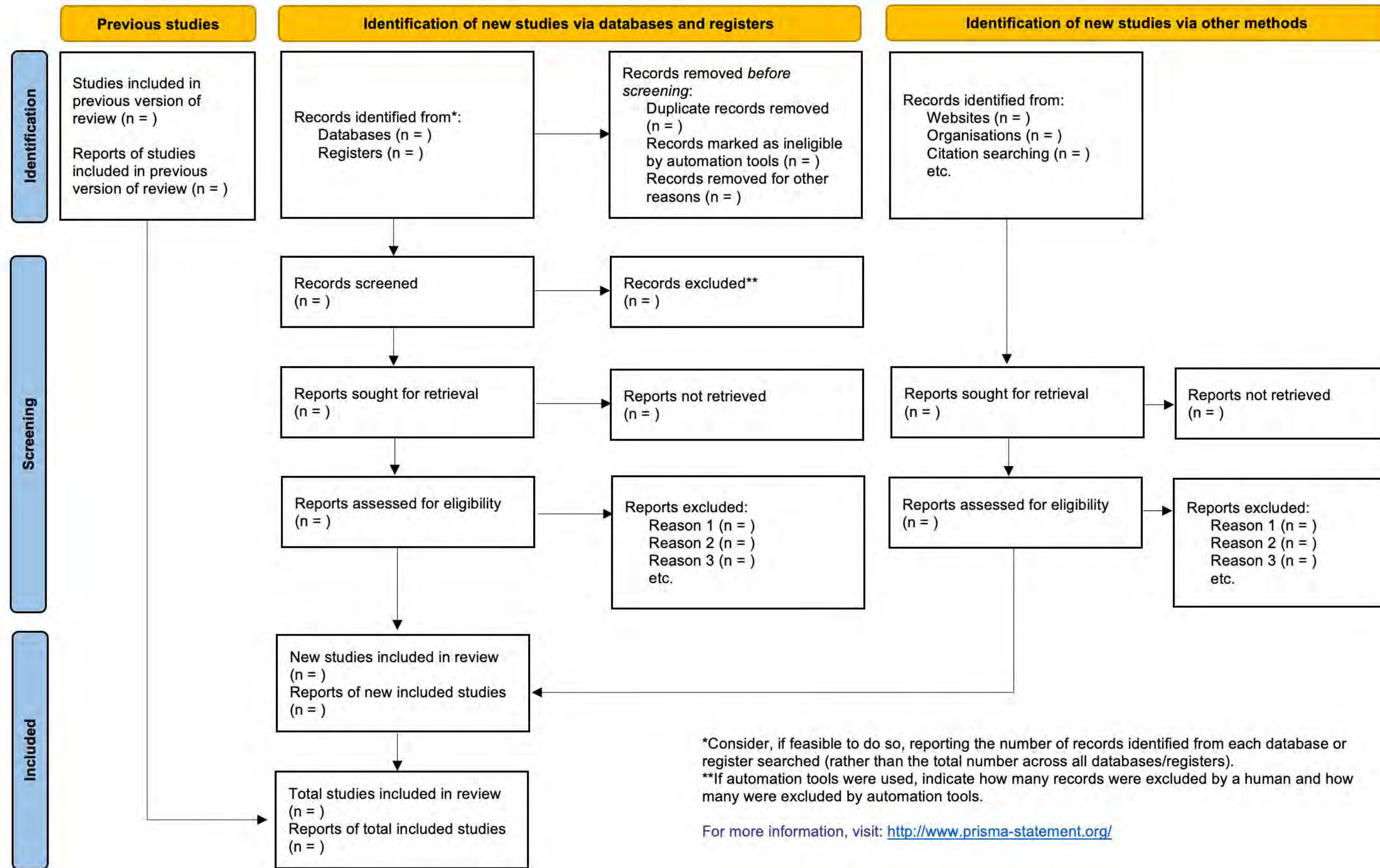


Diagrama de flujo de PRISMA 2020 [57, 58]

<http://www.prisma-statement.org/PRISMAStatement/FlowDiagram>

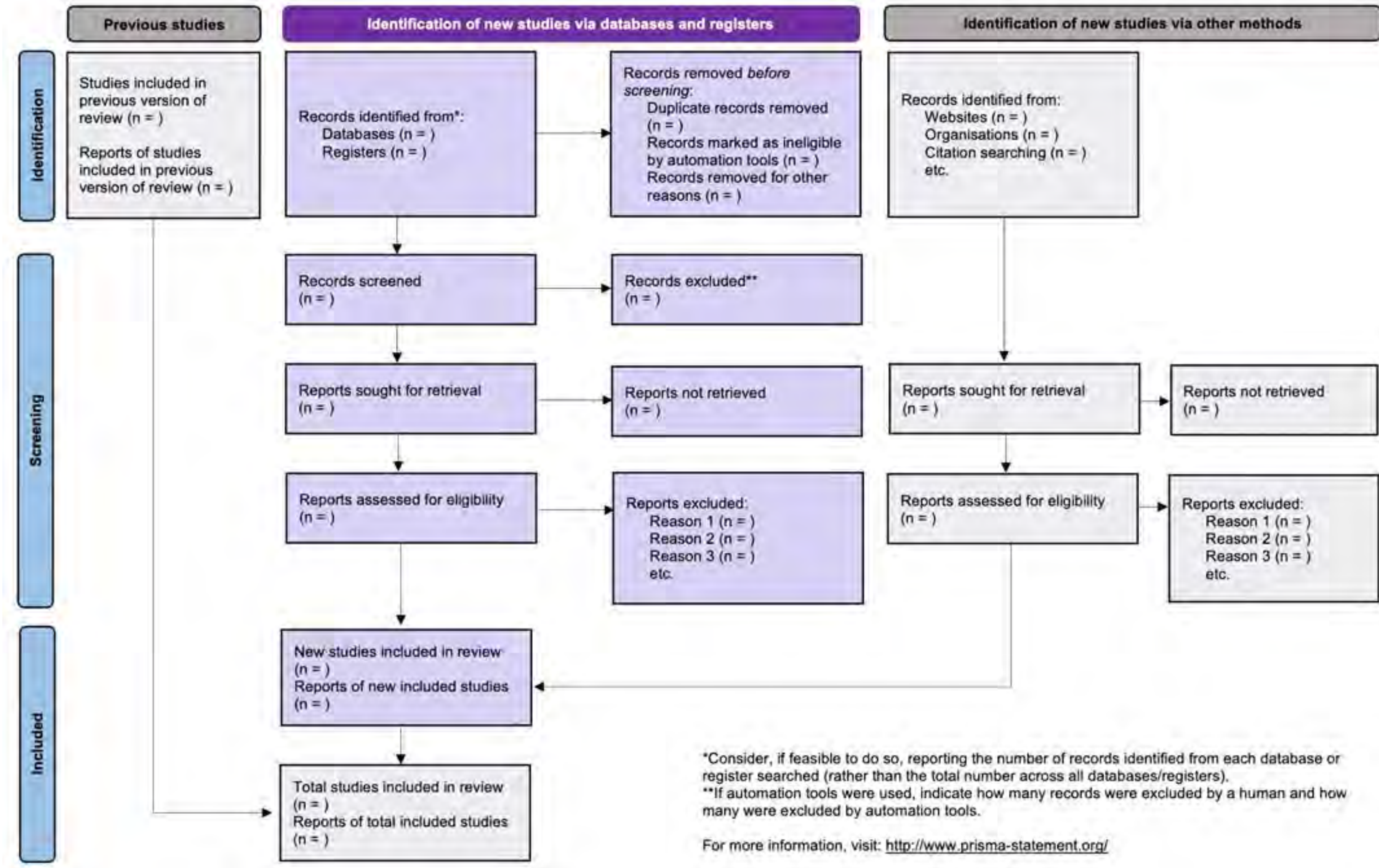


Diagrama de flujo de PRISMA 2020

- Existe una herramienta para realizar los diagramas de flujo según la actualización de 2020
- <https://www.eshackathon.org/software/PRISMA2020.html>

SALSA [10]

- Permite analizar si una metodología de análisis garantiza las cuatro características (sistemática, completa, explícita y reproducible)

Search
Appraisal
Synthesis
Analysis

- **Search**

- Se refiere a cómo se lleva a cabo la búsqueda de los trabajos que serán objeto de revisión
- El protocolo de revisión debe establecer que la búsqueda se realice utilizando las bases de datos de referencia, como WoS o Scopus, por ejemplo
- Se refiere también a que la búsqueda debe hacerse con criterios transparentes y bien definidos, tanto de inclusión como de exclusión de los trabajos a analizar. Normalmente, estos criterios se expresarán con la elección de las palabras clave, las ecuaciones de búsqueda correspondientes y posiblemente aplicando filtros de algún tipo. Por ejemplo, documentos publicados en los últimos 5 o 10 años, o en determinados idiomas, etc.
- El objetivo final de esta fase es conseguir un banco de artículos formado por un número variable que puede oscilar entre unas decenas y un centenar, dependiendo del tipo de estudio, los objetivos y los criterios de selección y exclusión aplicados

SALSA [10]

- **Appraisal**

- Esta fase se refiere a la evaluación de los trabajos obtenidos a través de las diversas búsquedas, con qué criterios se considerarán las contribuciones de cada uno de los componentes del banco de artículos inicial para decidir si finalmente formarán parte de la revisión
- Suelen utilizarse criterios que establecen un doble filtro: criterios pragmáticos, como la fecha de publicación de los trabajos, los ámbitos geográficos o temático, etc.; y criterios de calidad de los trabajos, como la calidad de la investigación, las metodologías utilizadas, los resultados, etc.
- En esta fase servirá para excluir, por tanto, los trabajos del corpus final y asegurarse que los que formen parte de la revisión tienen suficiente calidad y pertinencia

- **Synthesis y Analysis**

- Estas dos fases se refieren a aquellas que permitirán reunir y comparar los resultados de cada uno de los componentes del banco de artículos
- En el caso de investigaciones cuantitativas, se hará mediante técnicas estadísticas
- En el caso de investigaciones cualitativas, se puede presentar en diversas formas, entre ellas, la revisión o la narración crítica y el estado de la cuestión
- *Synthesis* se refiere a representación sintética de cada trabajo en base a la extracción de las características de cada artículo considerado. En el caso de las investigaciones cuantitativas se referirá a aspectos numérico-estadísticos mediante técnicas de metasíntesis. En el caso de investigaciones de tipo cualitativo se pueden utilizar tablas o fichas para sintetizar las dimensiones comunes con las que se han estudiado los diferentes artículos o trabajos seleccionados
- *Analysis* se refiere a la descripción y valoración global de los resultados encontrados. En el caso de los estados de la cuestión permite presentar un discurso global sobre la situación del campo de estudio considerado a través del análisis de los resultados

Tipos de revisión caracterizados usando el marco SALSA [10]



| Label | Description | Methods used (SALSA) | | | |
|--|--|---|--|---|--|
| | | Search | Appraisal | Synthesis | Analysis |
| Critical review | Aims to demonstrate writer has extensively researched literature and critically evaluated its quality. Goes beyond mere description to include degree of analysis and conceptual innovation. Typically results in hypothesis or model | Seeks to identify most significant items in the field | No formal quality assessment. Attempts to evaluate according to contribution | Typically narrative, perhaps conceptual or chronological | Significant component: seeks to identify conceptual contribution to embody existing or derive new theory |
| Literature review | Generic term: published materials that provide examination of recent or current literature. Can cover wide range of subjects at various levels of completeness and comprehensiveness. May include research findings | May or may not include comprehensive searching | May or may not include quality assessment | Typically narrative | Analysis may be chronological, conceptual, thematic, etc. |
| Mapping review/ systematic map | Map out and categorize existing literature from which to commission further reviews and/or primary research by identifying gaps in research literature | Completeness of searching determined by time/scope constraints | No formal quality assessment | May be graphical and tabular | Characterizes quantity and quality of literature, perhaps by study design and other key features. May identify need for primary or secondary research |
| Meta-analysis | Technique that statistically combines the results of quantitative studies to provide a more precise effect of the results | Aims for exhaustive, comprehensive searching. May use funnel plot to assess completeness | Quality assessment may determine inclusion/exclusion and/or sensitivity analyses | Graphical and tabular with narrative commentary | Numerical analysis of measures of effect assuming absence of heterogeneity |
| Mixed studies review/mixed methods review | Refers to any combination of methods where one significant component is a literature review (usually systematic). Within a review context it refers to a combination of review approaches for example combining quantitative with qualitative research or outcome with process studies | Requires either very sensitive search to retrieve all studies or separately conceived quantitative and qualitative strategies | Requires either a generic appraisal instrument or separate appraisal processes with corresponding checklists | Typically both components will be presented as narrative and in tables. May also employ graphical means of integrating quantitative and qualitative studies | Analysis may characterise both literatures and look for correlations between characteristics or use gap analysis to identify aspects absent in one literature but missing in the other |
| Overview | Generic term: summary of the [medical] literature that attempts to survey the literature and describe its characteristics | May or may not include comprehensive searching (depends whether systematic overview or not) | May or may not include quality assessment (depends whether systematic overview or not) | Synthesis depends on whether systematic or not. Typically narrative but may include tabular features | Analysis may be chronological, conceptual, thematic, etc. |
| Qualitative systematic review/qualitative evidence synthesis | Method for integrating or comparing the findings from qualitative studies. It looks for 'themes' or 'constructs' that lie in or across individual qualitative studies | May employ selective or purposive sampling | Quality assessment typically used to mediate messages not for inclusion/exclusion | Qualitative, narrative synthesis | Thematic analysis, may include conceptual models |

Tipos de revisión caracterizados usando el marco SALSA [10]



| Label | Description | Methods used (SALSA) | | | |
|------------------------------|---|--|---|---|---|
| | | Search | Appraisal | Synthesis | Analysis |
| Rapid review | Assessment of what is already known about a policy or practice issue, by using systematic review methods to search and critically appraise existing research | Completeness of searching determined by time constraints | Time-limited formal quality assessment | Typically narrative and tabular | Quantities of literature and overall quality/direction of effect of literature |
| Scoping review | Preliminary assessment of potential size and scope of available research literature. Aims to identify nature and extent of research evidence (usually including ongoing research) | Completeness of searching determined by time/scope constraints. May include research in progress | No formal quality assessment | Typically tabular with some narrative commentary | Characterizes quantity and quality of literature, perhaps by study design and other key features. Attempts to specify a viable review |
| State-of-the-art review | Tend to address more current matters in contrast to other combined retrospective and current approaches. May offer new perspectives on issue or point out area for further research | Aims for comprehensive searching of current literature | No formal quality assessment | Typically narrative, may have tabular accompaniment | Current state of knowledge and priorities for future investigation and research |
| Systematic review | Seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review | Aims for exhaustive, comprehensive searching | Quality assessment may determine inclusion/exclusion | Typically narrative with tabular accompaniment | What is known; recommendations for practice. What remains unknown; uncertainty around findings, recommendations for future research |
| Systematic search and review | Combines strengths of critical review with a comprehensive search process. Typically addresses broad questions to produce 'best evidence synthesis' | Aims for exhaustive, comprehensive searching | May or may not include quality assessment | Minimal narrative, tabular summary of studies | What is known; recommendations for practice. Limitations |
| Systematized review | Attempt to include elements of systematic review process while stopping short of systematic review. Typically conducted as postgraduate student assignment | May or may not include comprehensive searching | May or may not include quality assessment | Typically narrative with tabular accompaniment | What is known; uncertainty around findings; limitations of methodology |
| Umbrella review | Specifically refers to review compiling evidence from multiple reviews into one accessible and usable document. Focuses on broad condition or problem for which there are competing interventions and highlights reviews that address these interventions and their results | Identification of component reviews, but no search for primary studies | Quality assessment of studies within component reviews and/or of reviews themselves | Graphical and tabular with narrative commentary | What is known; recommendations for practice. What remains unknown; recommendations for future research |

PSALSAR [59]

- Combina PRISMA y SALSA para proponer 6 pasos

| | Steps | Outcomes | Methods | |
|----------------------|----------------------------|-------------------------------|--|---|
| PSALSAR Framework | Protocol | Defined study scope | Only the mountain ecosystem and its various ecosystem services | |
| | Search | Define the search strategy | Searching strings | |
| | Appraisal | Search studies | | Search databases |
| | | Selecting studies | | Defining inclusion and exclusion criteria |
| | Synthesis | Quality assessment of studies | | Quality criteria |
| | | Extract data | | Extraction template |
| Analysis | Categorize the data | | Categorize the data on the iterative definition and ready it for further analysis work | |
| | Data analysis | | Quantitative categories, description, and narrative analysis of the organized data | |
| Report | Result and discussion | | Based on the analysis, show the trends, identify gap and result comparison | |
| | Conclusion | | Deriving conclusion and recommendation | |
| | Report writing | | PRISMA methodology | |
| | Journal article production | | Summarizing the report result for the larger public | |

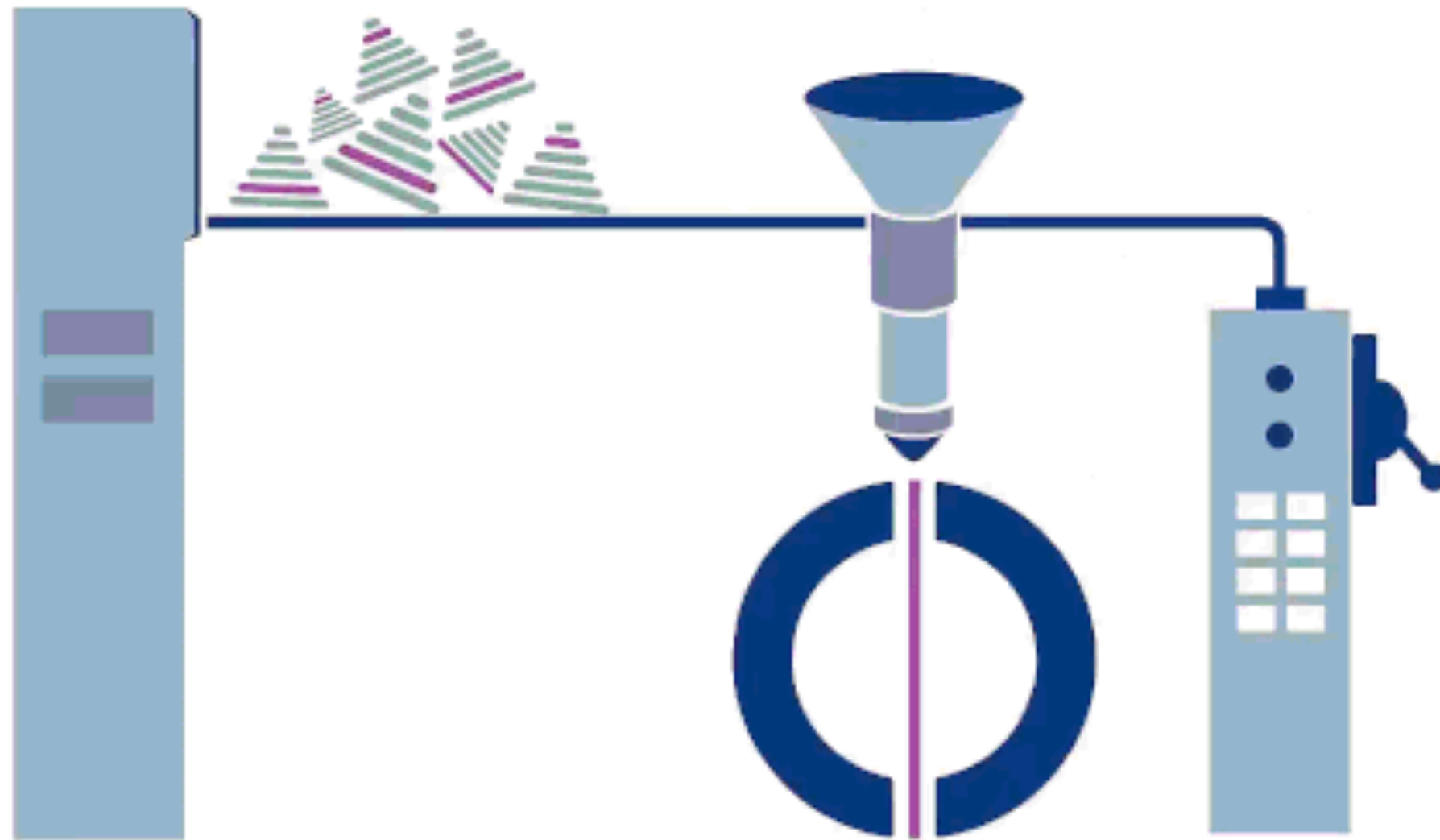
ReSiste-CHS [60]

- Su contexto son los estados de la cuestión y los marcos conceptuales destinados a apoyar nuevos proyectos y en concreto, trabajo de fin de máster, tesis doctorales y memorias para obtener financiación para proyectos de investigación
- Se centra en el ámbito de las Ciencias Humanas y Sociales y en investigaciones cualitativas o conceptuales
- Adopta el Framework SALSA para determinar las fases principales, centrandose sus propuestas específicas en las dos primeras fases: Búsqueda y Evaluación, ya que son las proveen la base de la evidencia
- Adopta los principios generales de las Ciencias Humanas y Sociales para las otras dos fases: Análisis y Síntesis
- Contempla una fase adicional, la Presentación, que es una extensión de la última, la Síntesis, con el fin de poner énfasis en la conveniencia de complementar el resultado final con tablas y diagramas

Fases de una revisión sistemática [31, 61]

- Planificar la revisión sistemática
 - Identificar la necesidad de la revisión
 - Formular las preguntas de la investigación
 - Definir el protocolo de la revisión
 - Validar el protocolo de la revisión
- Hacer la revisión sistemática
 - Identificar la investigación relevante
 - Seleccionar los estudios primarios
 - Evaluar la calidad de los estudios primarios
 - Extraer los datos relevantes
- Reportar la revisión sistemática
 - Sintetizar los datos extraídos
 - Redactar el informe de la revisión
 - Validar el informe de la revisión

Fases de una revisión sistemática

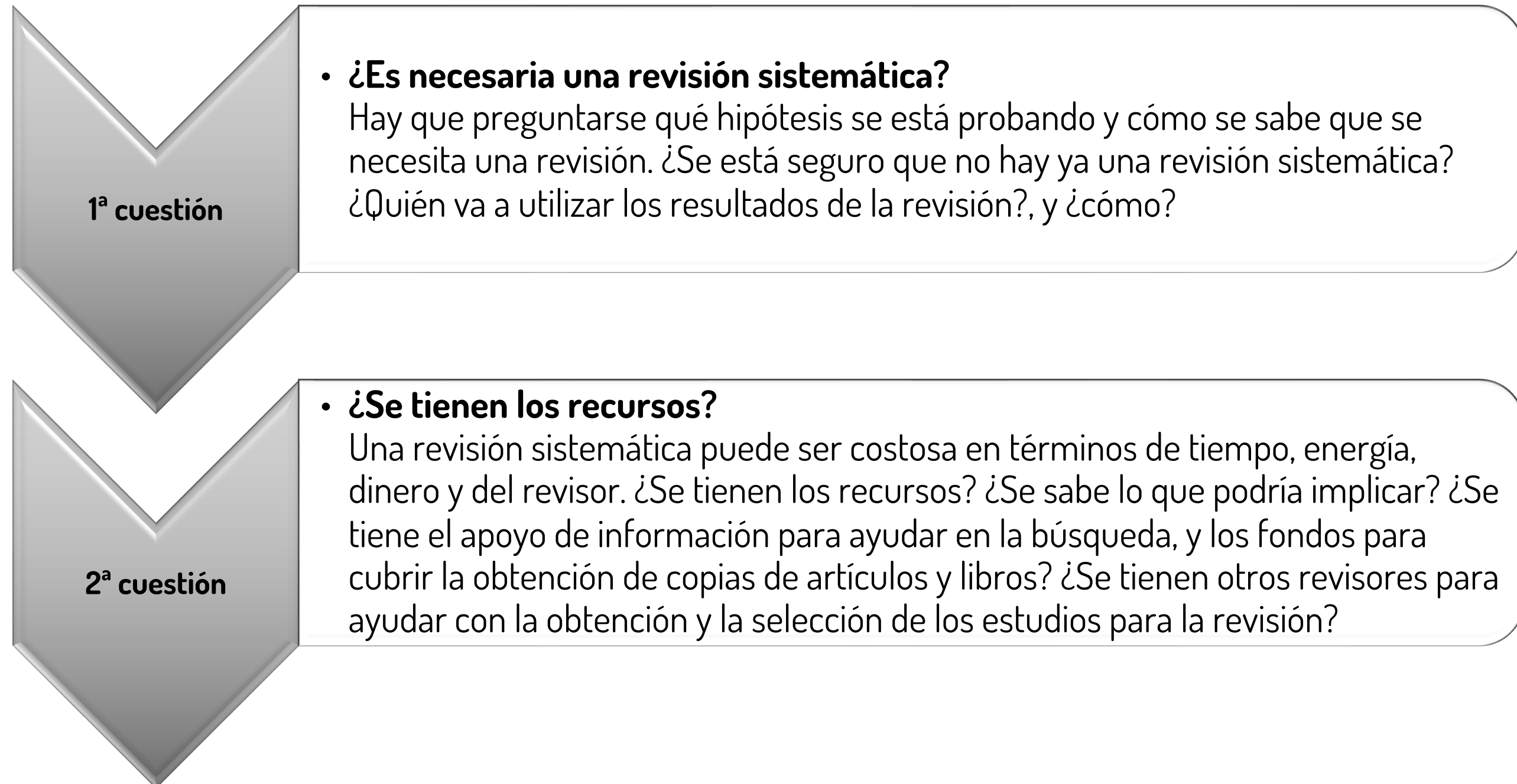


By Jacknunn - Own work, CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=49168037>



4. Fase de planificación

Identificar la necesidad de la revisión – Cuestiones previas a la realización de una revisión sistemática



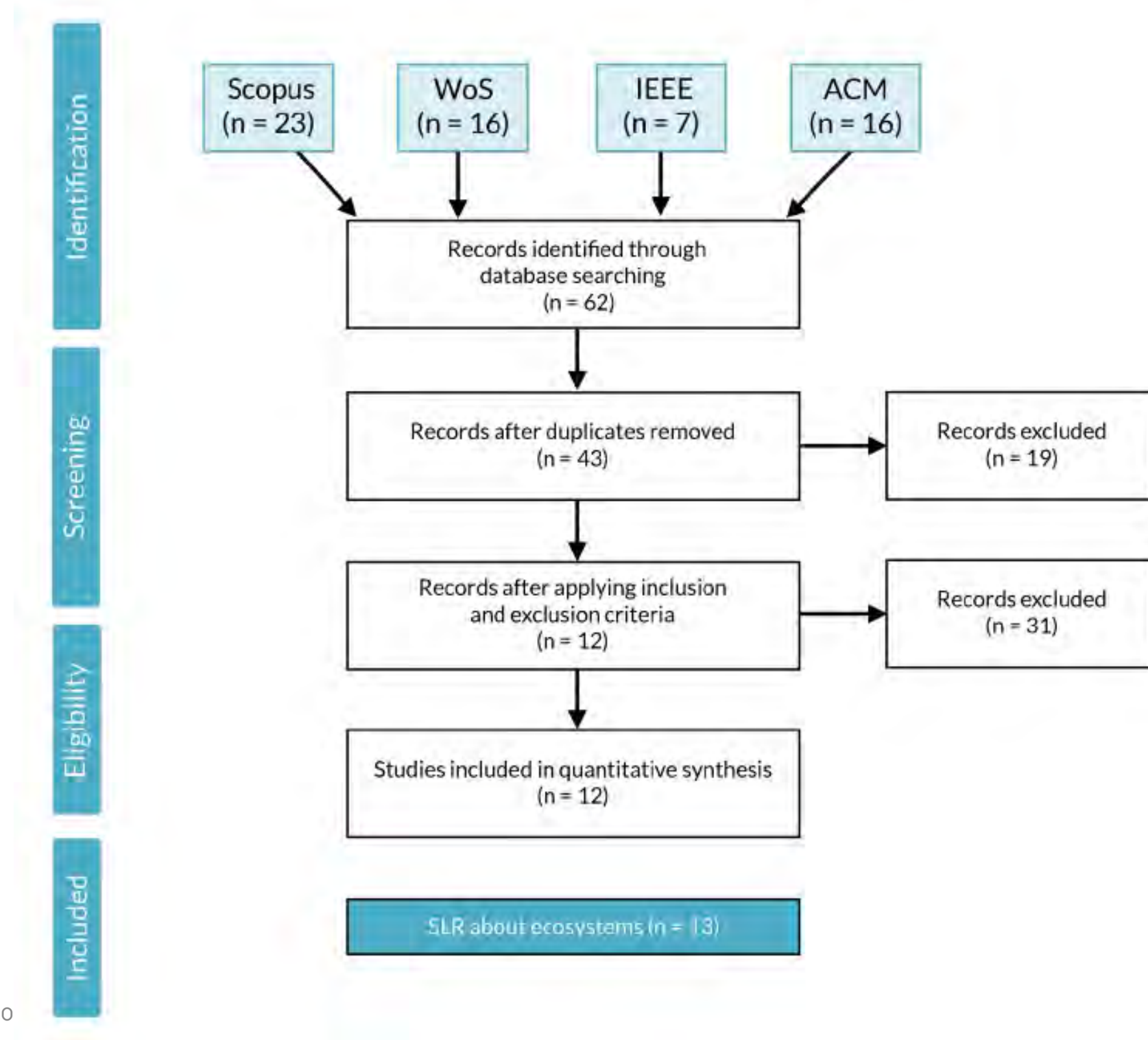
¿Se sigue con la revisión sistemática?

- No tiene sentido hacer una revisión sistemática que ya se haya hecho antes, salvo que [62]
 - Sea evidente que las anteriores revisiones sistemáticas están sesgadas
 - Estén significativamente anticuadas, por ejemplo, si se han publicado nuevos estudios desde que se completó la revisión existente
- **Es importante comenzar cualquier nueva revisión mediante la búsqueda de revisiones sistemáticas existentes**
- **Si se encuentran varios trabajos de revisión, debe invertirse el tiempo y el esfuerzo necesario para analizar si los aportes de estas revisiones requieren o no de un nuevo proceso de revisión sistemática [42]**

Estudio de las revisiones sistemáticas existentes [42]

- MQ1. How many studies were published over the years?
- MQ2. Who are the most active authors in the area?
- MQ3. What type of papers are published?
- MQ4. In which sources appear this kind of studies?
- MQ5. Which are the most common databases used in this kind of studies?
- MQ6. Which search terms are used to define the search string in this kind of studies?
- MQ7. In which domains are the studies focused?
- MQ8. Which years cover the review and mapping studies?
- MQ9. What type of review are published?

Estudio de las revisiones sistemáticas existentes [42]



Otros aspectos para tener en cuenta para decidir continuar con la revisión sistemática y qué tipo de revisión hacer



- ¿Cuál es el alcance de la revisión sistemática?
- ¿Qué tiempo se puede invertir?
- ¿Qué beneficios se esperan?
- ¿Dónde se quiere publicar la revisión?

Formular las preguntas de investigación

- El propósito de una revisión sistemática es identificar las lagunas de conocimiento y las necesidades de investigación en un campo o área concreta
- Esto requiere una clara especificación del área del problema y una revisión crítica de la literatura dentro de ese dominio, con el fin de presentar una adecuada línea argumental que identifique las lagunas de conocimientos y las necesidades de investigación que deben ser abordadas

Preguntas de investigación

- Al comienzo de la revisión es necesario especificar claramente las preguntas que esta tiene como objetivo responder
- Aunque las revisiones sistemáticas a menudo tienen como objetivo responder a preguntas individuales, o probar una sola hipótesis, a veces las cuestiones estratégicas hacen que el campo de preguntas sea mucho más amplio y puede ser necesario trabajar para identificar cuál es la pregunta o preguntas más probables que será preciso responder

Preguntas de investigación

- Se debe llevar a cabo un proceso de reflexión previo a comenzar la revisión, tras el cual viene una redefinición de las cuestiones
 - Hay que evitar preguntas en las revisiones sistemáticas que sean muy generales y con poca profundización en los temas
 - Por ello es tan importante el refinamiento de las mismas, para que se conviertan en preguntas mucho más específicas que engloben esos matices genéricos
 - El objetivo es realizar una revisión sistemática mucho más depurada para evitar resultados generales que serían fáciles de obtener con una revisión narrativa de la bibliografía

Ejemplo: Preguntas de investigación para un mapping [63]

MQ1: How many studies were published over the years?

MQ2: Who are the most active authors in the area?

MQ3: Which publication vehicles are the main targets for research production in the area?

MQ4: In which domains has pragmatic interoperability been applied? (e.g. Bioinformatics, Telemedicine, Business)

MQ5: Which type of computational support has pragmatic interoperability techniques provided (e.g. framework, software architecture, etc.)?

MQ6: Which definitions of pragmatic interoperability have been used?

Ejemplo: Preguntas de investigación para una SLR [63]

RQ1: Which solutions have been used to enhance pragmatic interoperability?

RQ2: How did the proposed solutions address pragmatic interoperability?

Definir el protocolo de la revisión

- El rigor y la fiabilidad de las revisiones sistemáticas se basan, en gran parte, en la planificación previa y la documentación de un enfoque metódico para su realización, es decir, en un protocolo
- Un protocolo de revisión sistemática es importante por varias razones [56]
 1. Permite planificar cuidadosamente y, por lo tanto, anticiparse a los posibles problemas
 2. Permite documentar explícitamente lo que se ha planeado antes de comenzar su revisión, permitiendo a otros comparar el protocolo y la revisión completada (es decir, identificar la información selectiva), replicar los métodos de revisión si se desea, y juzgar la validez de los métodos planificados
 3. Evita la toma de decisiones arbitrarias con respecto a los criterios de inclusión y la extracción de datos
 4. Puede reducir la duplicación de esfuerzos y mejorar la colaboración

Definición de “Protocolo de revisión sistemática”

En el contexto de las revisiones sistemáticas y los meta-análisis, un protocolo es un documento que presenta una "hoja de ruta" científica explícita de una revisión sistemática planificada y no iniciada. El protocolo detalla el enfoque metodológico y analítico racional y planificado de la revisión [56]

Protocolo para realizar una revisión sistemática

- Los pasos principales para llevar a cabo una revisión sistemática se han extraído de la asistencia sanitaria [64] y se pueden resumir [65]
 - Definir los términos de búsqueda
 - Identificar las bases de datos y motores de búsqueda, así como revistas que pueden deber accederse manualmente, y consultar con los términos de búsqueda seleccionados
 - Decidir y aplicar, filtros para la inclusión y la exclusión
 - Asegurarse de que los artículos resultantes son representativos, repitiendo el proceso de filtrado
- Se pueden usar variaciones de este protocolo
- Cualquiera que sea el protocolo utilizado, tiene que ser cuidadosamente documentado para ser transparente
 - Otros investigadores deben ser capaces de seguir los mismos procedimientos y obtener los mismos resultados
 - Esto ayudará en gran medida su validez externa

Ejemplos de las secciones de un protocolo [64]

Title

Protocol

- Background
- Objectives
- Methods
- Criteria for selecting studies for this review
- Search methods for identification of studies
- Data collection and analysis

Appendices

Information

- Authors
- Contributions of authors
- Sources of support
- Declarations of interest
- Acknowledgements

References

- Additional references*

Figures and Tables

Elementos principales a establecer en la definición del protocolo



- Preguntas de investigación (incluir versión definitiva)
- Marco temporal
- Ámbito de la revisión
- Criterios de inclusión y exclusión
- Criterios de calidad
- Fuentes de datos
- Términos de búsqueda
- Ecuación de búsqueda canónica

Marco temporal

- El marco temporal debe ajustarse para satisfacer el objetivo buscado, pero con unas miras hacia la eficiencia del proceso
- A veces se plantea como un criterio de exclusión
- Esta decisión se va a traducir en criterios de restricción a la hora de ejecutar las búsquedas en las bases de datos seleccionadas

Ámbito de la revisión

- Descomponer las preguntas de investigación para responder **¿quién?**, **¿qué?**, y **¿cómo?**, puede ayudar a identificar los elementos fundamentales de cada pregunta de investigación [66]
- Es útil utilizar una estructura formal para centrar la pregunta y así poder descomponerla en los conceptos que la componen
- Hay varios marcos que se pueden utilizar (como PICO – Population, Intervention, Comparison, Outcome [67]; SPIDER – Sample, Phenomenon of Interest, Design, Evaluation, Research type [68]; SPICE – Setting, Perspective, Intervention/Interest, Comparison, Evaluation [69]; CIMO – Context-Intervention-Mechanisms-Outcomes [70]), pero el más utilizado es el marco **PICOC** (Population, Intervention, Comparison, Outcome, Context) [62]
- El marco PICOC se aplica a cada paso de la revisión sistemática

Ámbito de la revisión



| | |
|--|---|
| <i>Population</i> | Who or what is the problem or situation you are dealing with? In a human population, for example, which age, sex, socioeconomic or ethnic groups are involved? What are the technical terms, synonyms, and related terms? |
| <i>Intervention</i> OR <i>Exposure</i> | In what ways are you considering intervening in the situation? What sort of options do you have for tackling the problem? For example, this could be an educational intervention such as online tutorials on plagiarism (population = undergraduate students). NB: For non-intervention studies you may find it helpful to replace Intervention (a planned procedure) with Exposure (an unintentional occurrence or happening). For example, exposure to radio waves from mobile phone transmitters. |
| <i>Comparison</i> | What is the alternative? This is optional. For when you wish to consider, for example, the effect of two or more interventions, comparing their outcomes possibly in terms of what they deliver and/or cost. So you may want information on the relative merits of: <ul style="list-style-type: none">• buses versus trams for urban congestion;• natural versus chemical methods of agricultural pest control;• surgery versus drugs for an illness. |
| <i>Outcome(s)</i> | How is it measured? This may be more difficult to identify: you have a technical terminology for your problem and a range of management options, but what do you want to achieve? This stage does, however, focus your mind on what your desired outcome(s) might be and how you will assess the impact - what you are going to measure and how. |
| <i>Context</i> | What is the particular context of your question? Are you looking at specific countries/areas/settings? |

Ámbito de la revisión

- Population (P) ¿Quién?
- Intervention (I) ¿Qué? ¿Cómo?
- Comparison (C) ¿Con qué comparar?
- Outcomes (O) ¿Qué se busca conseguir/mejorar?
- Context (C) ¿En qué tipo de organización y bajo qué circunstancias?

Ejemplo PICOC [32]

Population (P): The target group for the investigation: Software architectures

Intervention (I): specifies the investigation aspects or issues of interest for the researchers: provide support or analyze HCI / HMI processes

Comparison (C): the aspect of the investigation with which the intervention is being compared to. No comparison intervention has been planned

Outcomes (O): the effect of the intervention: Software Architectures proposals and real-world experiences

Context(C): the setting or environment of the investigation: environments related to HCI / HMI (in the industry, academia, etc.)

Ejemplo PICOC [71]

| Población <i>Population</i> <i>P</i> | Intervención <i>Intervention</i> <i>I</i> | Comparación <i>Comparison</i> <i>C</i> | Resultados <i>Outcomes</i> <i>O</i> | [Contexto] <i>[Context]</i> <i>[C]</i> |
|---|---|---|--|---|
| Literatura gris científica (Tesis) | Difusión de tesis a través de repositorios institucionales en acceso abierto | Tesis que no están en acceso abierto | Aumento de visibilidad y de impacto de las tesis en acceso abierto | Universidad de Salamanca. 2006-2010 |
| Literatura gris científica (Tesis) | Mandato de acceso abierto las Instituciones a partir de una fecha | Tesis que no estaban sujetas a mandato de esas mismas instituciones | Aumento de visibilidad y de impacto de las tesis en acceso abierto por mandato institucional | Universidad de Salamanca. 2008-2010 |
| Repositorios institucionales | Implementación de herramientas en los repositorios para lograr la interoperabilidad | Comparación entre varios repositorios midiendo la relación entre interoperabilidad y grado de visibilidad | Los repositorios más interoperables aumentan su visibilidad | Ámbito internacional |

Ejemplo PICOC [42]

- Population (P): systematic literature reviews and mappings
- Intervention (I): conduct a systematic literature review about software architecture and model driven engineering in technological ecosystems
- Comparison (C): no comparison
- Outputs (O): the systematic reviews and mappings about technological ecosystems
- Context (C): contexts related to technological and software ecosystems

Criterios de inclusión y exclusión

- Después de definir las cuestiones de investigación y los objetivos, el siguiente paso en una revisión sistemática de la literatura es definir los criterios de inclusión y exclusión de los estudios
- Es importante definir tanto unos como otros, aunque muchas veces sean la expresión antagónica de un concepto, pero de esta manera se puede asignar un criterio de aceptación o de rechazo a cada artículo del conjunto de datos que se esté manejando

Criterios de inclusión y exclusión

- El objetivo de estos criterios es descartar los documentos que hayan sido recuperados en la fase de búsqueda, pero que carecen de las condiciones mínimas establecidas por los objetivos de la revisión
- Se espera que formen parte del conjunto de documentos solo aquellos que lo merezcan en base a estos dos aspectos
 - **Criterios formales**, como los referidos al tipo de documento, la accesibilidad al texto completo, su licencia de uso, el idioma, la zona geográfica, la fecha de publicación, el proceso de revisión, etc.
 - **Criterios de adecuación de los documentos encontrados a los temas y objetivos de la revisión**, ya que pueden haberse producido falsos positivos

Criterios de inclusión y exclusión. Ejemplo [63]

- IC1: The papers proposed a pragmatic interoperability solution (method, technique, model, tool, framework) AND
- IC2: The proposed solution are applied on software OR system OR application OR service OR infrastructure AND
- IC3: The proposed solution supports machine to machine pragmatic interoperability AND
- IC4: The papers are written in English language AND
- IC5: The papers are reported in peer reviewed Workshop or Conference or Journal or Technical Reports.

Criterios de inclusión y exclusión. Ejemplo [63]

EC1: The papers do not propose a pragmatic interoperability solution OR

EC2: The proposed solution are not applied on software OR system OR application OR service OR infrastructure OR

EC3: The proposed solution does not support machine to machine pragmatic interoperability OR

EC4: The papers are not described in English OR

EC4: The papers are not published in a peer reviewed conference or journal

Criterios de calidad

- Los estudios que se seleccionen en el proceso de revisión sistemática pueden tener puntos débiles o defectos
- El objetivo es identificar las carencias con el objeto de decidir si la aportación de cada trabajo es interesante para la revisión sistemática o no
- Se debe diseñar una lista de verificación para chequear los aspectos relevantes de los artículos seleccionados
- La lista estará compuesta de una serie de criterios que serán evaluados y puntuados para cada artículo seleccionado según una métrica definida
- Dependiendo de la puntuación de la evaluación, cada artículo se incluiría o se excluiría en la fase final de la selección
- Los responsables del desarrollo de la revisión sistemática fijarán el punto de corte de los artículos para su inclusión final en el corpus sobre el que se realizará el análisis de resultados

Criteria de calidad

- Los criterios de calidad suelen referirse a la calidad de la investigación y de los resultados que presenta el artículo candidato a ser incluido en el corpus final o banco de documentos
- Dixon-Woods et al. [72] proponen 5 criterios en forma de una lista de preguntas que por su amplitud pueden ser de uso general para aplicar criterios de calidad
 1. ¿Los propósitos y objetivos de la investigación están claramente establecidos?
 2. ¿El diseño de la investigación está claramente especificado y es apropiado para los fines y objetivos de la investigación?
 3. ¿Se proporciona una explicación clara del proceso por el cual se obtuvieron los hallazgos?
 4. ¿Se muestran suficientes datos para respaldar las interpretaciones y conclusiones?
 5. ¿El método de análisis es apropiado y está adecuadamente explicado?

Criterios de calidad. Ejemplo [32]



| Question | Score |
|--|-------------|
| 1. Are the research aims related to software architectures & HCI/HMI clearly specified? | Y/N/partial |
| 2. Was the study designed to achieve these aims? | Y/N/partial |
| 3. Are data presented on the evaluation of the proposed solution? | Y/N/partial |
| 4. Are data presented on the assessment regarding the human part of HCI/HMI? | Y/N/partial |
| 5. Is the software architecture clearly described and is its design justified? | Y/N/partial |
| 6. Are the devices involved clearly specified? Are their functions within the software architecture justified? | Y/N/partial |
| 7. Do the researchers discuss any problems with the software architecture described? | Y/N/partial |
| 8. Is the solution based on a software architecture tested in a real context? | Y/N/partial |
| 9. Are the links between data, interpretation and conclusions made clear? | Y/N/partial |
| 10. Are all research questions answered adequately? | Y/N/partial |

Fuentes de datos

- Se deben seleccionar y justificar las fuentes de datos en las que se va a proceder a buscar las fuentes primarias de la revisión sistemática
- Se debe evaluar la idoneidad de la fuente de datos con respecto a la disciplina y el tener acceso *online* a su consulta
 - Salvo circunstancias especiales (como una revisión sistemática de proyectos de investigación [73]), la fuente privilegiada de las revisiones sistemáticas son los artículos publicados en revistas científicas evaluadas, ya que constituyen, en general, la forma preferente (y más fiable, precisamente por ser evaluados) de comunicar los avances de una disciplina científica, sus principales controversias y frentes abiertos, etc. [74]
 - En Ciencias Sociales y Humanidades los libros y capítulos de libros tienen una gran importancia
 - En otras disciplinas, como la Ciencia de la Computación o la Ingeniería Informática, las actas de los congresos son especialmente representativos
- No hay que limitarse solo a las bases de datos más grandes, pero hay que ser conscientes de los objetivos buscados y del esfuerzo que se va a tener que realizar
 - Por ejemplo, no es lo mismo estar realizando una revisión sistemática para una tesis doctoral que para conocer el estado actual de una línea de investigación en los últimos años
- Determinar si se van a incluir fuentes de literatura gris

Fuentes de datos

- Tipos de bases de datos
 - Bases de datos multidisciplinares
 - Papel legitimador de la Ciencia
 - Internacional: Web of Science, Scopus
 - Nacional (España): Bases de datos CSIC, Dialnet Plus
 - Bases de datos especializadas
 - Revistas
 - Proyectos [73]
- Otras fuentes
 - Literatura gris
 - Preprints

Fuentes de datos

Algunas de las fuentes de datos más usadas (no es un listado que pretenda ser completo)

- WoS
- Scopus
- Google Scholar
- Scielo
- IEEEXplore
- ACM
- Springer
- ScienceDirect
- Emerald Insight
- Compendex
- ERIC
- Pubmed
- LISA
- LISTA
- Dialnet Plus
- arXiv
- etc.

Fuentes de datos, ¿cuántas utilizar?

- Cada trabajo de revisión es único y se deben especificar y justificar las fuentes de datos en la definición de su protocolo
- Recomendaciones generales (adaptado de [74])
 - Seleccionar al menos una de las bases de datos internacionalmente reconocidas (WoS, Scopus) y combinar con una fuente más local si el ámbito del estudio así lo requiere (Dialnet Plus, Scielo, etc.)
 - Probar con varias de las bases de datos especializadas y quedarse con aquellas que proporcionen mejores resultados (un par de ellas a lo sumo)
 - Si la literatura gris es relevante para el estudio, considerar Google Scholar, pero se debe tener precaución por la gran cantidad de resultados y el posible “ruido” que puede obtenerse
 - Consultar cualquier otra fuente que se adecue al tipo de estudio a realizar

Términos de búsqueda

- Antes de formular una ecuación de búsqueda se deben establecer, de manera clara y precisa, los términos de búsqueda para, a continuación, establecer las relaciones lógicas que se darán entre ellos
- Se debe tener en cuenta el análisis PICOC identificarlos
- Hay que organizar los términos siguiendo la estrategia de búsqueda que se haya decidido
- Se pueden definir sinónimos
- Si se soportan diferentes idiomas hay que establecer la ontología de equivalencias entre los idiomas a considerar
- Se pueden utilizar caracteres comodín
- Hay ocasiones en que los términos no son sencillos de seleccionar y hay que recurrir a otro tipo de análisis para determinarlos [75-76]

Términos de búsqueda. Ejemplo [77]

Initial Logic Grid Aligned with the PICO Elements of the Review Question

| Population | Intervention | Comparison intervention | Outcome measures |
|------------|-------------------------|-------------------------|---------------------|
| Dementia | Animal-assisted therapy | Music therapy | Aggressive behavior |

Logic Grid with Identified Keywords Added

| Population | Intervention | Comparison intervention | Outcome measures |
|---|--|---|--|
| Dementia Alzheimer Huntington Kluver Lewy | Animal-assisted therapy Animal-assisted activities Animal-assisted interventions Animal therapy Pet therapy Dog therapy Dog-assisted therapy Canine-assisted therapy Pet-facilitated therapy Aquarium | Music therapy Music Singing Sing Auditory stimulation | Aggression Neuropsychiatric Apathy inventory Cornell scale Cohen Mansfield BEHAVE-AD CERAD-BRSD Behavior Behaviour |

Términos de búsqueda

- Marco **FDC** [74]
 - **Facetar**: considerar todas las facetas características de una investigación académica, tales como el objeto de estudio, el marco teórico, el marco metodológico, etc.
 - **Derivar**: Por cada faceta, derivar las palabras clave que la representen, incluyendo sinónimos y variaciones en los diferentes idiomas contemplados
 - **Combinar**: Una vez que se dispone de un grupo de palabras clave, se combinan en un grupo de ecuaciones de búsqueda

Términos de búsqueda. Facetas [74]

- Para no obviar ningún aspecto clave de la investigación se consideran algunas facetas, de las que derivar las palabras clave
- Corresponden al examen de diversos documentos y fuentes (por ejemplo, componentes de un proyecto de investigación, rúbrica de evaluación de un trabajo académico, partes de un proyecto de tesis doctoral, apartados de una publicación científica, etc.)

Términos de búsqueda. Facetas [74]

- **Objeto de estudio:** Identifica el objeto material o conceptual en el que se centra la investigación
- **Tipo de acción:** Identifica la clase de actividad que mejor se ajusta al estudio
- **Marco teórico:** Teorías o disciplinas que informan y aportan los constructos conceptuales principales del estudio
- **Técnicas de obtención de datos:** Técnicas concretas con las que se piensan obtener datos para la investigación
- **Estrategias metodológicas:** Identifica las metodologías a utilizar
- **Topónimos:** Nombres de lugares, regiones o países que intervengan en el estudio
- **Nombres propios:** Nombres de autores destacados o representantes de corrientes teóricas que intervengan en el estudio. Nombres propios de empresas o corporaciones que tengan algún relación con el estudio
- **Software o herramientas:** Denominaciones de paquetes de software o de instrumentos o herramientas que se piensan utilizar en la investigación

Ecuación de búsqueda canónica

- Una vez que se hayan identificado los términos para cada concepto dentro de la estrategia de búsqueda, se debe plantear una o varias ecuaciones canónicas utilizando la lógica booleana para combinar los términos adecuadamente
- Estas ecuaciones canónicas se adaptarán en la etapa de realización de la revisión a cada una de las fuentes de datos seleccionada
- La lógica booleana permite combinar los términos de búsqueda utilizando los operadores lógicos AND, OR, NOT para diseñar la estrategia de búsqueda
- Hart explica la lógica booleana como una forma de "sumar, restar y multiplicar los términos de búsqueda para ampliar (sumar), reducir (restar) o incluir términos (multiplicar o combinar) en la búsqueda" [78]

Ecuación de búsqueda canónica

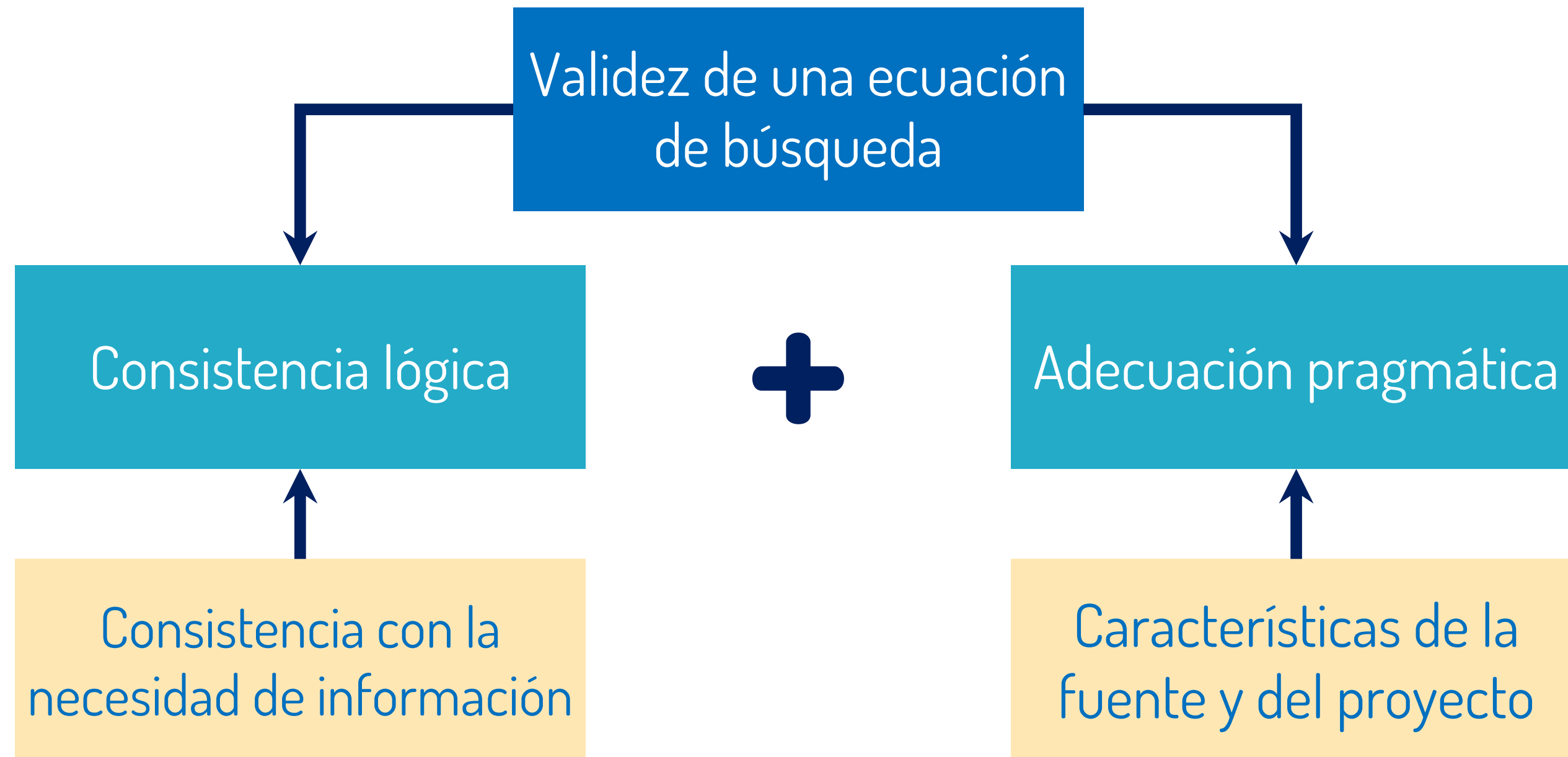
- Una ecuación de búsqueda eficaz sería la formada por descriptores y sus correspondientes calificadores combinados entre sí mediante los operadores booleanos más apropiados [8]
 - Para unir conceptos relacionados se utilizará el operador OR (operador de unión). Por ejemplo, los sinónimos se relacionan entre ellos con el operador OR
 - Para relacionar términos que hacen referencia a conceptos distintos en un mismo documento se utilizará AND (operador de intersección)
 - Para eliminar documentos que contenga el término no deseado se empleará NOT (operador de exclusión)
 - A la hora de formular ecuaciones de búsqueda más complejas, en las que se combinen varios operadores, se utilizarán paréntesis para indicar qué operación se debe efectuar en primer lugar

Ecuación de búsqueda canónica. Ejemplo [32]

(“software architectur” AND ((HCI OR “Human-Computer Interaction” OR “Human Computer Interaction”) OR (HMI OR “Human-Machine Interaction” OR “Human Machine Interaction”)))*

Condición de validez de una ecuación de búsqueda [79]

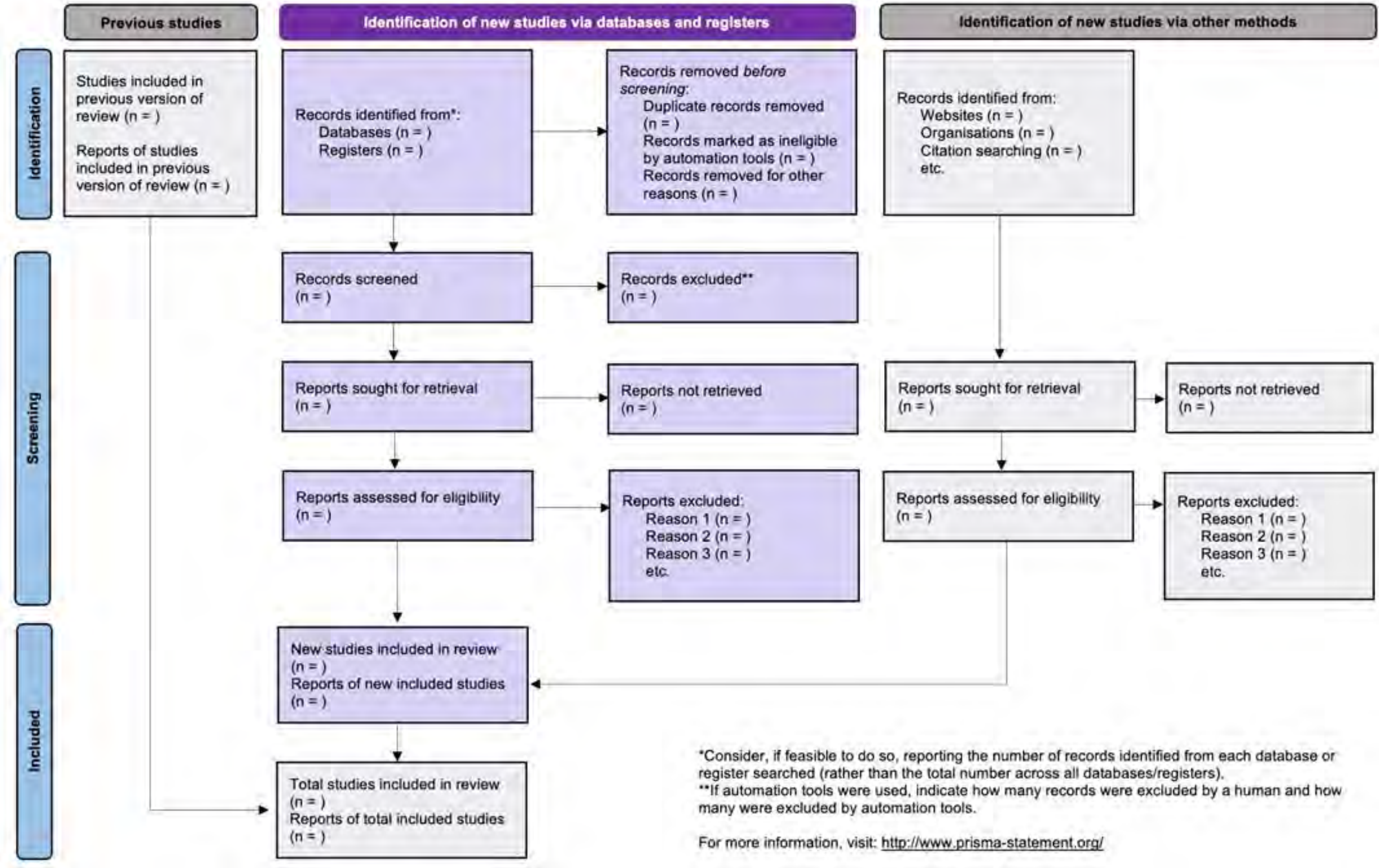
- Para que una estrategia de búsqueda sea válida debe presentar, a la vez, consistencia lógica y adecuación pragmática



5. Fase de realización



Fases de la realización de la revisión [57, 58]



Fases de la realización de la revisión – PRISMA 2009 [54-56]

1. Fase de identificación (*identification*)
 - Ejecutar las consultas y obtener los registros
2. Fase de eliminación (*screening*)
 - Eliminar duplicados
 - Revisar los títulos y resúmenes (aplicando los criterios de inclusión y exclusión)
3. Fase de selección (*eligibility*)
 - Revisar el texto completo y evaluar la calidad (aplicando también los criterios de inclusión y exclusión)
 - Añadir (si es necesario) documentos citados en sus resultados (siempre que cumplan los criterios de inclusión y exclusión y los criterios de calidad)
4. Fase de inclusión
 - Definir el corpus final de estudios seleccionados para el estudio cualitativo y/o para el estudio cuantitativo

Fases de la realización de la revisión – PRISMA 2020 [57, 58]

1. Fase de identificación (*identification*)
 - Ejecutar las consultas y obtener los registros
 - Eliminar duplicados
2. Fase de eliminación (*screening*)
 - Revisar los títulos y resúmenes (aplicando los criterios de inclusión y exclusión)
 - Revisar el texto completo y evaluar la calidad (aplicando también los criterios de inclusión y exclusión)
 - Añadir (si es necesario) documentos citados en sus resultados (siempre que cumplan los criterios de inclusión y exclusión y los criterios de calidad)
3. Fase de inclusión
 - Definir el corpus final de estudios seleccionados para el estudio cualitativo y/o para el estudio cuantitativo

Identificar la investigación relevante

- Se implementa la estrategia de búsqueda planificada
- Buscar en todas las fuentes de datos seleccionadas adaptando la ecuación canónica a cada lenguaje/interfaz de búsqueda propia de cada fuente de datos
 - Debe intentarse que las consultas en las diferentes fuentes de datos sean equivalentes, de lo contrario los resultados obtenidos podrían ser no comparables
 - Cada adaptación de la ecuación canónica para cada fuente de datos debe quedar documentada
 - Cuando se utiliza una interfaz de búsqueda, muchos sistemas traducen la búsqueda a una ecuación que es la que se debe recoger en la documentación del proceso

Interfaz de búsqueda de WoS



The screenshot shows the Web of Science search interface. At the top, there is a navigation bar with the Clarivate logo, language options (English), and a Products menu. Below this is the "Web of Science" logo and navigation links for Search, Marked List, History, and Alerts. On the right side of the navigation bar, there are "Sign In" and "Register" buttons. The main content area features a purple banner with the text "Discover multidisciplinary content from the world's most trusted global citation database." Below the banner is a search box with a dropdown menu set to "Search in: Web of Science Core Collection". The search box has tabs for "DOCUMENTS", "AUTHORS", and "CITED REFERENCES". The "All Fields" option is selected in the dropdown menu, and a search query "Economic development india engb" is entered in the search box. To the right of the search box are "CLEAR" and "SEARCH" buttons. Below the search box, there is a description of the "All Fields" search option: "Searches all of the searchable fields using one query. This allows you to easily find your search terms in any field." An example query is provided: "2014 drexel decay radioactiv*".



Interfaz de búsqueda de Scopus

The screenshot shows the Scopus search interface. At the top left, there is the logo of the University of Salamanca and the Scopus logo. The main navigation bar includes links for Search, Sources, Lists, and SciVal, along with utility icons for help, notifications, and a library icon. On the right side of the navigation bar, there are buttons for 'Create account' and 'Sign in'. Below the navigation bar, the main heading is 'Start exploring' with the subtext 'Discover the most reliable, relevant, up-to-date research. All in one place.' There are three tabs: 'Documents' (selected), 'Authors', and 'Affiliations'. A search bar is present with a dropdown menu for 'Search within' (set to 'Article title, Abstract, Keywords') and a text input field containing 'Search documents *'. To the right of the search bar is a 'Search tips' link. Below the search bar, there are links for '+ Add search field', '+ Add date range', and 'Advanced document search >'. At the bottom of the search bar is a blue 'Search' button with a magnifying glass icon. Below the search bar, there are three columns of links: 'About Scopus' (What is Scopus, Content coverage, Scopus blog, Scopus API, Privacy matters), 'Language' (日本語に切り替える, 切换到简体中文, 切换到繁體中文, Русский язык), and 'Customer Service' (Help, Contact us).

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Interfaz de búsqueda avanzada de Google Scholar



The screenshot shows the Google Scholar advanced search interface. At the top, the browser address bar displays the URL: `scholar.google.es/schhp?hl=es&as_sdt=0,5#d=gs_asd`. Below the address bar, there are navigation links for 'Personalizar vínculo...', 'Mi perfil', and 'Mi biblioteca'. The main search area is titled 'Búsqueda avanzada' and contains several sections for refining the search:

- Buscar artículos**: A section with four radio button options: 'con todas las palabras', 'con la frase exacta', 'con al menos una de las palabras', and 'sin las palabras'. Each option is followed by a text input field.
- donde las palabras aparezcan**: A section with two radio button options: 'en todo el artículo' (selected) and 'en el título del artículo'.
- Mostrar artículos escritos por**: A section with a text input field and a hint: 'p. ej., "García Márquez" o Cela'.
- Mostrar artículos publicados en**: A section with a text input field and a hint: 'p. ej., JAMA o Gaceta Sanitaria'.
- Mostrar artículos fechados entre**: A section with two text input fields and a hint: 'p. ej., 1996'.

Interfaz de búsqueda avanzada de ScienceDirect

scencedirect.com/search

Personalizar vincu... Otros marcadores Lista de lectura

ScienceDirect Journals & Books Register Sign in UNIVERSIDAD DE SALAMANCA

Advanced Search

Search tips ?

Find articles with these terms

In this journal or book title Year(s)

Author(s) Author affiliation

Volume(s) Issue(s) Page(s)

Title, abstract or author-specified keywords

Title

References

ISSN or ISBN

Search

Interfaz de búsqueda avanzada de Springer Link

The screenshot shows the Springer Link Advanced Search page. At the top, there is a search bar with a magnifying glass icon and a settings gear icon. Below the search bar, there are navigation links for Home, Books A-Z, Journals A-Z, Videos, and Librarians. The main content area is titled "Advanced Search" and contains a "Find Resources" section. This section has five input fields for search criteria: "with all of the words", "with the exact phrase", "with at least one of the words", "without the words", and "where the title contains". Below these fields, there are two more input fields for "where the author / editor is" and "Show documents published" (with "Start year" and "End year" sub-fields). A checkbox labeled "Include Preview-Only content" is checked. A blue "Search" button is at the bottom of the search form. Below the search form, there is a banner that says "Over 10 million scientific documents at your fingertips". At the bottom of the page, there are three columns of links: "Our Content" (Journals, Books, Book Series, Protocols, Reference Works, Proceedings), "Other Sites" (Springer.com, SpringerProtocols, SpringerMaterials, AdisInsight), and "Help & Contacts" (Legal information, Privacy statement, California privacy statement, How we use cookies, Manage cookies/Do not sell my data, Contact Us, Impressum). The Springer Nature logo is at the bottom left, and a chess knight icon is at the bottom right.



Interfaz de búsqueda avanzada de IEEE Xplore



Advanced Search [?](#)

Advanced Search | Command Search | Citation Search

Enter keywords and select fields.

Search Term in All Metadata [?](#)

AND Search Term in All Metadata [↑](#) [×](#)

AND Search Term in All Metadata [↑](#) [×](#) [+](#)

Publication Year

Documents Added Between: 03/31/2021 and 04/07/2021

Specify Year Range

1884 2021

From 1884 To 2021

[Reset All](#) [Search](#)

Preferences

- Learn More
- Data Fields
- Search Examples
- Search Operators
- Search Tips

Interfaz de búsqueda avanzada de ACM Digital Library

dl.acm.org/search/advanced

Personalizar vínculo... Otros marcadores Lista de lectura

ACM DIGITAL LIBRARY Association for Computing Machinery

Browse About Sign in

Journals Magazines Proceedings Books SIGs Conferences People Search ACM Digital Library

Advanced Search

Search

Search anything within the ACM Digital Library or go to your [Saved Searches](#).

Search Items from:
The ACM Full-Text collection

Search Within
Anywhere Enter Search term

Filters
Published In Match All Enter Search term

Publication Date
All dates
Last
Please Select
Custom range
From: Select Month Select Year
To: Select Month Select Year

Clear Search

SEARCH TIPS for text fields

Boolean searches

Use the boolean operators **AND**, **OR**, and **NOT** to narrow or broaden your search results.

By default, an **AND** relationship is assumed between Search Within terms unless you specify a different operator in the **Edit Query:** input.

By default, an **OR** relationship is assumed between words within 1 Search Within term.

Searching for phrases

Enclose your search terms within quotation marks (" ") to search for an exact match of that phrase.

If no quotation marks are used, search results will be populated with publications that contain your search terms somewhere in the text.

For example, if you search for "machine learning" the search engine will limit the results to publications that contain this exact phrase otherwise an **OR** will be assumed in between the words.

Curly quotes (" ") are also acceptable eg. "machine learning"

NOTE: opening and closing quotes must be of the same type; curly or straight. Please avoid entering "machine learning"

Wildcards

Use an asterisk (*) to specify any number of unknown characters. For example, if you search for **comput***, the search engine will provide results that contain words such as compute, computation, computing, etc.

Use a question mark (?) to specify any single unknown character. For example, if you search for **compute?**, the search engine will provide results that contain words such as computer or computed **but not** computers because the question mark represents only one character.

NOTE: Wildcards cannot be used at the start of a search term or when searching for phrases within quotes.

Special Characters

The following characters have a special meaning when they appear in a query:

+ - & | ! () { } [] ^ " ~ * ? : /

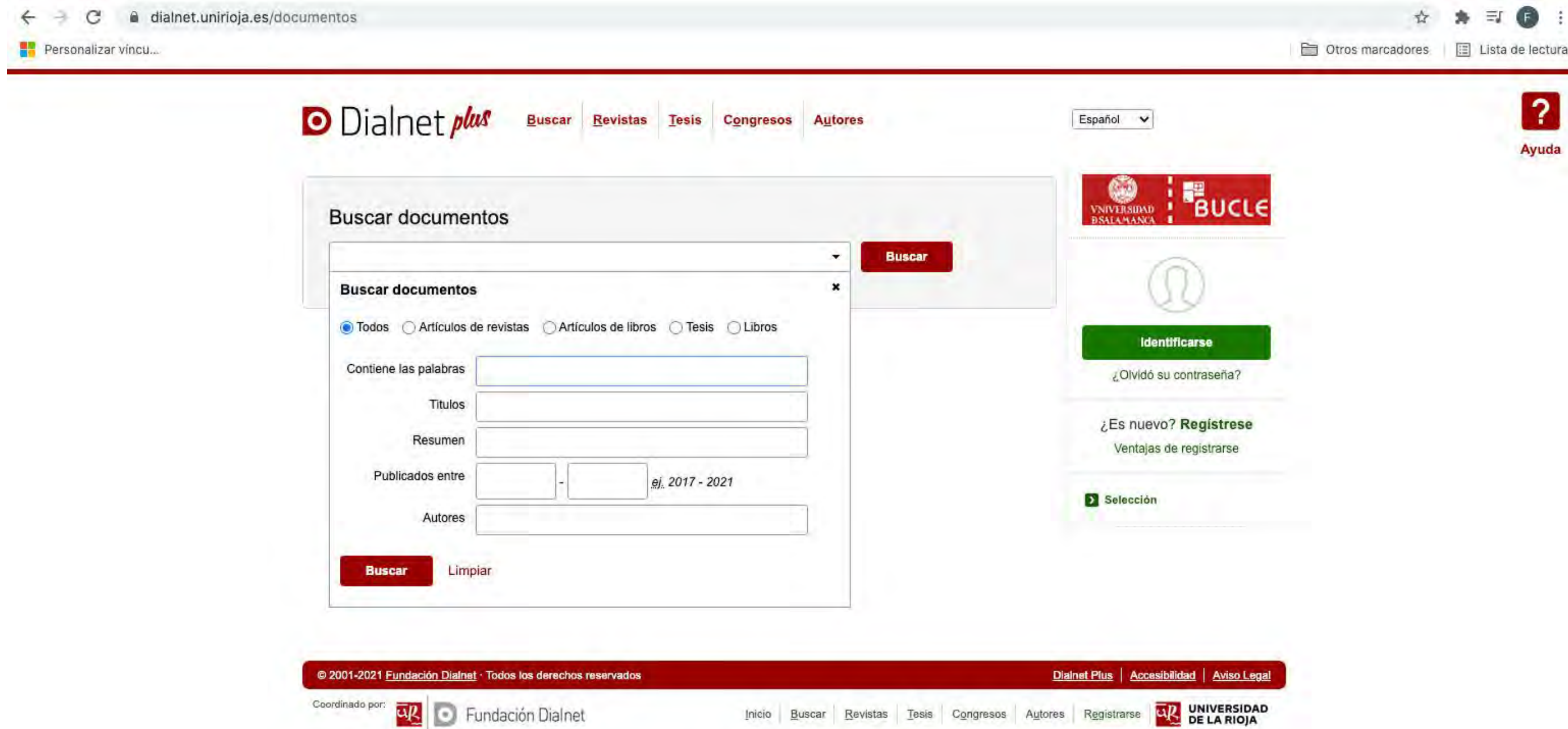
To instruct Search to interpret any of these characters literally, rather as a special character, precede the character with a backslash character \

For example, the term *web-based* will search for *web NOT base* so either remove the space before - or escape it **web \-based** to find web-based documents.

Another example, *complexity n^2* is best to be searched with escaping **complexity n\^2** as ^ is interpreted as boost a term.



Interfaz de búsqueda avanzada de Dialnet Plus



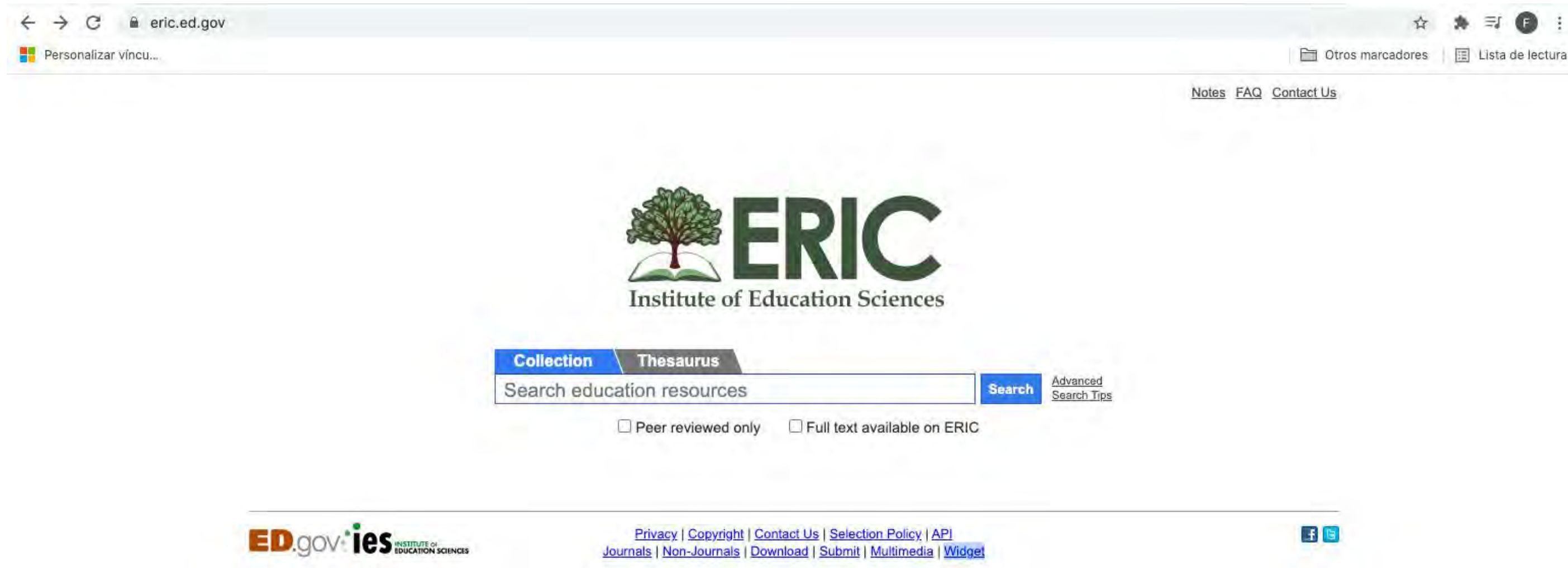
The screenshot shows the Dialnet Plus website interface. At the top, there is a browser address bar with the URL `dialnet.unirioja.es/documentos`. Below the browser, the website header includes the Dialnet Plus logo, navigation links for [Buscar](#), [Revistas](#), [Tesis](#), [Congresos](#), and [Autores](#), a language dropdown set to 'Español', and an 'Ayuda' (Help) icon.

The main search area is titled 'Buscar documentos'. It features a search input field and a red 'Buscar' button. Below this, there are radio buttons for document types: Todos, Artículos de revistas, Artículos de libros, Tesis, and Libros. There are also input fields for 'Contiene las palabras', 'Títulos', 'Resumen', 'Publicados entre' (with a date range example 'ej. 2017 - 2021'), and 'Autores'. A second 'Buscar' button and a 'Limpiar' (Clear) button are located at the bottom of the search form.

On the right side of the page, there is a 'BUCLE' logo for Universidad de Salamanca, a user profile icon, a green 'Identificarse' (Log in) button, a link for '¿Olvidó su contraseña?' (Forgot your password?), a link for '¿Es nuevo? Regístrese' (Are you new? Register) with 'Ventajas de registrarse' (Benefits of registering) below it, and a 'Selección' (Selection) button.

The footer contains copyright information: '© 2001-2021 Fundación Dialnet · Todos los derechos reservados'. It also includes links for 'Dialnet Plus', 'Accesibilidad', and 'Aviso Legal'. The footer is coordinated by 'Fundación Dialnet' and includes navigation links for 'Inicio', 'Buscar', 'Revistas', 'Tesis', 'Congresos', 'Autores', and 'Registrarse', along with the logo of 'UNIVERSIDAD DE LA RIOJA'.

Interfaz de búsqueda de ERIC



The screenshot shows the ERIC search interface in a browser window. The address bar displays "eric.ed.gov". The page features the ERIC logo (a tree over an open book) and the text "ERIC Institute of Education Sciences". Below the logo, there are two tabs: "Collection" (selected) and "Thesaurus". A search input field contains the text "Search education resources", followed by a "Search" button and a link to "Advanced Search Tips". Below the search field, there are two checkboxes: "Peer reviewed only" and "Full text available on ERIC". At the bottom of the page, there is a footer with the "ED.gov:ies" logo, a list of links (Privacy, Copyright, Contact Us, Selection Policy, API, Journals, Non-Journals, Download, Submit, Multimedia, Widget), and social media icons for Facebook and Twitter.

Interfaz de búsqueda de ERIC – Búsqueda avanzada



The screenshot shows the ERIC website's advanced search page. At the top, there is a navigation bar with the ERIC logo, a search box labeled "Search education resources", and a "Search" button. Below the search box are checkboxes for "Peer reviewed only" and "Full text available on ERIC". The main content area is titled "How does the ERIC search work?" and explains the search process, including the use of key ERIC fields (title, author, source, abstract, descriptor) and the ranking of results. It also provides instructions on how to create more specific searches using quotes, field:term syntax, and IES ERIC options. A sidebar on the right lists "ERIC field names" and "IES ERIC options". The footer contains the ED.gov logo, a list of links (Privacy, Copyright, Contact Us, Selection Policy, API, Journals, Non-Journals, Download, Submit, Multimedia, Widget), and social media icons.

eric.ed.gov/?advanced

Personalizar vincu... Otros marcadores Lista de lectura

Notes FAQ Contact Us

ERIC Collection Thesaurus

Search education resources Search Advanced Search Tips

Peer reviewed only Full text available on ERIC

How does the ERIC search work?

ERIC will look for your search terms across a set of key ERIC fields: **title**, **author**, **source**, **abstract** and **descriptor**. You can also enter an ERIC accession number (ERIC ID) to search for the ERIC document itself, as well as documents that mention or cite the document by ID. An ISBN, ISSN or IES Grant/Contract Number may also be entered directly into the search box.

Ranking of results is determined by many factors including the publication date (more recent publications are favored).

This [video](#) helps users understand how to find information in an intuitive way and, in most cases, without the need for advanced search logic. The video demonstrates how simple search strategies can be an effective way to search the ERIC database.

How do I create more specific searches?

- Use quotes to group words into specific phrases:
 - ["no child left behind"](#)
 - [maryland "no child left behind"](#)
 - ["west virginia" "no child left behind"](#)
- Use the **field:term** syntax to limit one or more search terms to a specific ERIC field:
 - [author:young](#)
 - [author:"john young"](#)
 - ["regression analysis" title:"test scores"](#)
 - [abstract:"no child left behind" pubyear:2002](#)
- Add the **field:term** syntax to limit searches to IES Funded and/or What Works Clearinghouse (WWC) Reviewed documents:
 - [funded:y](#) will show IES Funded documents.
 - For WWC Reviewed documents:
 - [wwcr:y](#) Meets Evidence Standards without Reservations
 - [wwcr:r](#) Meets Evidence Standards with Reservations
 - [wwcr:n](#) Does Not Meet Evidence Standards

What other advanced options are available?

- You can use AND/OR to limit the search, with parentheses if required. For example, [\(prekindergarten OR kindergarten\) AND literacy](#) will return findings with either the term prekindergarten or kindergarten that also contain the word literacy.
- You can require search terms using the + symbol in front of one or more words or phrases in your search. For example, [+title:regression multivariate hierarchical linear](#) would return only results with the term regression, with the terms multivariate, hierarchical, and linear being optionally searched in all fields.
- You can exclude search terms using the - symbol in the same way you would use a + symbol. For example, for information on bullying, but not focused by sexual orientation, search [bullying -gay](#).
- You can combine any advanced syntax into a single search: [regression \(autism OR autistic\) -descriptor:"regression analysis" -descriptor:"regression \(statistics\)" descriptor:autism](#)

ERIC field names

- abstract
- assessment
- audience
- author
- descriptor
- educationlevel
- law
- location
- pubyear
- source
- title

IES ERIC options

- funded:Y
- wwcr:N
- wwcr:R
- wwcr:Y

ED.gov:ies INSTITUTE OF EDUCATION SCIENCES

Privacy | Copyright | Contact Us | Selection Policy | API
Journals | Non-Journals | Download | Submit | Multimedia | Widget

f t

Consulta. Ejemplo [63]

- Web of Science

TS=["software architecture" AND (HCI OR "Human-Computer Interaction")] AND analy*

- Scopus

TITLE-ABS-KEY ["software architecture" AND (HCI OR "Human-Computer Interaction")] AND analysis]

Consulta. Ejemplo [71]

WEB OF SCIENCE (WOS)

| | Resultados | Búsqueda |
|------------|------------|--|
| # 1 | 8 | Título: ("Open Access" OR "acceso abierto) AND (bibliometric* OR almetric* OR informetric* OR scientometric* OR webometrics) =1998-2015. Inglés, español, francés. |
| # 2 | 1 | Título: Impact* AND ("Open Access" OR "acceso abierto) AND (bibliometric* OR almetric* OR informetric* OR scientometric* OR webometrics) =1998-2015. Inglés, español, francés. |
| #3 | 111 | Tema: ("Open Access" OR "acceso abierto) AND (bibliometric* OR almetric* OR informetric* OR scientometric* OR webometrics) =1998-2015. Inglés, español, francés. |
| #4 | 70 | Tema: Impact* AND ("Open Access" OR "acceso abierto) AND (bibliometric* OR almetric* OR informetric* OR scientometric* OR webometrics) =1998-2015. Inglés, español, francés. |
| #5 | 111 | #1 OR #2 OR #3 OR #4 |

Consulta. Ejemplo [42]



- ☒ WoS:
TS=((“technological ecosystem” OR “software ecosystem*” OR SECO OR “information ecosystem*” OR “ERP ecosystem*” OR “open ecosystem*” or “learning ecosystem*”) AND (SLR OR “Systematic Literature Review” OR “systematic mapping” OR “literature review”))*
- Scopus:
TITLE-ABS-KEY (“technological ecosystem” OR “software ecosystem*” OR seco OR “information ecosystem*” OR “ERP ecosystem*” OR “open ecosystem*” OR “learning ecosystem*”) AND TITLE-ABS-KEY (slr OR “Systematic Literature Review” OR “systematic mapping” OR “literature review”) AND (LIMIT-TO (DOCTYPE , “cp”) OR LIMIT-TO (DOCTYPE , “ar”) OR LIMIT-TO (DOCTYPE , “ch”) OR LIMIT-TO (DOCTYPE , “re”)) AND (EXCLUDE (SUBJAREA , “AGRI”) OR EXCLUDE (SUBJAREA , “MEDI”) OR EXCLUDE (SUBJAREA , “SOCI”)) AND (LIMIT-TO (LANGUAGE , “English”))*
- IEEE Xplorer:
(“technological ecosystem” OR “software ecosystem” OR SECO OR “information ecosystem” OR “ERP ecosystem” OR “open ecosystem” or “learning ecosystem”) AND (SLR OR “Systematic Literature Review” OR “systematic mapping” OR “literature review”)
- ACM Digital Library:
((acmdlTitle: (“technological ecosystem” OR “software ecosystem” OR SECO OR “information ecosystem” OR “ERP ecosystem” OR “open ecosystem” OR “learning ecosystem”) OR recordAbstract: (“technological ecosystem” OR “software ecosystem” OR SECO OR “information ecosystem” OR “ERP ecosystem” OR “open ecosystem” OR “learning ecosystem”)) AND (acmdlTitle: (SLR OR “Systematic Literature Review” OR “systematic mapping” OR “literature review”) OR recordAbstract: (SLR OR “Systematic Literature Review” OR “systematic mapping” OR “literature review”)))

Operadores de proximidad en las consultas

- Algunas fuentes de datos permiten utilizar operadores de proximidad
- Se intercalan entre los descriptores para establecer entre ellos una relación de proximidad, es decir, permiten concretar la posición de dos o más palabras en la ecuación de búsqueda
- Cada fuente de datos tiene sus propios operadores de proximidad, existiendo pequeñas diferencias entre unas y otras, por lo que siempre es aconsejable consultar la ayuda que ofrecen

Operadores de proximidad en WoS

- **NEAR/x**
 - Se emplea para encontrar registros en los que los términos unidos por el operador están separados entre sí por un número máximo de x palabras
 - Si se omite el número de palabras (/x), se tomará por defecto un valor de 15 palabras
 - El valor 0 indica que las palabras relacionadas con el operador NEAR deben ir seguidas, es decir, ser adyacentes: monetary NEAR/0 union
 - Ejemplo: TOPIC1 NEAR/5 TOPIC2
 - No puede utilizar el operador AND en consultas que incluyan el operador NEAR. Por ejemplo, la siguiente consulta no es válida: TS = (Germany NEAR/10 (monetary AND union))
 - NEAR se puede usar para encontrar una palabra o frase separada X número de palabras de una frase: TS = (Germany NEAR/10 "monetary union")

Operadores de proximidad en WoS

- **SAME**

- En las búsquedas en el campo dirección se utiliza SAME para restringir la búsqueda a los términos que aparecen en la misma dirección dentro de un registro completo
- Se debe usar paréntesis para agrupar los términos de la dirección
 - Ejemplo: AD=(McGill Univ SAME Quebec SAME Canada) busca registros en los que McGill University aparece en el campo Direcciones de un registro completo junto con "Quebec" y "Canada"
- SAME funciona exactamente como AND cuando se usa en otros campos (por ejemplo, en los campos Tema y Título)

Precedencia de operadores en WoS

1. NEAR/x
2. SAME
3. NOT
4. AND
5. OR

Ejemplo de ecuación de búsqueda usando NEAR [80]

[(meta-dashboard*) **OR**
 [(dashboard*) NEAR/10 (custom* OR personal*
 OR adapt* OR flexib* OR config* OR driven OR
 generat* OR compos* OR template* OR context-
 aware OR select*)] **OR**
 [(dashboard*) AND [(heterogeneous OR different
 OR diverse OR dynamic) NEAR/0
 ("requirement*" OR "stakeholder*" OR "user*" OR
 "need*" OR "task*" OR "necess*")]]] **AND NOT**
 [car OR vehicle OR automo*]

Operadores de proximidad en Scopus

- **Pre/x**
 - Encuentra resultados en los que una palabra precede a la otra x palabras
 - El orden importa
 - Ejemplo: TITLE-ABS-KEY (dashboard PRE/3 personalization)
- **W/x**
 - Indica la distancia entre las dos palabras, pero el orden de las mismas no importa
 - Ejemplo: TITLE-ABS-KEY (dashboard W/3 personalization)

Operadores de proximidad en Scopus

- **Reglas generales para los operadores de proximidad en Scopus**
 - Se pueden usar los caracteres comodín ? y *
 - Ejemplo: TITLE-ABS-KEY(ship* PRE/0 channel)
 - Se puede utilizar más de un operador de proximidad en secuencia para conectar varios términos, pero no se pueden mezclar tipos de operadores ni incluir valores diferentes para "x" dentro de la misma expresión
 - Ejemplo: TITLE-ABS-KEY(bay PRE/6 ship* PRE/6 channel) - válido
 - Ejemplo: TITLE-ABS-KEY(bay PRE/6 ship* PRE/0 channel) - inválido
 - Ejemplo: TITLE-ABS-KEY(bay W/6 ship* PRE/6 channel) - inválido
 - Se pueden incluir múltiples y diferentes operadores, así como diferentes valores para "x" en la misma búsqueda, pero no dentro de la misma expresión
 - Ejemplo: TITLE-ABS-KEY((b?y W/6 ship*) AND (ship* PRE/0 channel) AND NOT (channel W/0 isl*))

Precedencia de operadores en Scopus

1. OR
2. W/x, Pre/x
3. AND
4. AND NOT

La ecuación de búsqueda se completa con los filtros que permiten las bases de datos



The screenshot shows the Scopus search interface. At the top left, there is the logo of the University of Salamanca and the Scopus logo. The main navigation bar includes 'Search', 'Sources', 'Lists', and 'SciVal'. On the right, there are links for 'Create account' and 'Sign in'. Below the navigation bar, the text 'Start exploring' is followed by the tagline 'Discover the most reliable, relevant, up-to-date research. All in one place.' There are three tabs: 'Documents', 'Authors', and 'Affiliations'. A search bar contains the text 'Search documents * dashboard* PRE/10 custom*'. Below the search bar, there are three filter sections: 'Published from 2015' to 'Present', and 'Added to Scopus Anytime'. A red oval highlights these filter sections. At the bottom of the search bar, there are links for '+ Add search field', 'Remove date range', and 'Advanced document search >'. A 'Reset' button and a 'Search' button with a magnifying glass icon are also present.

44 document results

TITLE-ABS-KEY (dashboard* PRE/10 custom*) AND PUBYEAR >= 2014

Edit Save Set alert

Search within results...

Refine results

Limit to Exclude

Open Access

All Open Access (14) >

Gold (7) >

Bronze (3) >

Green (8) >

Learn more

Year

Author name

Subject area

Computer Science (32) >

Engineering (18) >

Decision Sciences (6) >

Medicine (6) >

Business, Management and Accounting (4) >

View more

Document type

Copy the format of a citation and apply it to another

Article (15) >

Review (2) >

Book Chapter (1) >

Conference Review (1) >

View more

Publication stage

Source title

Keyword

Affiliation

Funding sponsor

Country/territory

Source type

Language

English (44) >

Limit to Exclude

Export refine

Documents Secondary documents Patents

View Mendeley Data (357)

Analyze search results

Show all abstracts Sort on: Date (newest)

All Export Download View citation overview View cited by Add to List

| | Document title | Authors | Year | Source | Cited by |
|--------------------------|--|---|------|---|----------|
| <input type="checkbox"/> | HOPE: An integrative digital phenotyping platform for data collection, monitoring, and machine learning <i>Open Access</i> | Wang, X., Vouk, N., Heaukulani, C., (...), Lee, J., Morris, R.J.T. | 2021 | Journal of Medical Internet Research 23(3),e23984 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | ZEUS 2021 - Proceedings of the 13th European Workshop on Services and their Composition | [No author name available] | 2021 | CEUR Workshop Proceedings 2839 | 0 |
| | View abstract | | | | |
| <input type="checkbox"/> | Augmented BIM Workflow for Structural Design Through Data Visualization | Boechat, L.C., Corrêa, F.R. | 2021 | Lecture Notes in Civil Engineering 98, pp. 180-196 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | Visual analytics approach to comprehensive meteorological time-series analysis <i>Open Access</i> | Yuckovic, M., Schmidt, J. | 2020 | Data 5(4),94, pp. 1-16 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | Multi-level systems engineering analyzer dashboard: A semi-automated content analysis for interview data | Yu, Z., See Tao, H.Y., Xiao, Y., (...), Hutchison, N., Makwana, D. | 2020 | SYSCON 2020 - 14th Annual IEEE International Systems Conference, Proceedings 09275905 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | Privacy Dashboards: The Impact of the Type of Personal Data and User Control on Trust and Perceived Risk | Herder, E., Van Maaren, O. | 2020 | UMAP 2020 Adjunct - Adjunct Publication of the 28th ACM Conference on User Modeling, Adaptation and Personalization pp. 169-174 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | Data dashboard: Exploring centralization and customization in personal data curation | Vitale, F., Chen, J., Odom, W., Mcgreneere, J. | 2020 | DIS 2020 - Proceedings of the 2020 ACM Designing Interactive Systems Conference pp. 311-326 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | A proof-of-concept framework for the preference elicitation and evaluation of health informatics technologies: The online PRESENT patient experience dashboard as a case example <i>Open Access</i> | Mentzakis, E., Tkacz, D., Rivas, C. | 2020 | BMC Medical Informatics and Decision Making 20(1),95 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> | Bellevue Smart: Development and Integration of a Smart City <i>Open Access</i> | Picardal, C., Pugliese, B., Rhee, S., (...), Kadiyala, R., Thompson, K. | 2020 | Journal - American Water Works Association 112(2), pp. 28-37 | 2 |

La ecuación de búsqueda se completa con los filtros que permiten las bases de datos



Consulta avanzada de WoS



Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES

Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

All Fields ADD TO QUERY

All Fields
Topic
Title
Author
Publication Titles
Year Published
Affiliation
Publisher

Topic
Searches title, abstract, author keywords, and Keywords Plus.
Example:
robot*
control*
"input shaping"

SEARCH

CI=City
PS=Province/State
CU=Country/Region
ZP=Zip/Postal Code
FO=Funding Agency
FG=Grant Number
FT=Funding Text
SU=Research Area
WC=Web of Science Categories

IS=ISSN/ISBN
UT=Accession Number
PMID=PubMed ID
LD=Index Date
DOP=Publication Date
ALL=All Fields

GP=Group Author
ED=Editor
KP=Keyword Plus™

OO=Organization
SG=Suborganization
SA=Street Address

History

Your history is currently empty.
All your searches in the current session will appear here.

Consulta avanzada de WoS



Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES

Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

All Fields **ADD TO QUERY**

More options

Query Preview

Field Tags

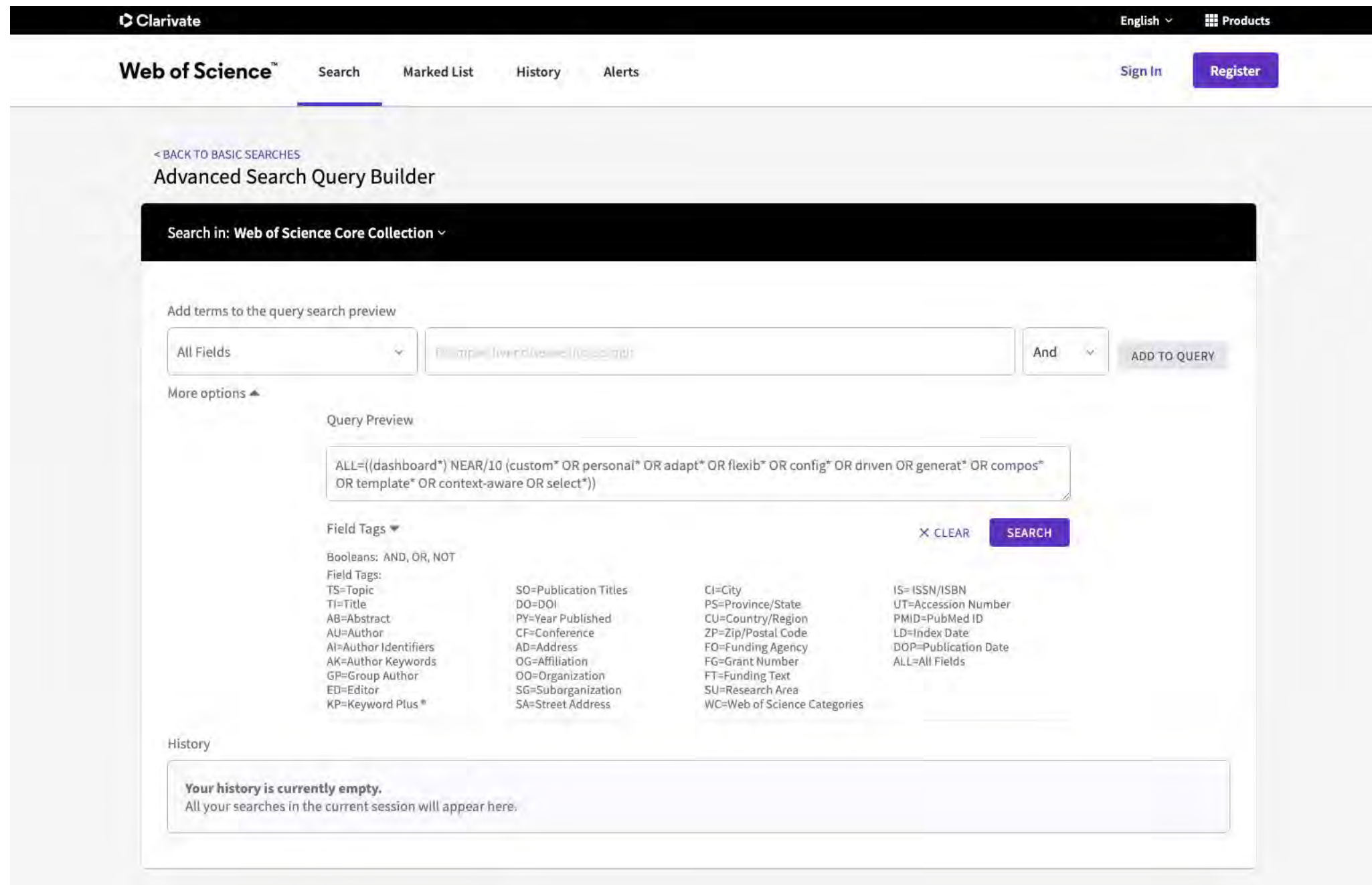
Booleans: AND, OR, NOT

| | | | |
|-----------------------|-----------------------|------------------------------|----------------------|
| Field Tags: | SO=Publication Titles | CI=City | IS= ISSN/ISBN |
| TS=Topic | DO=DOI | PS=Province/State | UT=Accession Number |
| TJ=Title | PY=Year Published | CU=Country/Region | PMID=PubMed ID |
| AB=Abstract | CF=Conference | ZP=Zip/Postal Code | LD=Index Date |
| AU=Author | AD=Address | FO=Funding Agency | DOP=Publication Date |
| AI=Author Identifiers | OG=Affiliation | FG=Grant Number | ALL=All Fields |
| AK=Author Keywords | OO=Organization | FT=Funding Text | |
| GP=Group Author | SG=Suborganization | SU=Research Area | |
| ED=Editor | SA=Street Address | WC=Web of Science Categories | |
| KP=Keyword Plus* | | | |

History

Your history is currently empty.
All your searches in the current session will appear here.

Consulta avanzada de WoS



The screenshot shows the 'Advanced Search Query Builder' interface on the Web of Science platform. At the top, there is a navigation bar with 'Clarithive', 'English', and 'Products'. Below this, the 'Web of Science' logo is followed by links for 'Search', 'Marked List', 'History', and 'Alerts'. On the right side of the navigation bar, there are 'Sign In' and 'Register' buttons.

The main content area features a 'Search in: Web of Science Core Collection' dropdown menu. Below this, there is a section for adding terms to the query search preview. It includes a dropdown menu set to 'All Fields', a text input field containing the query 'ALL=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))', a dropdown menu set to 'And', and an 'ADD TO QUERY' button.

Below the input fields, there is a 'Query Preview' section showing the constructed query: 'ALL=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))'. To the right of the preview are 'X CLEAR' and 'SEARCH' buttons.

A 'Field Tags' section is located below the query preview, listing various search fields and their abbreviations. The list includes: Booleans: AND, OR, NOT; Field Tags: TS=Topic, TI=Title, AB=Abstract, AU=Author, AI=Author Identifiers, AK=Author Keywords, GP=Group Author, ED=Editor, KP=Keyword Plus*; SO=Publication Titles, DO=DOI, PY=Year Published, CF=Conference, AD=Address, OG=Affiliation, OO=Organization, SG=Suborganization, SA=Street Address; CI=City, PS=Province/State, CU=Country/Region, ZP=Zip/Postal Code, FO=Funding Agency, FG=Grant Number, FT=Funding Text, SU=Research Area, WC=Web of Science Categories; IS=ISSN/ISBN, UT=Accession Number, PMID=PubMed ID, LD=Index Date, DOP=Publication Date, and ALL=All Fields.

At the bottom of the interface, there is a 'History' section with a message: 'Your history is currently empty. All your searches in the current session will appear here.'

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Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES

Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

Topic (car OR vehicle OR automo*) Not **ADD TO QUERY**

More options

Query Preview

```
TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))
```

Field Tags

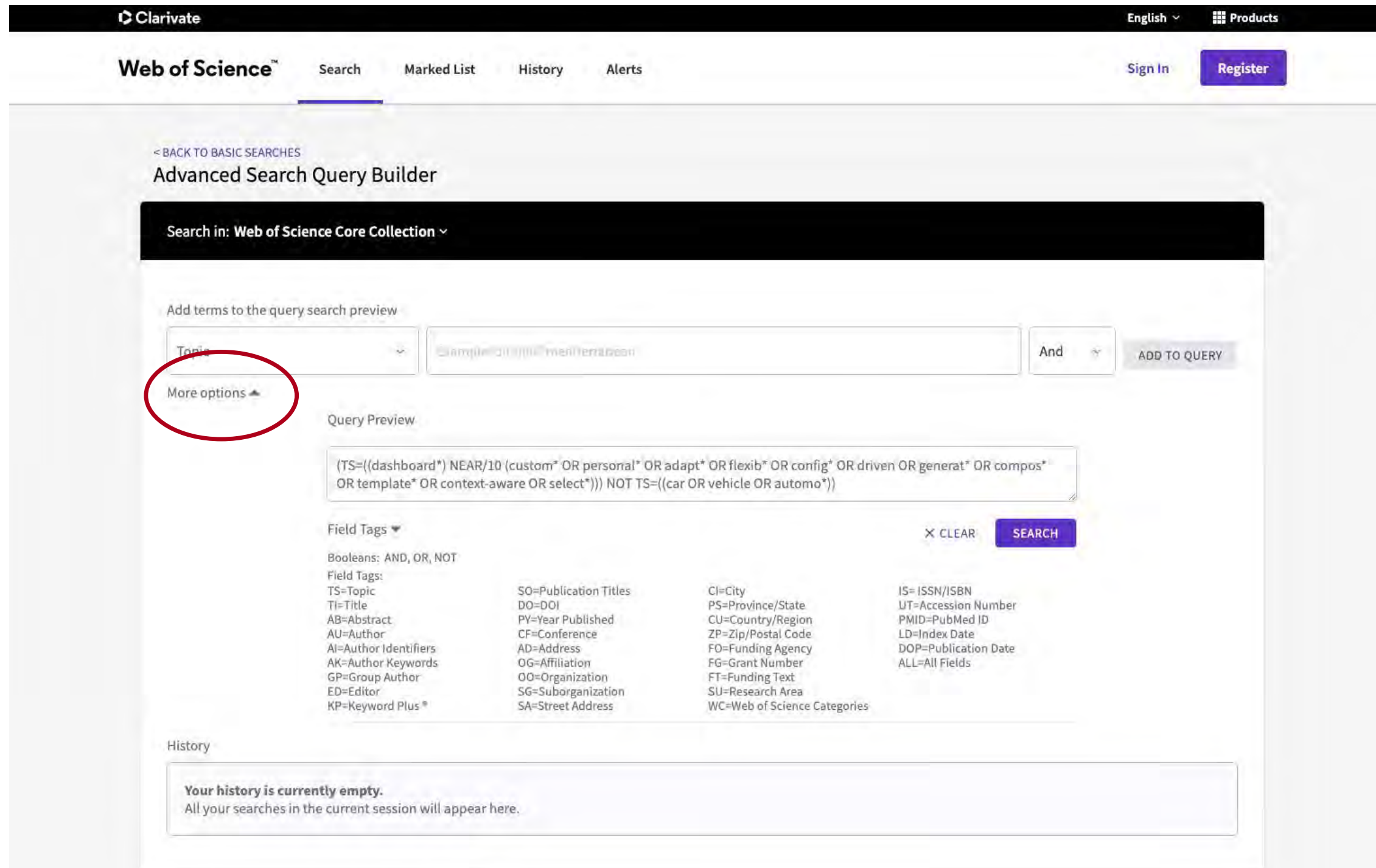
Booleans: AND, OR, NOT

| | | | |
|-----------------------|-----------------------|------------------------------|----------------------|
| Field Tags: | SO=Publication Titles | CI=City | IS=ISSN/ISBN |
| TS=Topic | DO=DOI | PS=Province/State | UT=Accession Number |
| TI=Title | PY=Year Published | CU=Country/Region | PMID=PubMed ID |
| AB=Abstract | CF=Conference | ZP=Zip/Postal Code | LD=Index Date |
| AU=Author | AD=Address | FO=Funding Agency | DOP=Publication Date |
| AI=Author Identifiers | OG=Affiliation | FG=Grant Number | ALL=All Fields |
| AK=Author Keywords | OO=Organization | FT=Funding Text | |
| GP=Group Author | SG=Suborganization | SU=Research Area | |
| ED=Editor | SA=Street Address | WC=Web of Science Categories | |
| KP=Keyword Plus* | | | |

History

Your history is currently empty.
All your searches in the current session will appear here.

Consulta avanzada de WoS



The screenshot shows the 'Advanced Search Query Builder' interface on the Web of Science website. At the top, there is a navigation bar with 'Clarivate', 'English', and 'Products'. Below this, the 'Web of Science' logo is followed by 'Search', 'Marked List', 'History', and 'Alerts'. On the right side of the navigation bar, there are 'Sign In' and 'Register' buttons.

The main content area is titled 'Advanced Search Query Builder' and includes a link '< BACK TO BASIC SEARCHES'. Below the title, there is a dropdown menu for 'Search in: Web of Science Core Collection'. The search input area contains a dropdown menu for 'Topic' (circled in red) and a text input field with the query '(TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))) NOT TS=((car OR vehicle OR automo*))'. To the right of the input field is an 'And' dropdown and an 'ADD TO QUERY' button.

Below the search input, there is a 'Query Preview' section showing the constructed query: `(TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))) NOT TS=((car OR vehicle OR automo*))`. There are 'X CLEAR' and 'SEARCH' buttons next to the preview.

The 'Field Tags' section lists various search criteria: Booleans (AND, OR, NOT), Field Tags (TS=Topic, TI=Title, AB=Abstract, AU=Author, AI=Author Identifiers, AK=Author Keywords, GP=Group Author, ED=Editor, KP=Keyword Plus), SO=Publication Titles, DO=DOI, PY=Year Published, CF=Conference, AD=Address, OG=Affiliation, OO=Organization, SG=Suborganization, SA=Street Address, CI=City, PS=Province/State, CU=Country/Region, ZP=Zip/Postal Code, FO=Funding Agency, FG=Grant Number, FT=Funding Text, SU=Research Area, WC=Web of Science Categories, IS=ISSN/ISBN, UT=Accession Number, PMID=PubMed ID, LD=Index Date, DOP=Publication Date, and ALL=All Fields.

At the bottom, there is a 'History' section with a message: 'Your history is currently empty. All your searches in the current session will appear here.'

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Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES

Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

Topic And

Select citation indexes from Web of Science Core Collection

Exact search

Query Preview

```
(TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))) NOT TS=((car OR vehicle OR automo*))
```

Field Tags

Booleans: AND, OR, NOT

Field Tags:

| | | | |
|-----------------------|-----------------------|------------------------------|----------------------|
| TS=Topic | SO=Publication Titles | CI=City | IS= ISSN/ISBN |
| TI=Title | DO=DOI | PS=Province/State | UT=Accession Number |
| AB=Abstract | PY=Year Published | CU=Country/Region | PMID=PubMed ID |
| AU=Author | CF=Conference | ZP=Zip/Postal Code | LD=Index Date |
| AI=Author Identifiers | AD=Address | FO=Funding Agency | DOP=Publication Date |
| AK=Author Keywords | OG=Affiliation | FG=Grant Number | ALL=All Fields |
| GP=Group Author | OO=Organization | FT=Funding Text | |
| ED=Editor | SG=Suborganization | SU=Research Area | |
| KP=Keyword Plus * | SA=Street Address | WC=Web of Science Categories | |

History

Your history is currently empty.
All your searches in the current session will appear here.

Consulta avanzada de WoS



Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES

Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

Topic And

Less options

Select citation indexes from Web of Science Core Collection

- Social Sciences Citation Index (SSCI)
- Arts & Humanities Citation Index (A&HCI)
- Current Chemical Reactions (CCR-EXPANDED)
- Book Citation Index - Social Sciences & Humanities (BKCI-SSH)
- Conference Proceedings Citation Index - Science (CPCI-S)
- Emerging Sources Citation Index (ESCI)
- Science Citation Index Expanded (SCI-EXPANDED)
- Book Citation Index - Science (BKCI-S)
- Conference Proceedings Citation Index - Social Sciences & Humanities (CPCI-SSH)

| | | | |
|-----------------------|-----------------------|------------------------------|----------------------|
| TS=Topic | SO=Publication Titles | CI=City | IS= ISSN/ISBN |
| TI=Title | DO=DOI | PS=Province/State | UT=Accession Number |
| AB=Abstract | PY=Year Published | CU=Country/Region | PMID=PubMed ID |
| AU=Author | CF=Conference | ZP=Zip/Postal Code | LD=index Date |
| AI=Author Identifiers | AD=Address | FO=Funding Agency | DOP=Publication Date |
| AK=Author Keywords | OG=Affiliation | FG=Grant Number | ALL=All Fields |
| GP=Group Author | OO=Organization | FT=Funding Text | |
| ED=Editor | SG=Suborganization | SU=Research Area | |
| KP=Keyword Plus* | SA=Street Address | WC=Web of Science Categories | |

History

Your history is currently empty.
All your searches in the current session will appear here.

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Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES
Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

Topic And

Less options

Select citation indexes from Web of Science Core Collection

Social Sciences Citation Index (SSCI) Science Citation Index Expanded (SCI-EXPANDED) Emerging Sources Citation Index (ESCI)

Exact search

Query Preview

```
(TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR template* OR context-aware OR select*))) NOT TS=((car OR vehicle OR automo*))
```

Field Tags

Booleans: AND, OR, NOT

Field Tags:

| | | | |
|-----------------------|-----------------------|------------------------------|----------------------|
| TS=Topic | SO=Publication Titles | CI=City | IS= ISSN/ISBN |
| TI=Title | DO=DOI | PS=Province/State | UT=Accession Number |
| AB=Abstract | PY=Year Published | CU=Country/Region | PMID=PubMed ID |
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| GP=Group Author | OO=Organization | FT=Funding Text | |
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| KP=Keyword Plus* | SA=Street Address | WC=Web of Science Categories | |

History

Your history is currently empty.
All your searches in the current session will appear here.

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Clarivate English Products

Web of Science™ Search Marked List History Alerts Sign In Register

< BACK TO BASIC SEARCHES

Advanced Search Query Builder

Search in: Web of Science Core Collection

Add terms to the query search preview

Topic And

Less options

Select citation indexes from

Social Sciences Citation Index Sources Citation Index (ESCI)

Exact search

Exact search

Turning on **Exact Search** will limit your search to the exact terms you enter into the search field.

By default (Exact search off), *Web of Science* will automatically expand searches in the Topic, Title, Abstract, Keywords, and Keywords Plus fields to help you find the most relevant results. For example, a search for *mouse* will return results with *mice*, and a search for *color* will return results *colour* or *colors*. *Web of Science* uses a combination of stemming and lemmatization to achieve this.

Field Tags

Booleans: AND, OR, NOT

| | | | |
|-----------------------|-----------------------|------------------------------|----------------------|
| Field Tags: | SO=Publication Titles | CI=City | IS=ISSN/ISBN |
| TS=Topic | DO=DOI | PS=Province/State | UT=Accession Number |
| TI=Title | PY=Year Published | CU=Country/Region | PMID=PubMed ID |
| AB=Abstract | CF=Conference | ZP=Zip/Postal Code | LD=Index Date |
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| AI=Author Identifiers | OG=Affiliation | FG=Grant Number | ALL=All Fields |
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| GP=Group Author | SG=Suborganization | SU=Research Area | |
| ED=Editor | SA=Street Address | WC=Web of Science Categories | |
| KP=Keyword Plus® | | | |

History

Your history is currently empty.
All your searches in the current session will appear here.

Consulta avanzada de WoS

El estado de la cuestión en los trabajos académicos: Las revisiones sistemáticas

Web of Science™ Search Marked List History Alerts English Products Sign In Register

309 results from Social Sciences Citation Index (SSCI), Science Citation Index Expanded (SCI-EXPANDED), Emerging Sources Citation Index (ESCI):

Q (TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR t...)) ANALYZE RESULTS CITATION REPORT CREATE ALERT

Copy query link

Refine results

Search within results for:

Quick Filters

- Review Articles New 8
- Early Access 0
- Open Access 150

EXCLUDE REFINE

Publication Years

Search for Publication Years

Select all Date

| Year | Count |
|--|-------|
| <input checked="" type="checkbox"/> 2021 | 17 |
| <input checked="" type="checkbox"/> 2020 | 70 |
| <input checked="" type="checkbox"/> 2019 | 48 |
| <input checked="" type="checkbox"/> 2018 | 38 |
| <input checked="" type="checkbox"/> 2017 | 34 |
| <input checked="" type="checkbox"/> 2016 | 23 |
| <input checked="" type="checkbox"/> 2015 | 10 |
| <input type="checkbox"/> 2014 | 12 |
| <input type="checkbox"/> 2013 | 14 |
| <input type="checkbox"/> 2012 | 6 |
| <input type="checkbox"/> 2011 | 5 |
| <input type="checkbox"/> 2010 | 6 |
| <input type="checkbox"/> 2009 | 6 |
| <input type="checkbox"/> 2008 | 5 |
| <input type="checkbox"/> 2007 | 2 |
| <input type="checkbox"/> 2006 | 4 |
| <input type="checkbox"/> 2005 | 1 |
| <input type="checkbox"/> 2004 | 1 |
| <input type="checkbox"/> 2003 | 2 |
| <input type="checkbox"/> 2001 | 1 |
| <input type="checkbox"/> 1999 | 1 |
| <input type="checkbox"/> 1995 | 2 |
| <input type="checkbox"/> 1993 | 1 |

See less EXCLUDE REFINE

Document Types

- Articles 271
- Meeting Abstracts 17
- Editorial Materials 12
- Early Access 9
- Review Articles 8

See all EXCLUDE REFINE

0/309 ADD TO MARKED LIST EXPORT Relevance 1 of 7

- Learning analytics dashboards for adaptive support in face-to-face collaborative argumentation
Han, J; Kim, KH; (...); Cho, YH
Apr 2021 | Computers & Education
Despite the potential of learning analytics for personalized learning, it is seldom used to support collaborative learning particularly in face-to-face (F2F) learning contexts. This study uses learning analytics to develop a dashboard system that provides adaptive support for F2F collaborative argumentation (FCA). This study developed two dash... Show more
73 References
Free Full Text From Publisher *** Related records
- Studies on morphological, physico-chemical and mechanical properties of wheat straw reinforced polyester resin composite
Haque, ME; Khan, MW and Rani, M
Mar 2021 (Early Access) | Polymer Bulletin
In this research, wheat straw (the agricultural by-product from the wheat plant, scientific name Triticum) reinforced unsaturated polyester resin composites were developed by applying a simple and easy technique to improve supportable composite materials. Therefore, untreated and sodium hydroxide-treated wheat straws have been used to form a ... Show more
47 References
View full text *** Related records
- Native Grasslands at the Core: A New Paradigm of Intensification for the Campos of Southern South America to Increase Economic and Environmental Sustainability
Jaurena, M; Durante, M; (...); Lattanzi, FA
Mar 5 2021 | Frontiers In Sustainable Food Systems
Extensive livestock production in southern South America occupies similar to 0.5 M km(2) in central-eastern Argentina, Uruguay and southern Brazil. These systems have been sustained for more than 300 years by year-long grazing of the highly biodiverse native Campos ecosystems that provides many valuable additional ecosystem services. However, thei ... Show more
103 References
Free Full Text from Publisher *** Related records
- Using text mining to measure mobile banking service quality
Leem, BH and Eum, SW
Mar 2021 (Early Access) | Industrial Management & Data Systems
Purpose The purpose of this study is to propose a method of measuring service quality as well as suggesting to detect customer complaints through analysis of customer online reviews of mobile bank, which is unstructured data. Design/methodology/approach This study uses text mining approach for customer online reviews ana ... Show more
30 References
Full Text at Publisher *** Related records
- Features Constituting Actionable COVID-19 Dashboards: Descriptive Assessment and Expert Appraisal of 158 Public Web-Based COVID-19 Dashboards
Ivanovic, D; Barbazza, E; (...); Kringsos, D
Feb 24 2021 | Journal Of Medical Internet Research
Background: Since the outbreak of COVID-19, the development of dashboards as dynamic, visual tools for communicating COVID-19 data has surged worldwide. Dashboards can inform decision-making and support behavior change. To do so, they must be actionable. The features that constitute an actionable dashboard in the context of the COVID- ... Show more
61 References
Free Full Text from Publisher *** Related records
- Enabling High-Throughput Searches for Multiple Chemical Data Using the US-EPA CompTox Chemicals Dashboard
Lowe, CN and Williams, AJ
Feb 22 2021 | Journal Of Chemical Information And Modeling
The core goal of cheminformatics is to efficiently store robust and accurate chemical information and make it accessible for drug discovery, environmental analysis, and the development of prediction models including quantitative structure-activity relationships (QSAR). The U.S. Environmental Protection Agency (EPA) has developed a web-based ap... Show more
21 References
View full text *** Related records
- The Rhinoplasty Health Care Monitor: Using Validated Questionnaires and a Web-Based Outcome Dashboard to Evaluate Personal Surgical Performance
van Zijl, FWW; Lohuis, PFM and Datema, FR
Feb 2021 (Early Access) | Facial Plastic Surgery & Aesthetic Medicine
Background: Self-assessment provides valuable feedback in the life-long process of mastering rhinoplasty. This study presents a method to measure and evaluate data-based performance of a single surgeon using a web-based dashboard. Methods: In this prospective analytic cohort study, all patients referred to the senior author for functio ... Show more
19 References
View full text *** Related records



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Clarivate English Products

Web of Science Search Marked List History Alerts Sign In Register

107 results from Social Sciences Citation Index (SSCI), Science Citation Index Expanded (SCI-EXPANDED), Emerging Sources Citation Index (ESCI):

Q (TS=((dashboard*) NEAR/10 (custom* OR personal* OR adapt* OR flexib* OR config* OR driven OR generat* OR compos* OR t...)) ANALYZE RESULTS CITATION REPORT CREATE ALERT

Refined by: Open Access X Publication Years: 2021 or 2020 or 2019 or 2018 or 2017 X Document Types: Articles X Clear all

Copy query link

Refine results

Search within results: []

Quick Filters

- Early Access 1
- Open Access 107

Publication Years

- 2021 10
- 2020 42
- 2019 19
- 2018 22
- 2017 14

Document Types

- Articles 107
- Early Access 1

Web of Science Categories

- Health Care Sciences Services 18
- Medical Informatics 13
- Computer Science Information Systems 12
- Public Environmental Occupational Health 10
- Computer Science Interdisciplinary Applica... 7

See all

Authors

- Theron R 5
- Vazquez-ingelmo A 4
- Garcia-penalvo FJ 3
- Leri D 3
- Azizi MSAM 2

0/107 ADD TO MARKED LIST EXPORT Relevance 1 of 3

- 1 Learning analytics dashboards for adaptive support in face-to-face collaborative argumentation
Han, J; Kim, KH; (...); Cho, YH
Apr 2021 | Computers & Education
Despite the potential of learning analytics for personalized learning, it is seldom used to support collaborative learning particularly in face-to-face (F2F) learning contexts. This study uses learning analytics to develop a dashboard system that provides adaptive support for F2F collaborative argumentation (FCA). This study developed two dash... Show more
Free Full Text From Publisher *** 73 References Related records
- 2 Native Grasslands at the Core: A New Paradigm of Intensification for the Campos of Southern South America to Increase Economic and Environmental Sustainability
Jaurena, M; Durante, M; (...); Lattanzi, FA
Mar 5 2021 | Frontiers in Sustainable Food Systems
Extensive livestock production in southern South America occupies similar to 0.5 M km(2) in central-eastern Argentina, Uruguay and southern Brazil. These systems have been sustained for more than 300 years by year-long grazing of the highly biodiverse native Campos ecosystems that provides many valuable additional ecosystem services. However, thei... Show more
Free Full Text from Publisher *** 103 References Related records
- 3 Features Constituting Actionable COVID-19 Dashboards: Descriptive Assessment and Expert Appraisal of 158 Public Web-Based COVID-19 Dashboards
Ivankovic, D; Barbazza, E; (...); Kringos, D
Feb 24 2021 | Journal Of Medical Internet Research
Background: Since the outbreak of COVID-19, the development of dashboards as dynamic, visual tools for communicating COVID-19 data has surged worldwide. Dashboards can inform decision-making and support behavior change. To do so, they must be actionable. The features that constitute an actionable dashboard in the context of the COVID-... Show more
Free Full Text from Publisher *** 61 References Related records
- 4 Analysis and Classification of Mobile Apps Using Topic Modeling: A Case Study on Google Play Arabic Apps
Fuad, A and Al-Yahya, M
Feb 16 2021 | Complexity
Mobile app stores provide an extremely rich source of information on app descriptions, characteristics, and usage, and analyzing these data provides insights and a deeper understanding of the nature of apps. However, manual analysis of this vast amount of information on mobile apps is not a simple and straightforward task; it is costly in terms of human effc... Show more
Free Full Text from Publisher *** 29 References Related records
- 5 Staying close to business: the role of epistemic alignment in rendering HR analytics outputs

Herramientas para la gestión de los registros

- Los resultados de las búsquedas en las bases de datos se deben ir exportando desde estas hasta las herramientas que se hayan seleccionado
 - Hojas de cálculo
 - Gestores de referencias bibliográficas

Gestores de referencias bibliográficas

- Aunque las hojas de cálculo son una herramienta que facilita el manejo de los registros, en algún momento del proceso (aunque solo fuera en la parte final del informe) los gestores de referencias bibliográficas resultan imprescindibles
- Estas herramientas incluyen funciones que resultan de gran valor en el proceso de revisión
 - Importación directa y selectiva de registros desde las bases de datos
 - Importación indirecta a través de ficheros con formatos reconocidos (por ejemplo .ris)
 - Creación de carpetas o bibliotecas para mantener grupos de registros diferenciados
 - Asignación de etiquetas a cada referencia
 - Integración con los principales procesadores de texto

Gestores de referencias bibliográficas

- Recomendaciones

Licencia gratuita

- **Zotero** (<https://www.zotero.org/>)
- Mendeley (<https://www.mendeley.com/>)

Licencia de pago

- **EndNote** (<https://endnote.com/>)
- RefWorks (<https://refworks.proquest.com/>)

Seleccionar los estudios primarios

- Se eliminan los registros duplicados procedentes de las diferentes fuentes de datos consultadas
 - Se tiene que registrar el número de duplicados que se eliminan
- Se revisan los títulos y resúmenes de los documentos que han pasado el primer filtro (aplicando los criterios de inclusión y exclusión)
 - Se debería registrar el criterio de exclusión por el que se descarta cada uno de los documentos que no pasa el filtro

Evaluar la calidad de los estudios primarios

- Se revisa el texto completo de los documentos que han pasado el filtro anterior
- Se aplican los criterios de inclusión y exclusión
- Se evalúa la calidad de cada documento según la lista de verificación que se ha definido
- Se tienen que registrar los documentos que se eliminan por no cumplir los criterios de inclusión
- Se tienen que registrar los documentos que se eliminan por no llegar al mínimo de calidad requerido [81]
 - Dependiendo de la puntuación de la evaluación, cada artículo se incluiría o se excluiría en la fase final
 - El investigador debe fijar el punto de corte
- Se pueden añadir documentos citados en sus resultados (siempre que cumplan los criterios de inclusión y exclusión y los criterios de calidad)
 - Se tiene que registrar el número de documentos añadidos por esta vía

Cómo leer un artículo

- Se puede seguir la aproximación de tres pasadas [82]. En cada una se decide si se continúa leyendo
 - Primera pasada – Da una idea general
 - Leer con detalle título, resumen e introducción
 - Identificar la estructura interna del artículo (secciones y subsecciones) e ignorar el resto
 - Leer las conclusiones
 - Echar un vistazo a las referencias y tomar nota mental de las que ya se conocen, se esperan, etc.
 - Segunda pasada – Permite captar el contenido del documento, pero no sus detalles
 - Mirar atentamente las figuras, gráficos
 - Marcar las referencias que no se conocen
 - Tercera pasada – Permite entender el artículo en profundidad
 - Lectura del texto completo buscando entender los elementos clave

Incorporación de nuevos registros

- La lectura en profundidad de los documentos seleccionados puede provocar su descarte, pero también se pueden identificar nuevos documentos que resulten de interés para el estudio de revisión
- Si estos nuevos candidatos se seleccionan para su inclusión en el corpus final (tienen que cumplir todos los criterios de inclusión/exclusión y de calidad al igual que los registros identificados en la estrategia de búsqueda), estos tienen que quedar reflejados en el diagrama de flujo de la revisión
 - Con PRISMA 2020 es mucho más explícito
- La selección de estas nuevas fuentes suele surgir por la revisión de las referencias incluidas en los trabajos seleccionados tras aplicar la estrategia de búsqueda, pero existen herramientas para descubrir trabajos relacionados para aquellos casos en los que el número de registros positivos no cubre las expectativas de los autores de la revisión
 - Por ejemplo, ResearchRabbit (<https://www.researchrabbit.ai/>), Litmaps (<https://www.litmaps.com/>) o Iris (<https://iris.ai/>)
- También hay herramientas basadas en Inteligencia Artificial Generativa [83] para que recibir sugerencias sobre bibliografía de un tema, como por ejemplo Scite Assistant (<https://scite.ai/assistant>) o Consensus (<https://consensus.app/>), que pueden servir de semillas a las herramientas anteriores

Ejemplo de uso de ResearchRabbit partiendo de [1] como semilla

The screenshot displays the ResearchRabbit interface with the following components:

- Left Panel:** Navigation options including 'New Collection', 'New Category', 'Connect to Zotero', and 'Shared with Me'. A filter section is set to 'Custom' with 'Comments' selected.
- Selected Paper:** 'Desarrollo de estados de la cuestión robustos: Revisiones Sistemáticas de Literatura' by Francisco José García-Peñalvo (2022). The abstract discusses systematic literature reviews as a method for identifying research gaps.
- Similar Work:** A list of related papers such as 'Retos y desafíos en la Educación Superior: una mirada desde la percepción de los docentes' and 'A participatory approach to ecosystem conservation: fuzzy cognitive maps and stakeholder group analysis in Ulubat Lake, Turkey'.
- Network Graph:** A visualization of connections between the selected paper and 50 other papers. Nodes represent authors and years (e.g., Moro 2021, García-Peñalvo 2021, Salas 2020). The graph shows a dense network of relationships.
- Right Panel:** 'EXPLORE PEOPLE' section showing 'These Authors' (157) and 'Suggested Authors' (337). 'EXPLORE OTHER CONTENT' shows 'Linked Content' (4). 'EXPORT PAPERS' options include BibTeX, RIS, and CSV.

Ejemplo de uso de ResearchRabbit partiendo de una colección de Zotero como semilla

El estado de la cuestión en los tra

The image displays the ResearchRabbit interface, which is used for exploring research connections. It is divided into several main sections:

- Left Panel (Zotero Collections):** Shows a sidebar with options like "New Collection", "New Category", and "Import Zotero Collection". Below this, there are sections for "Uncategorized" (with a "+ Collection" button), "ChatGPT-Edu" (containing 31 items), and "Untitled Collection".
- Center Panel (Selected Papers):** Displays a list of 31 selected papers. Each entry includes a checkbox, author names, year, and a brief title. Examples include:
 - "Dental Education: A Review and Guide for Curriculum Update" (Education Sciences)
 - "How Does ChatGPT Perform on the United States Medical Licensing Examination? The Implications of Large Language Models for Medical Education and Knowledge Assessment" (JMIR Medical Education)
 - "Generative AI and the future of education: Ragnarök or reformation? A paradoxical perspective from management educators" (International Journal of Management Education)
 - "Examining Science Education in ChatGPT: An Exploratory Study of Generative Artificial Intelligence" (Journal of Science Education and Technology)
 - "Ethical use of artificial intelligence in health professions education: AMEE Guide No.158" (Medical Teacher)
 - "Chatting or cheating? The impacts of ChatGPT and other artificial intelligence language models on nurse education" (Nurse Education Today)
 - "Chatting and cheating: Ensuring academic integrity in the era of ChatGPT" (Innovations in Education and Teaching International)
 - "Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond" (Journal of University Teaching and Learning Practice)
- Right Panel (Similar Work):** Provides recommendations for similar work based on the selected papers. It lists titles such as "Exploring Generative Models with Middle School Students", "Teaching High School Students To Teach Machines", "Phenomenal intentionality and the brain in a vat", "Defining digital literacy", "Remote Negotiations: International Broadcasting as Bargaining in the Information Age", "Digital Media Literacy Education and Online Civic and Political Participation", "Auto-Encoding Variational Bayes", "SELF-EFFICACY MECHANISM IN HUMAN AGENCY", "Creative self-efficacy development and creative performance over time.", and "The development of a learner empowerment measure 1".
- Bottom Right Panel (Network Graph):** A network graph showing connections between authors. The central node is "Ali 2021". Other prominent nodes include "Goodfellow 2014", "Arora 2022", and "Pataranutaporn 2022". The graph also shows other authors like "Cao 2019", "Ali 2021", "Güera 2018", "Doersch 2016", "Kingma 2014", "Roberts 2018", "Ha 2018", "Williams 2019", "Druqa 2019", "Aharony 2020", "Mitra 2018", "Tseklevs 2016", "Sedley 2016", "Frymier 1996", "Ellis 2004", "Pan 2010", "Kong 2018", "Hitron 2019", "Jobin 2019", "VanderKaay 2019", "Herrington 2000", "Bandura 1982", "Cath 2018", "Floridi 2019", "Tierney 2011", "Horan 2004", "Radner 1971", "Williams 1971", "Aharony 2020", "Druqa 2019", "Mitra 2018", "Tseklevs 2016", "Sedley 2016", "Frymier 1996", "Ellis 2004", "Pan 2010", "Kong 2018", "Hitron 2019", "Jobin 2019", "VanderKaay 2019", "Herrington 2000", "Bandura 1982", "Cath 2018", "Floridi 2019", "Tierney 2011", "Horan 2004", "Radner 1971", "Williams 1971", "Aharony 2020", "Druqa 2019", "Mitra 2018", "Tseklevs 2016", "Sedley 2016", "Frymier 1996", "Ellis 2004", "Pan 2010", "Kong 2018", "Hitron 2019", "Jobin 2019".

Ejemplo de uso de Litmaps partiendo de [84] como semilla

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Avoiding the Dark Side of Digital Transformation in Teaching. An Institutional Reference Framework for eLearning in Higher Education

García-Peñalvo, 2021

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| Ecuadorian university English teachers' reflections on emergency remote teaching during the COVID-19 pandemic | Estrella, 2022 - SN Social Sciences | 35 | 0 |
| Método basado en Educación 4.0 para mejorar el aprendizaje: lecciones aprendidas de la COVID-19 | Fidalgo-Blanco, 2022 - RIED: Revista Iberoamericana de Educación a Distancia | 21 | 5 |
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| Analysis of The Effectiveness of Online Electronic Learning System Using Data Traffic Network Performance Management to Succeed Merdeka Learning - Merdeka Campus During the Covid-19 Pandemic | Silalahi, 2021 | 9 | 0 |
| Understanding Digital Learning Behaviors: Moderating Roles of Goal Setting Behavior and Social Pressure in Large-Scale Open Online Courses | | | |

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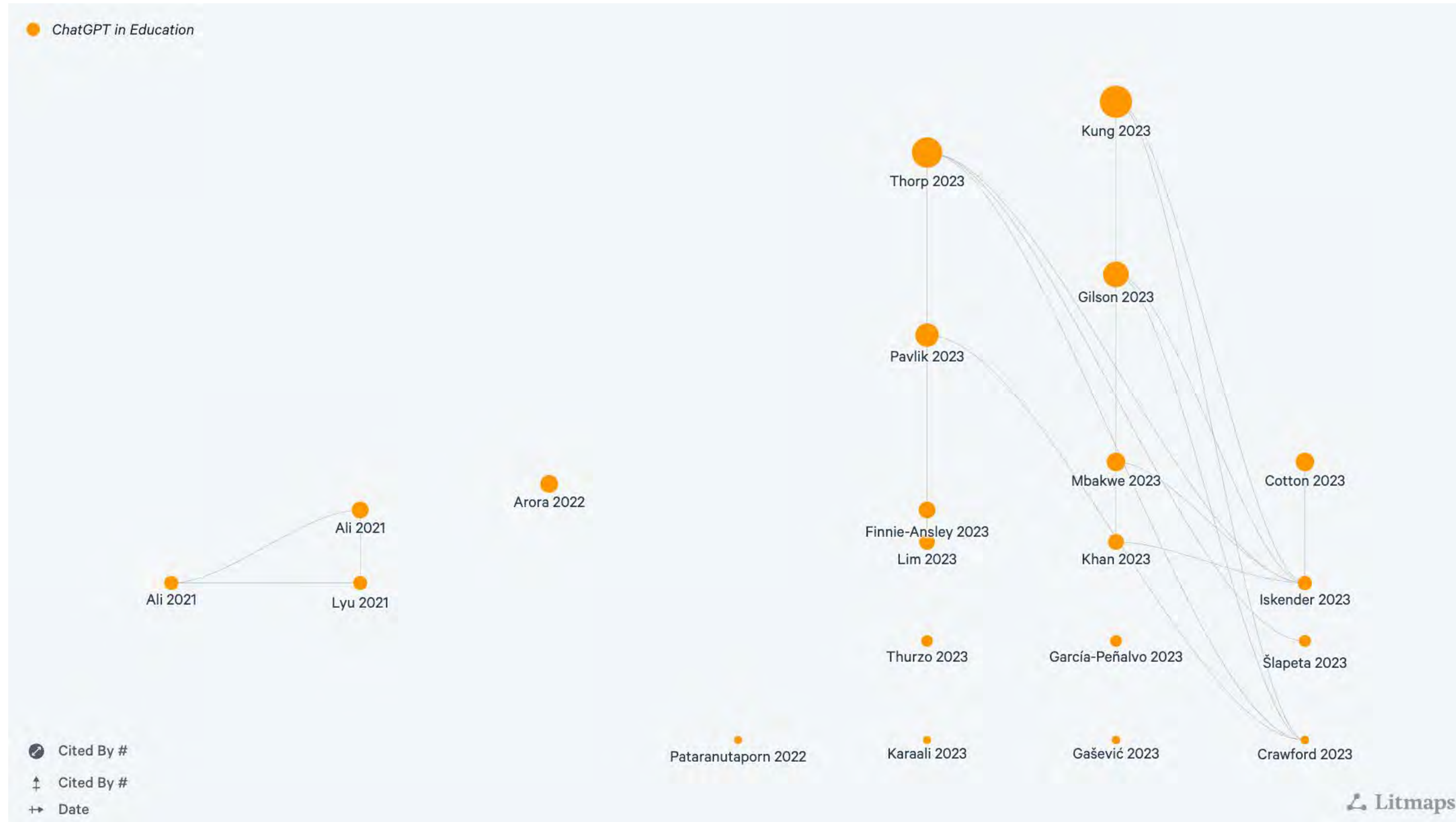
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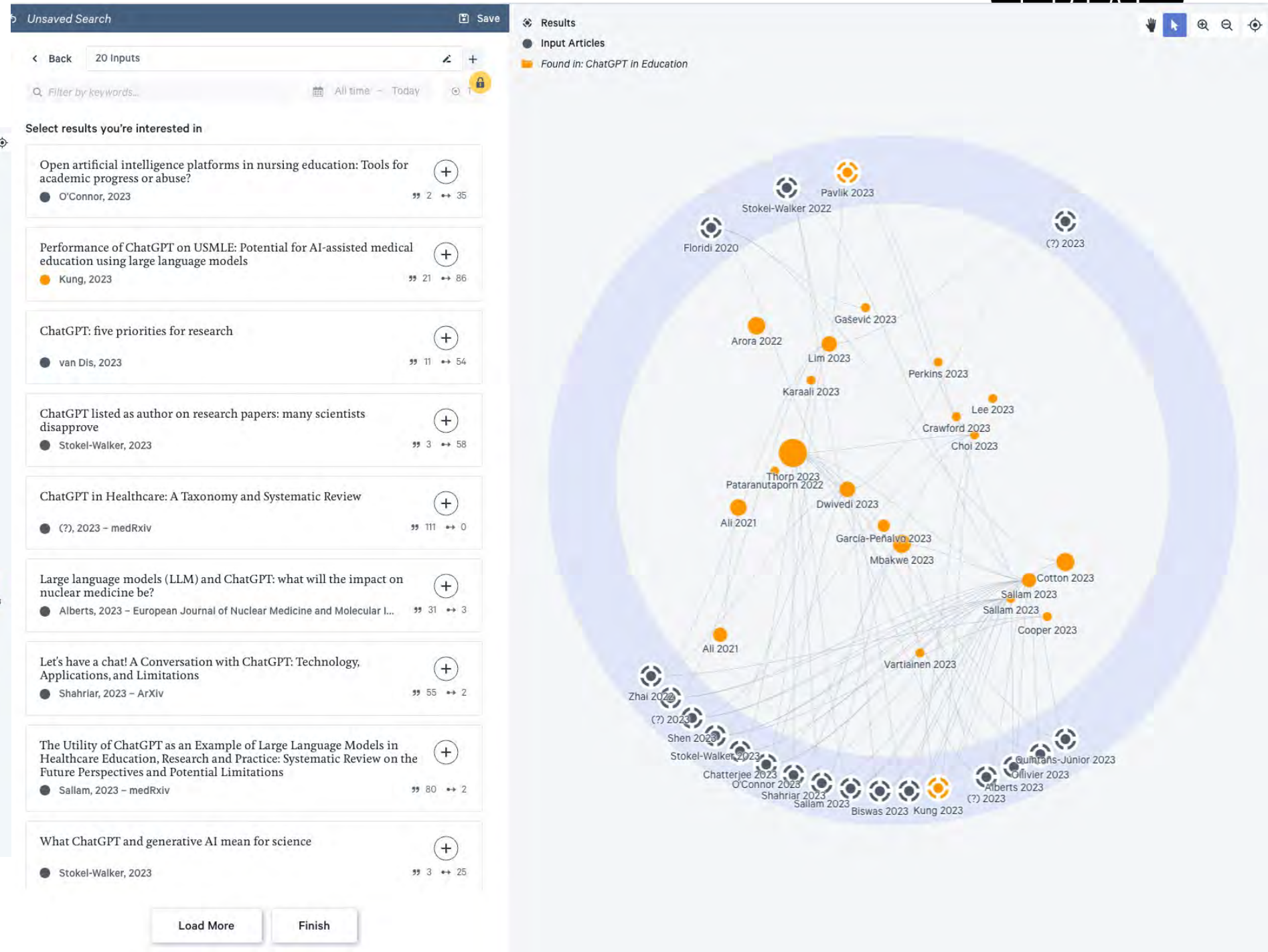
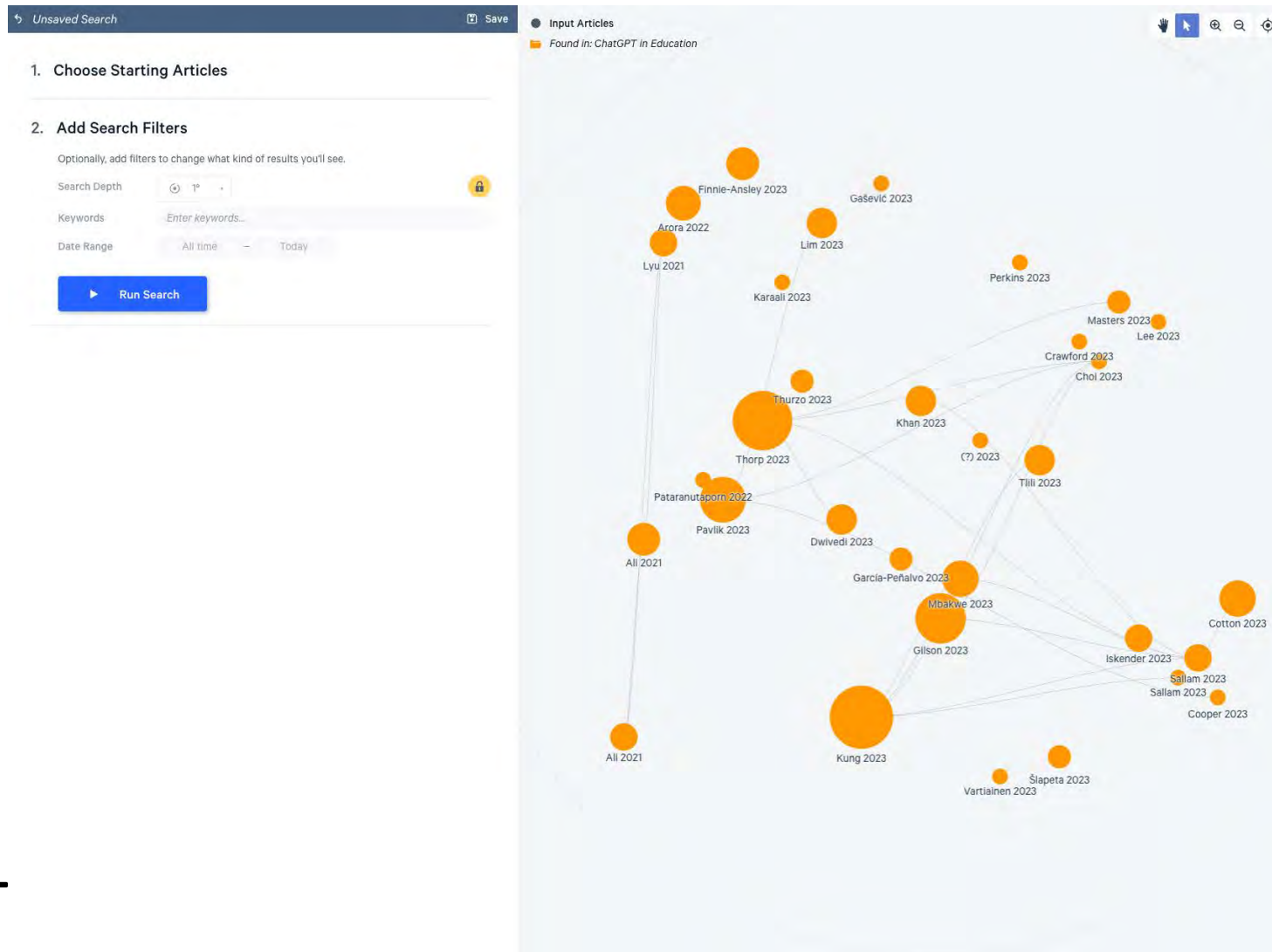
Visualización de la colección como un mapa

Ejemplo de uso de Litmaps partiendo de una colección importada de Zotero como semilla



Ejemplo de uso de Litmaps partiendo de una colección importada de Zotero como semilla

Búsqueda de artículos relacionados



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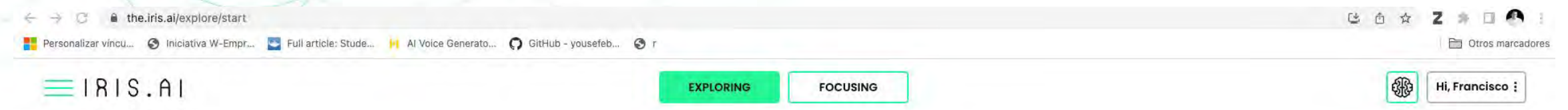


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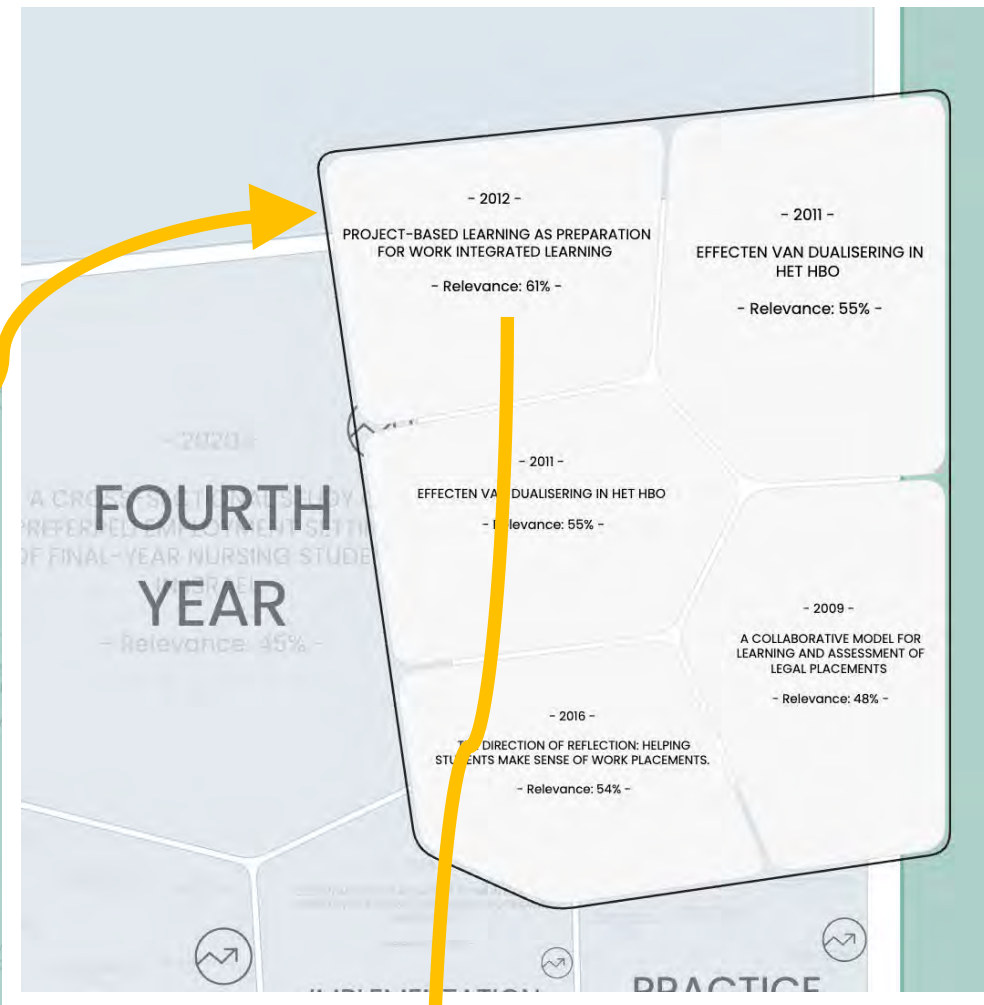
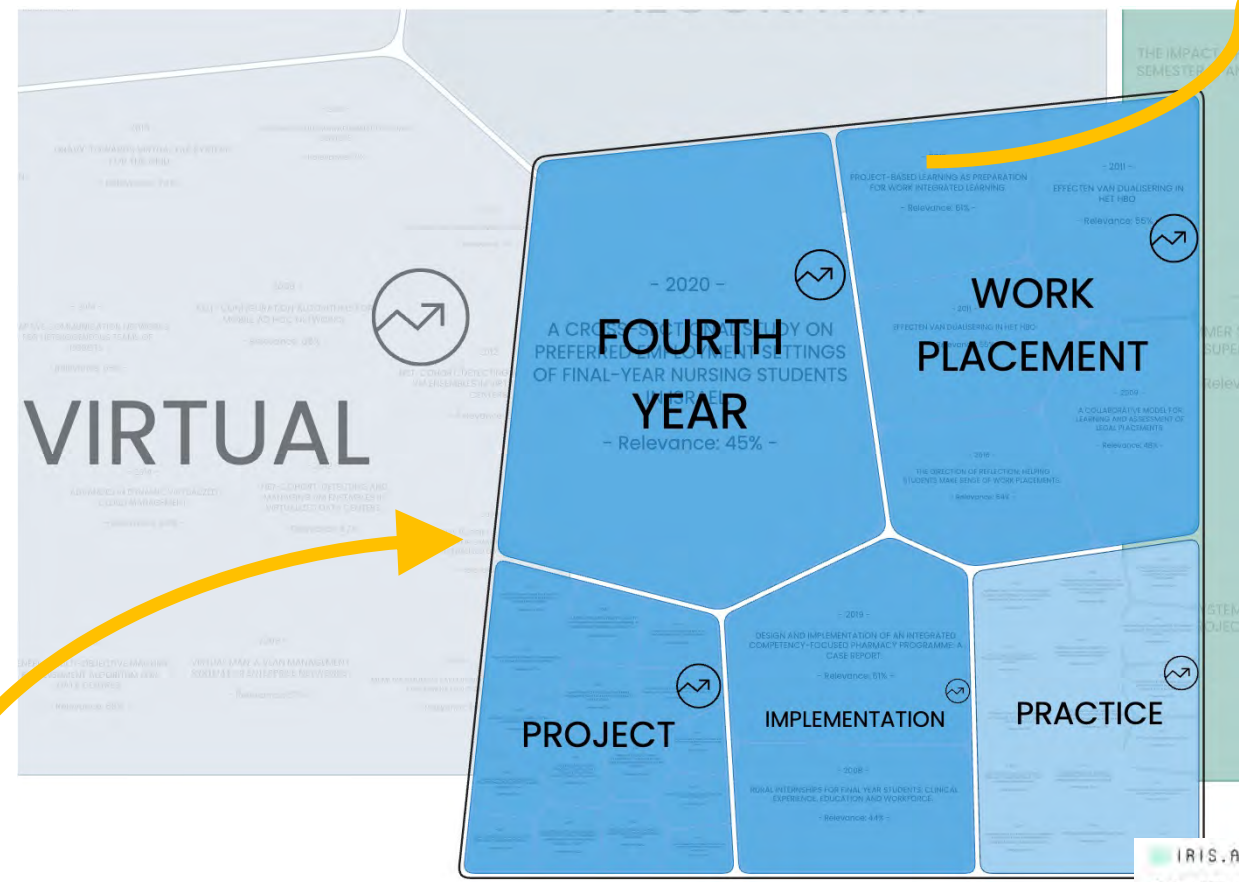
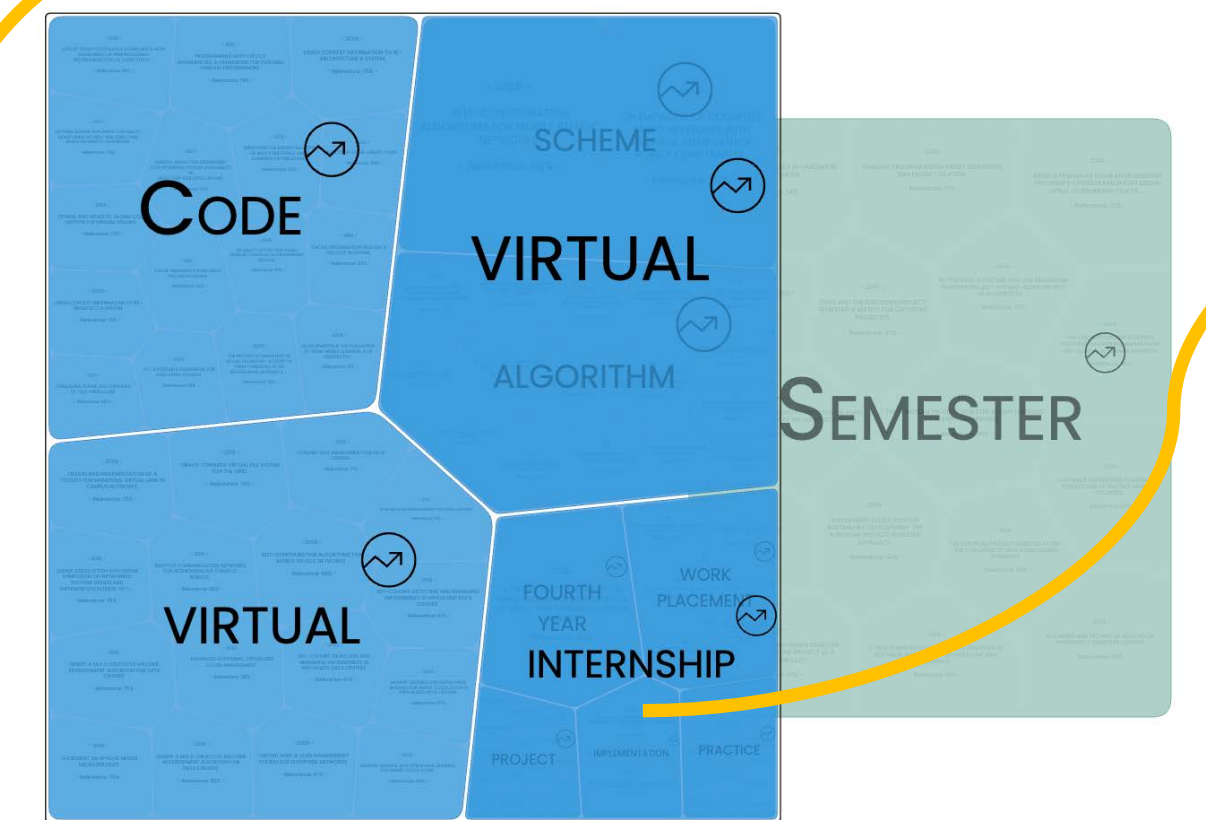
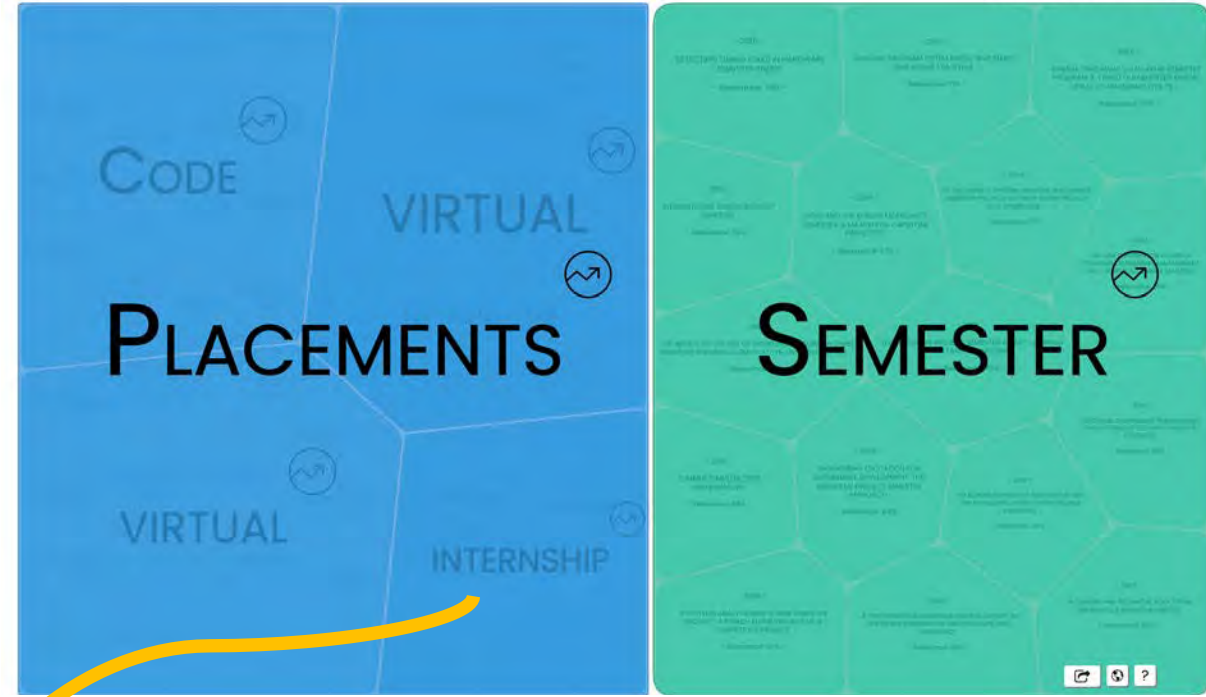


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Virtual Placements Management Process Supported by Technology: Proposal and First Results of the Semester of Code

I've identified 93 related papers from our repositories and grouped them by concept.

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I've found this paper for you in: placements > internship > work placement

- 2012 -

Project-based learning as preparation for work integrated learning
Jorgensen, D. (David) & Howard, Prue.

Relevance: 87%

Abstract
Work Integrated Learning (WIL) has become recognised internationally as a powerful learning tool to develop professional practice capabilities in students and ultimately graduates. The success of WIL is dependent on the ability of the graduate to fit the ground running. This is true from both an employer and graduate perspective, both during the WIL experience(s) and after graduation on entering the workforce. Many WIL programs worldwide have traditionally focused on the work placement or internship itself, and assumed that the parent academic program of study has effectively prepared the student to achieve this. Anecdotal evidence has indicated that this is not necessarily the case and study programs need to be explicitly structured to specifically prepare students for the WIL experience if the value of the experience is to be optimised. As these placements are putting students in a professional practice environment, the academic preparation needs to focus on introducing students to professional practice itself. This means developing professional practice skills. Project Based Learning (PBL) by its underlying philosophy puts students in a real, or virtual, professional practice environment. It stands to reason then, that PBL should be an ideal preparation for WIL. Central Queensland University introduced a WIL engineering program in 1994 in the form of their Co-operative Education program. Soon thereafter, the faculty recognised that the needs of the employers and students were disconnected from the traditional content focused delivery of the existing engineering program. This paper recounts the issues involved and the development of the PBL paradigm introduced to support and enhance the engineering program's WIL activities, and reports on the progress in investigating the effectiveness of this approach.

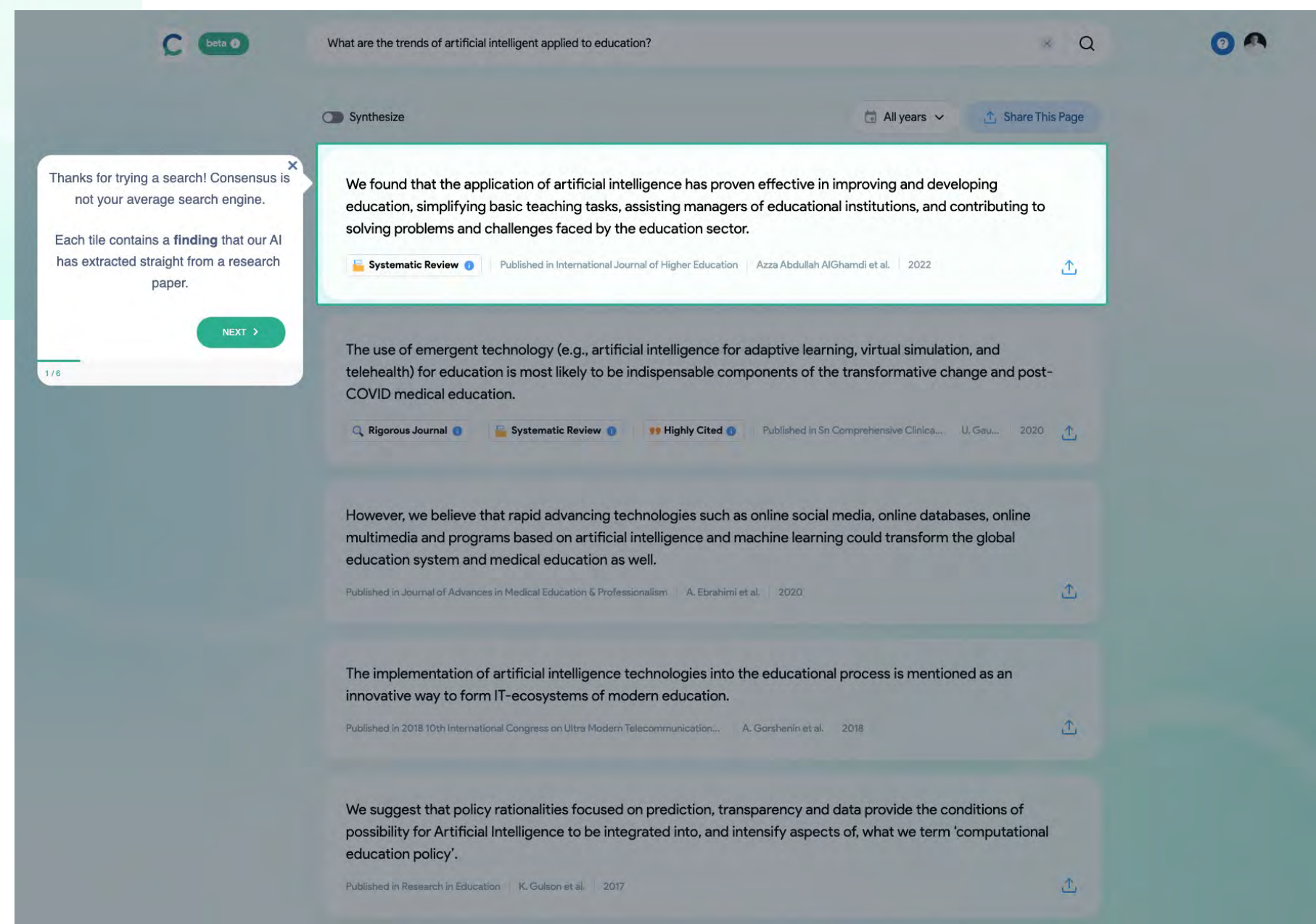
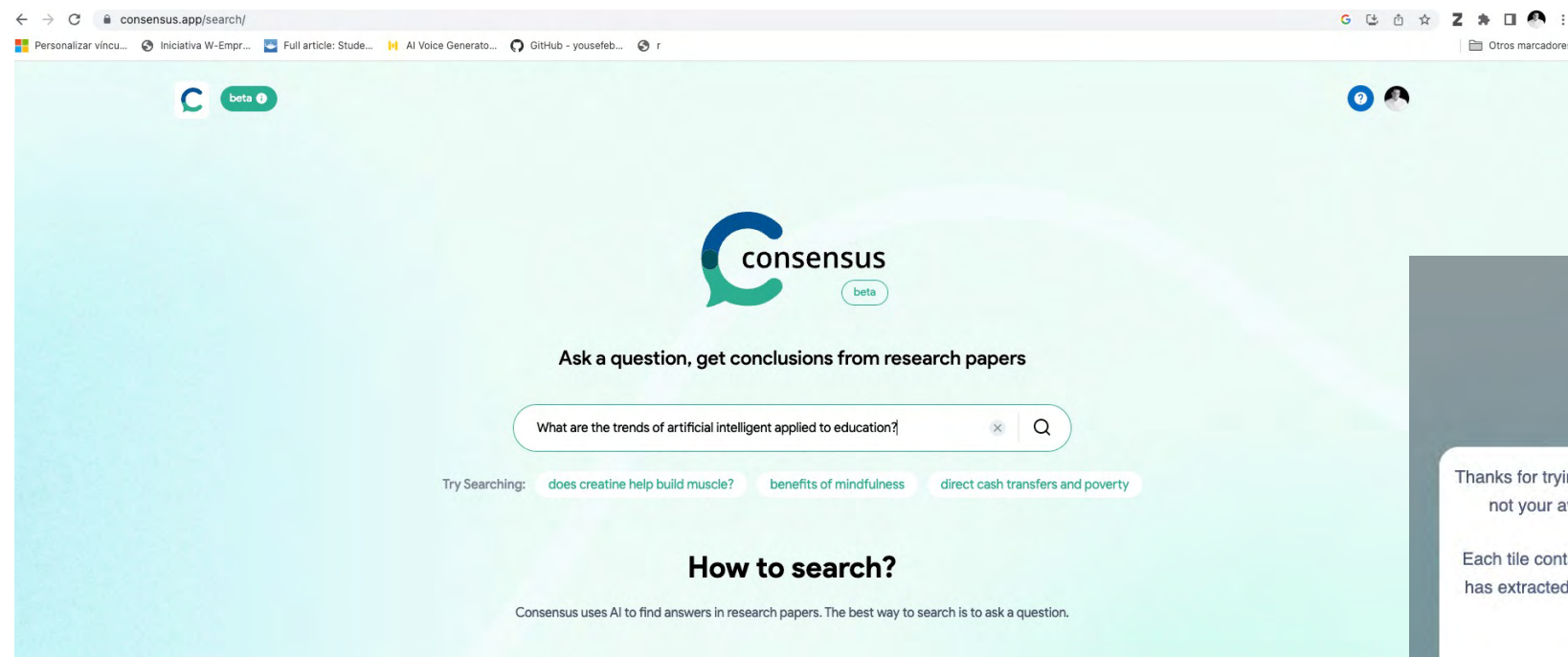
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Journal Title: *Journal of Pedagogical Research*
ISSN: 2201-9243
Publisher: Centre for Educational Development, Republic Polytechnic
Language of Full Text: English

Ejemplo de uso de Scite Assistant



The screenshot displays the Scite Assistant interface. At the top, there's a navigation bar with the 'assistant by scite_' logo and an 'Install extension!' button. Below this, three main sections are visible: 'Ask simple questions and get reliable answers from the full-text of millions of research articles', 'Start a draft of an essay, grant, or paragraph', and 'Effectively use information from research articles to support your research tasks'. The central chat area shows a user prompt: 'Give me five key references about chatgpt in education'. The assistant's response provides a summary and a list of five references. On the right, a 'References' sidebar shows the first reference in detail, including the title, authors, and a snippet of the abstract. At the bottom, there's a search bar with the text 'Give me five key references about chatgpt in education' and a 'What do you need help with?' prompt.

Ejemplo del uso de Consensus



Documentar el flujo de la revisión

- Se recomienda utilizar un diagrama de flujo PRISMA [54, 57, 58], pero también existen otras posibilidades

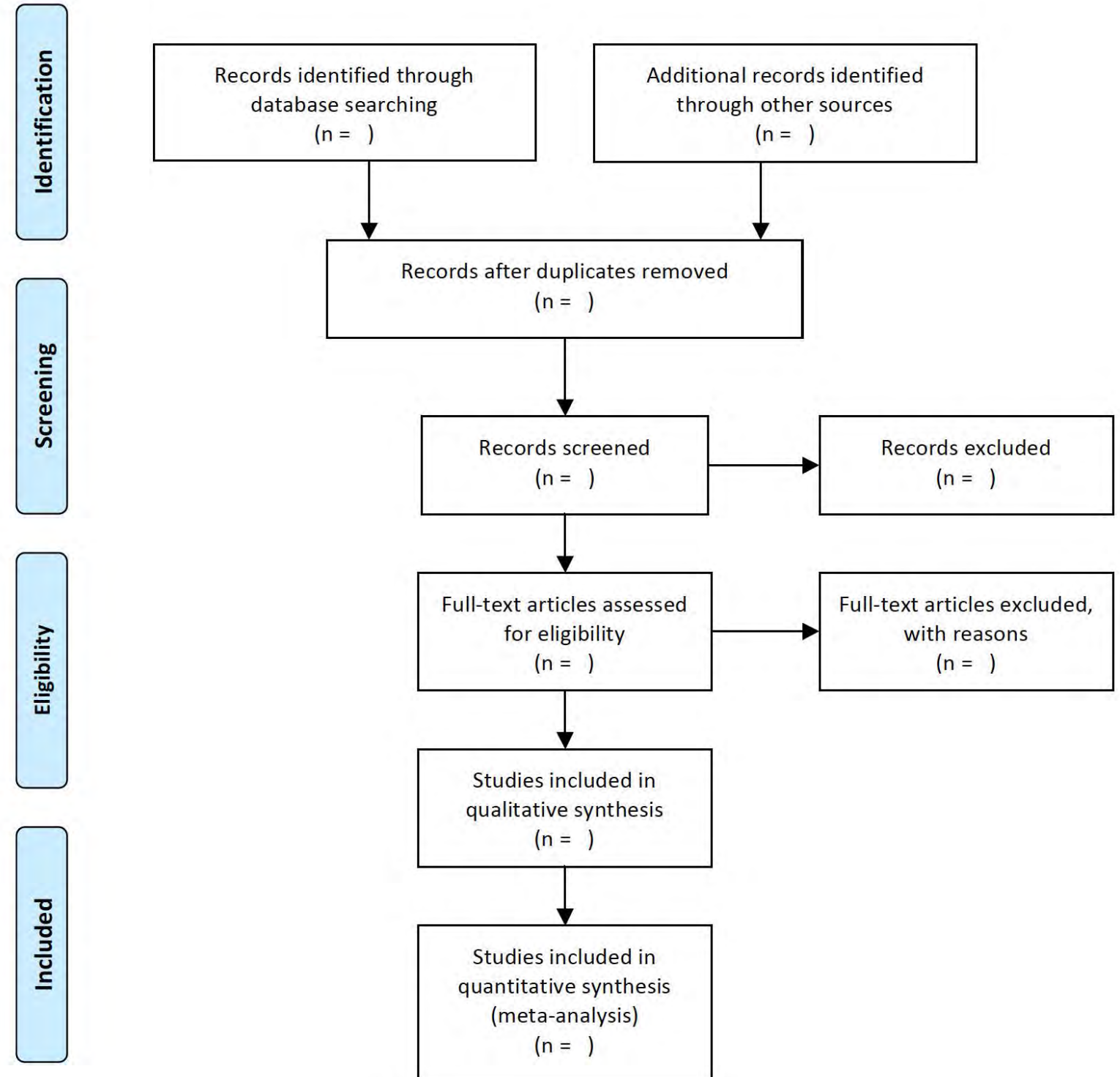
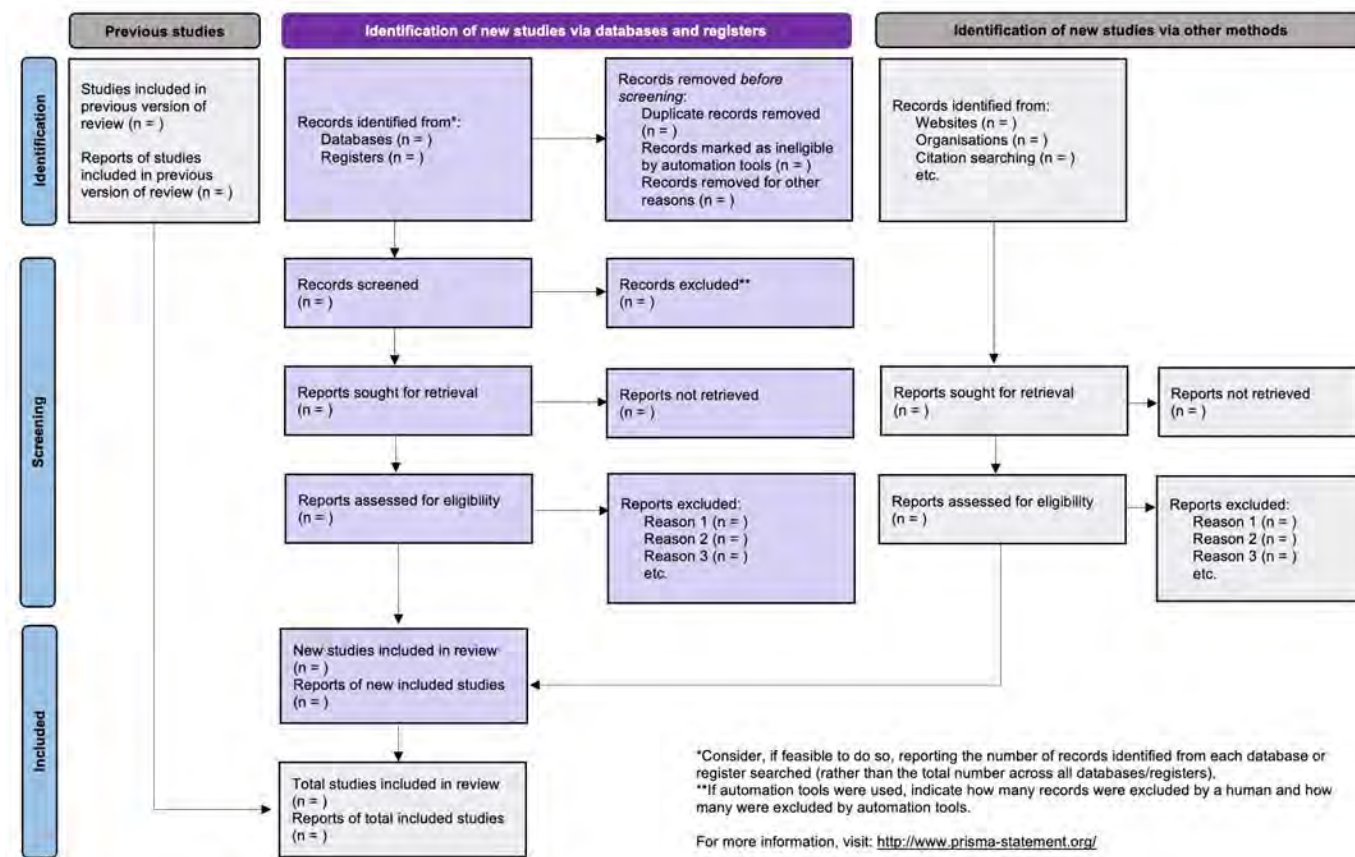


Diagrama de flujo de la revisión. Ejemplo [86]

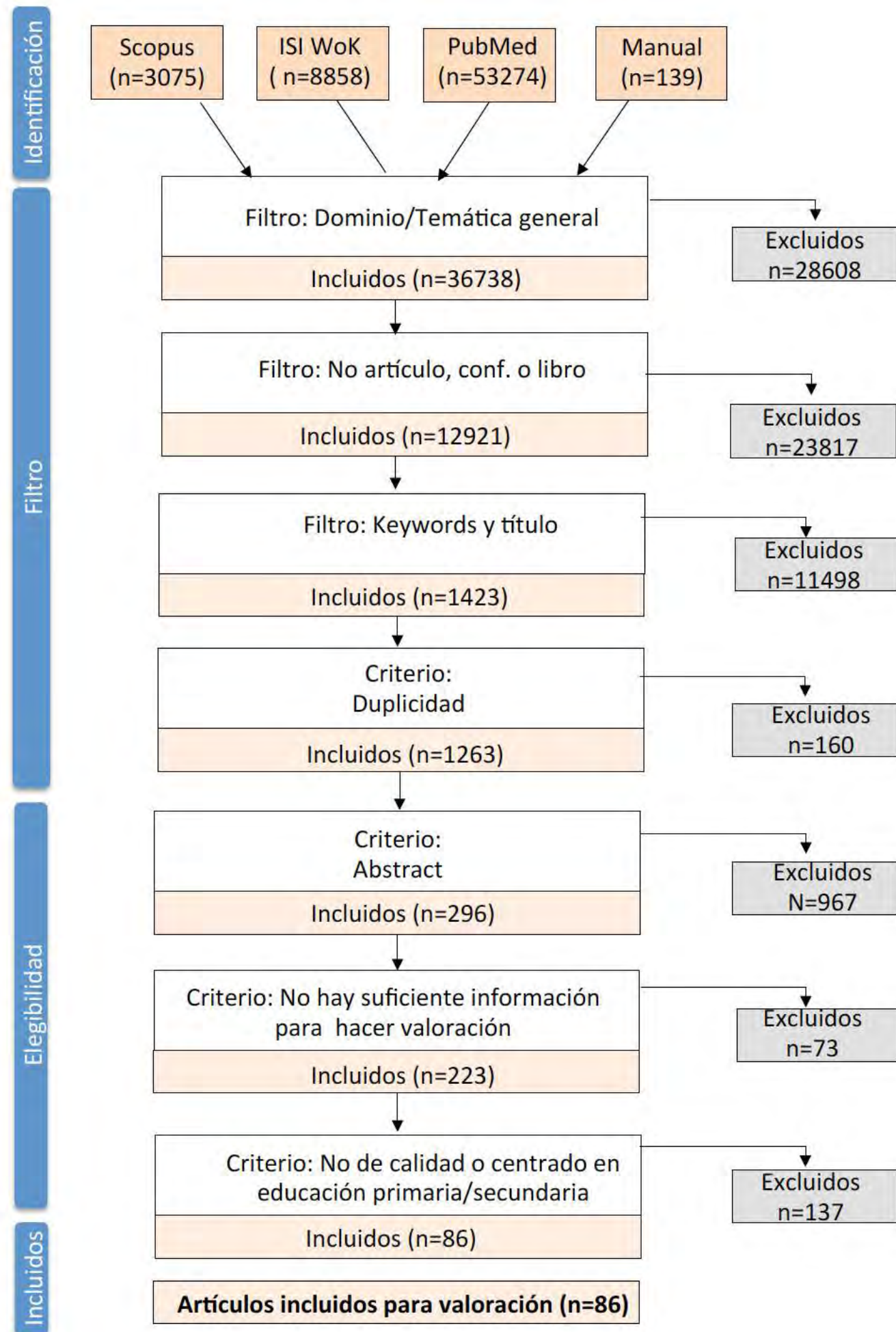


Diagrama de flujo de la revisión. Ejemplo [87]

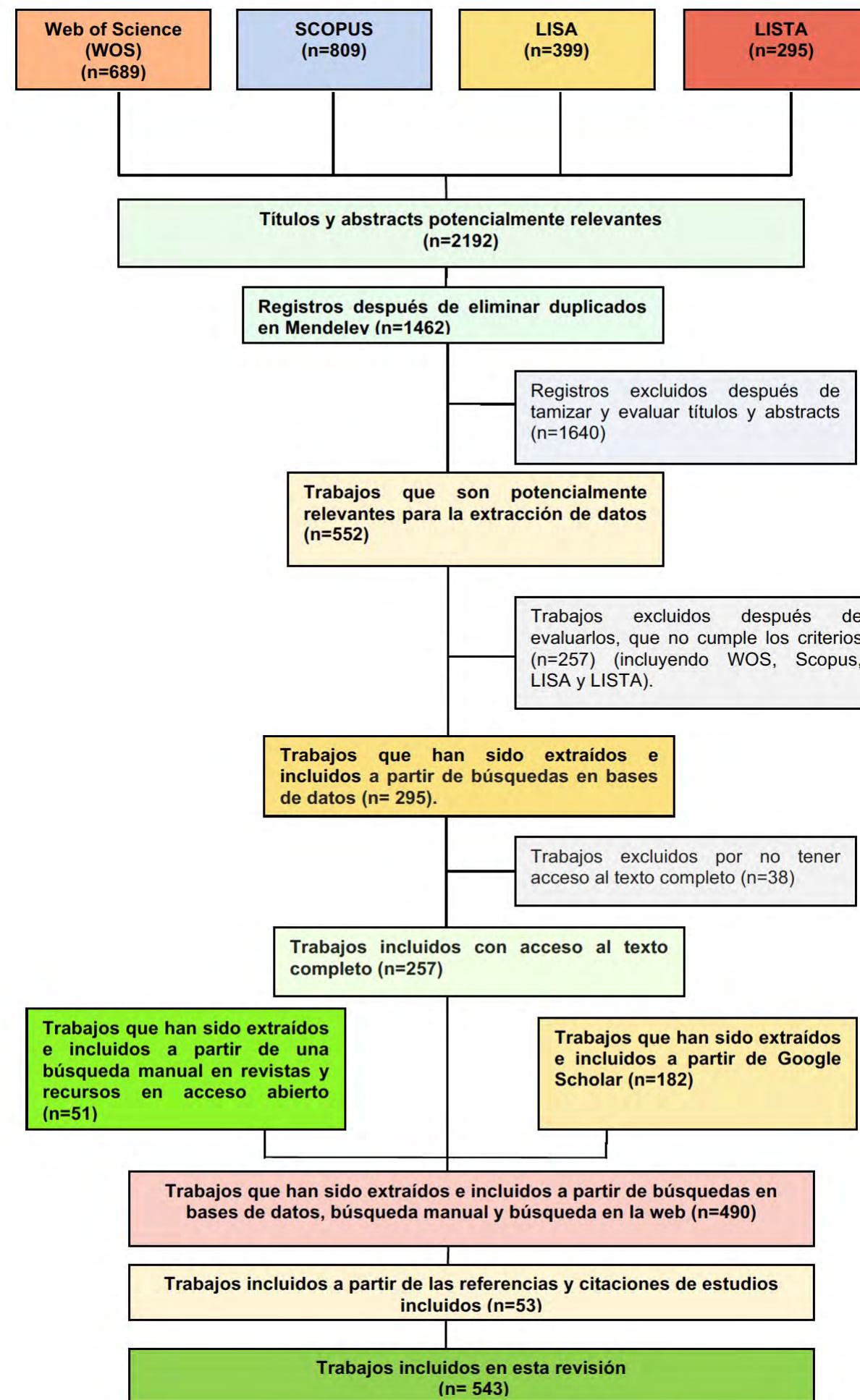


Diagrama de flujo de la revisión. Ejemplo [88]

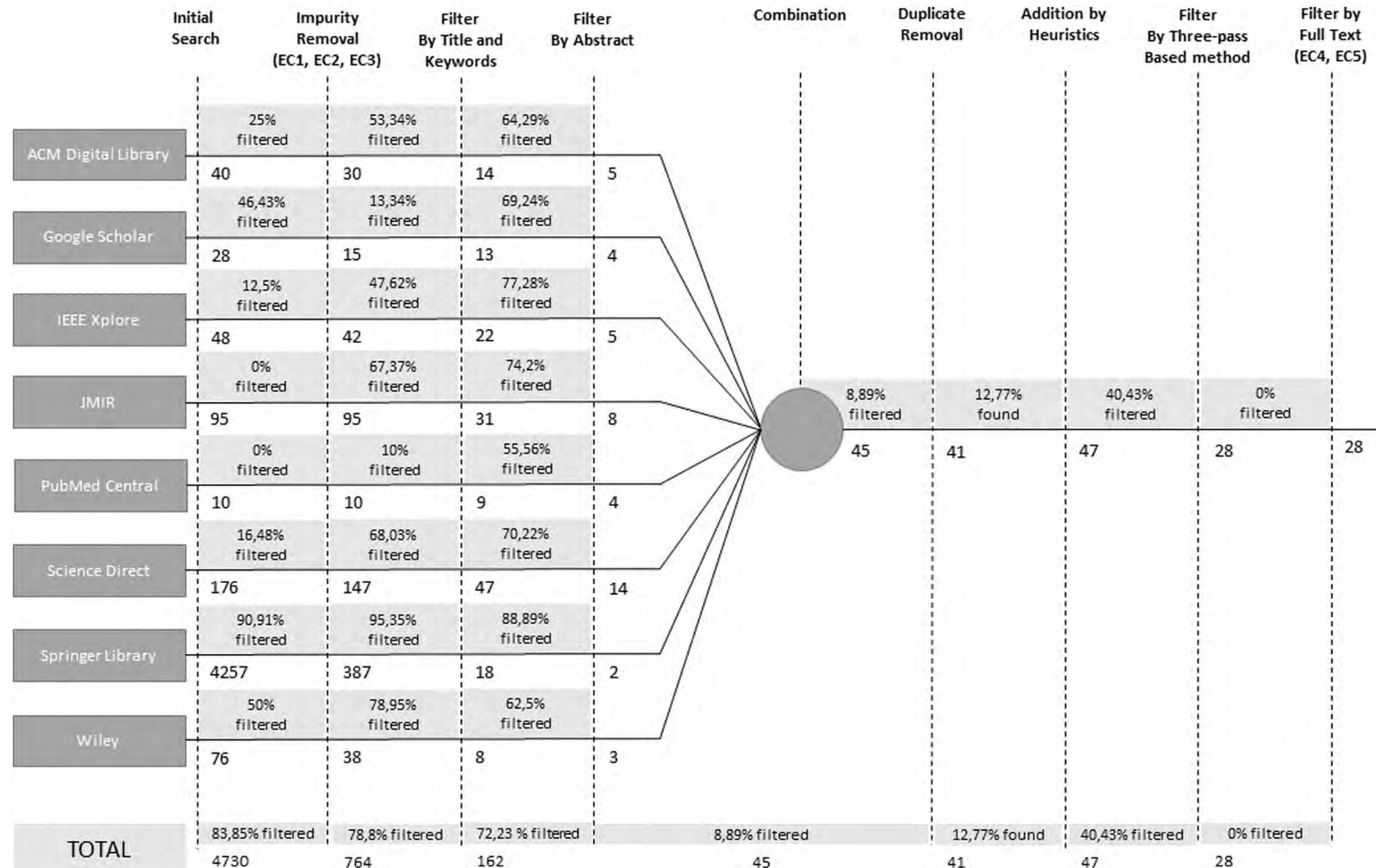
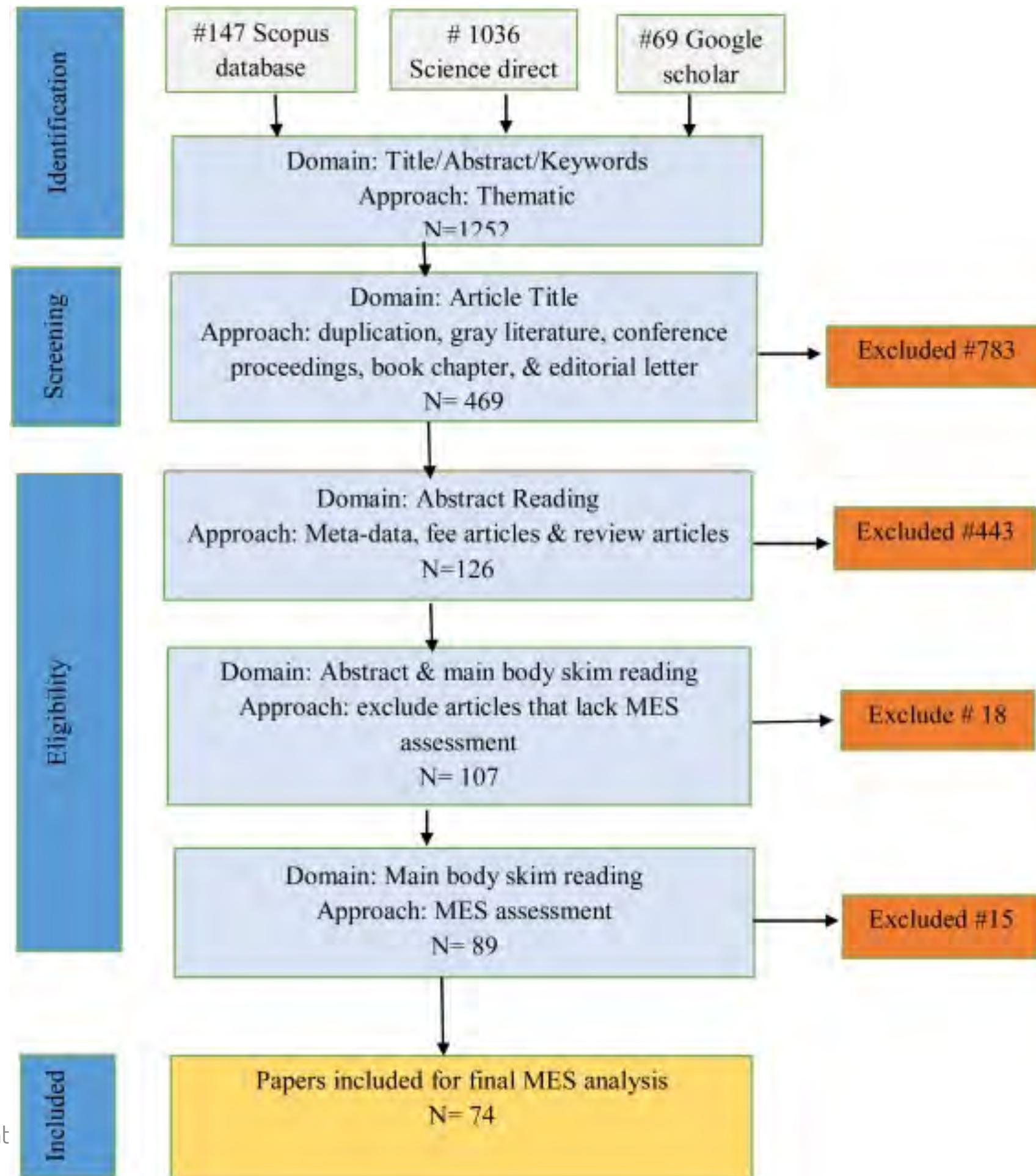


Diagrama de flujo de la revisión. Ejemplo [59]



Extraer los datos relevantes

- De cada artículo seleccionado se deben extraer los datos relevantes
 - El objetivo es llevar a cabo un análisis sistematizado, esto implica aplicar el mismo esquema a cada uno de los documentos seleccionados
 - Por ejemplo, creando una ficha individual que refleje el esquema de análisis y que facilite trasladar esa información a tablas o gráficos en el informe final
- Los elementos que componen el esquema de análisis deben ajustarse a los objetivos del estudio
- Metadatos del artículo, se recomienda utilizar un gestor de referencias bibliográficas
- Datos del contenido relacionado con las preguntas de investigación
 - En esta etapa de extracción de datos, los elementos específicos que deben recogerse varían para cada trabajo y es necesario guiarse por las preguntas y objetivos de investigación

Ejemplo de un esquema de análisis [89]

| | | |
|---|--|---|
| 1 | Referencia completa de la fuente | Metadatos de la fuente (autor, título, etc.) |
| 2 | Resumen informativo | Debe incluir objeto de estudio, metodología y principales resultados obtenidos. Extensión recomendada sobre 300 palabras |
| 3 | Tipo de investigación / Métodos de obtención de datos | Tipo de investigación (cualitativa, cuantitativa, teórica, aplicada, estudio de caso, etc.) y métodos de obtención de datos |
| 4 | Principales aportaciones | En relación con: terminología, modelos, conceptos, diseño experimental, resultados, etc. |
| 5 | Valor, originalidad o aspectos más relevantes | Se identifican los aspectos que otorgan mayor valor al trabajo: rigor, escritura, datos, etc. |
| 6 | Comentarios y síntesis valorativa | Notas y comentarios adicionales de tipo valorativo o crítico |
| 7 | Palabras clave | Términos que ayudan a categorizar el documento que se está analizando |

Resúmenes automáticos

- Hay herramientas que realizan resúmenes automáticamente o responden a preguntas sobre el contenido de un artículo
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 - **ChatPDF** (<https://www.chatpdf.com>)
 - **Humanata** (<https://www.humata.ai>)
 - **Klavier** (<https://klavier.ai>)
 - **Scholarcy** (<https://www.scholarcy.com/>)
 - **SciSpace Copilot** (<https://typeset.io>)



Ejemplo de resumen de [90] realizado con arXivGTP

Cornell University

We gratefully acknowledge support from the Simons Foundation and member institutions.

arXiv > quant-ph > arXiv:2201.04093

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Quantum Physics

[Submitted on 11 Jan 2022]

Systematic Literature Review: Quantum Machine Learning and its applications

David Peral García, Juan Cruz-Benito, Francisco José García-Peñalvo

Quantum computing is the process of performing calculations using quantum mechanics. This field studies the quantum behavior of certain subatomic particles for subsequent use in performing calculations, as well as for large-scale information processing. These capabilities can give quantum computers an advantage in terms of computational time and cost over classical computers. Nowadays, there are scientific challenges that are impossible to perform by classical computation due to computational complexity or the time the calculation would take, and quantum computation is one of the possible answers. However, current quantum devices have not yet the necessary qubits and are not fault-tolerant enough to achieve these goals. Nonetheless, there are other fields like machine learning or chemistry where quantum computation could be useful with current quantum devices. This manuscript aims to present a Systematic Literature Review of the papers published between 2017 and 2021 to identify, analyze and classify the different algorithms used in quantum machine learning and their applications. Consequently, this study identified 52 articles that used quantum machine learning techniques and algorithms. The main types of found algorithms are quantum implementations of classical machine learning algorithms, such as support vector machines or the k-nearest neighbor model, and classical deep learning algorithms, like quantum neural networks. Many articles try to solve problems currently answered by classical machine learning but using quantum devices and algorithms. Even though results are promising, quantum machine learning is far from achieving its full potential. An improvement in the quantum hardware is required since the existing quantum computers lack enough quality, speed, and scale to allow quantum computing to achieve its full potential.

arXivGTP "default" prompt is used

learning algorithms, quantum-inspired machine learning algorithms, and hybrid quantum-classical machine learning algorithms.

Key insights:

- Quantum machine learning is a promising field that could offer significant advantages over classical machine learning for certain applications.
- The current state of quantum devices is not yet advanced enough for large-scale quantum computing, but there are still useful applications in machine learning and other fields.
- There are several types of quantum machine learning algorithms, including quantum implementations of classical algorithms, quantum-inspired algorithms, and hybrid algorithms that combine classical and quantum components.

Questions for the authors:

- What do you think are the most promising applications of quantum machine learning in the near future?
- How do you see the field of quantum machine learning evolving over the next decade?
- What are some of the biggest challenges in developing and implementing quantum machine learning algorithms?
- Can you provide an example of a successful application of quantum machine learning in a real-world problem?
- How do you see the current limitations of quantum devices affecting the development of quantum machine learning algorithms?

Suggestions for future research:

- Investigating the potential advantages of quantum machine learning for specific applications in fields such as finance, healthcare, and cybersecurity.
- Developing new quantum-inspired machine learning algorithms that take advantage of the unique properties of quantum systems.
- Exploring the use of quantum machine learning for optimization problems and other applications where classical algorithms are inefficient.
- Investigating the impact of noise and other sources of error in quantum machine learning algorithms and developing techniques to mitigate these effects.
- Developing hybrid quantum-classical algorithms that can take advantage of both classical and quantum computing resources.

References:

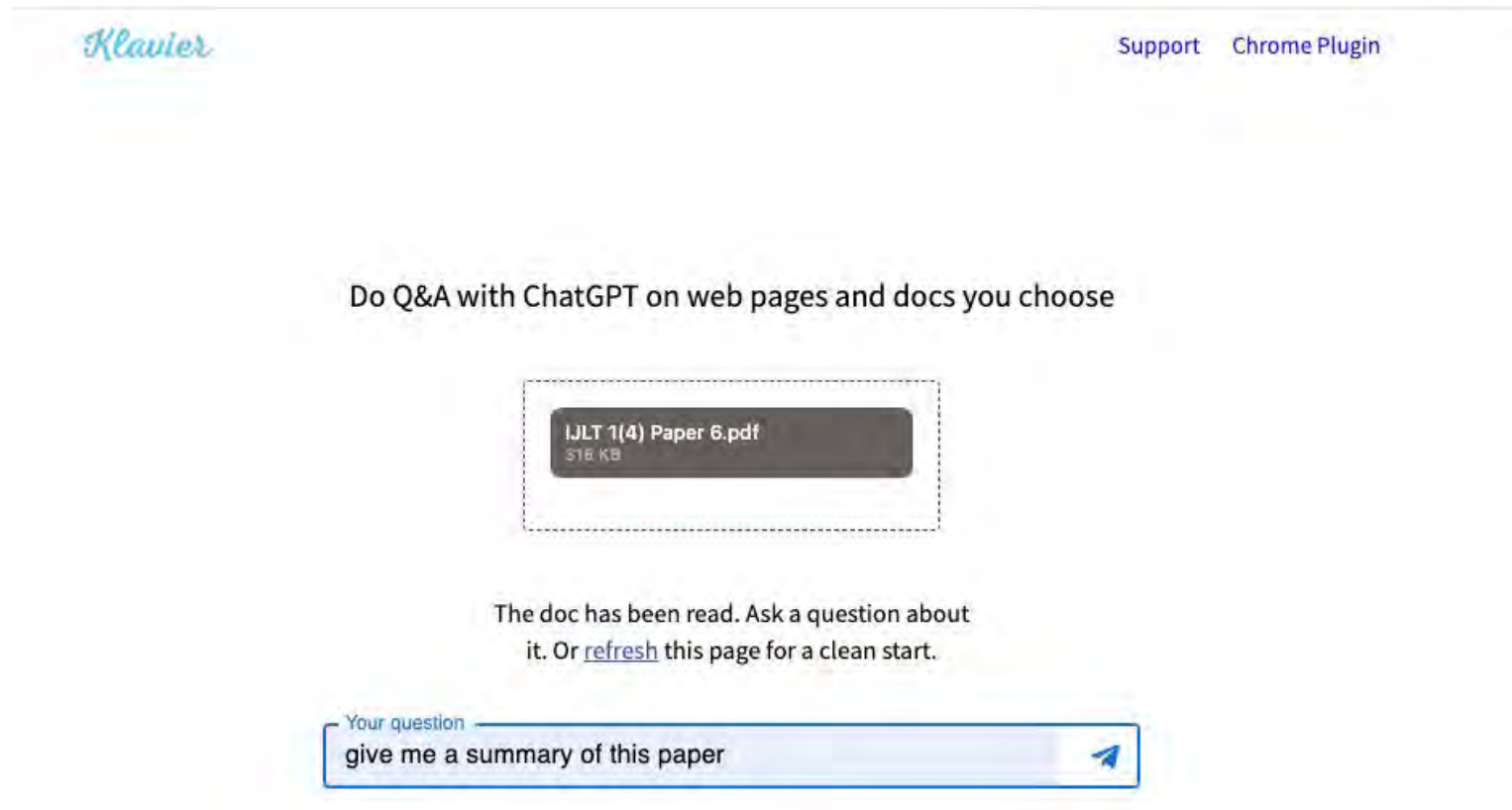
- Biamonte, J., et al. (2017). Quantum machine learning. *Nature*, 549(7671), 195-202.
- Wittek, P. (2014). *Quantum machine learning: What quantum computing means to data mining*. Academic Press.
- Schuld, M., et al. (2015). Introduction to quantum machine learning. *Contemporary Physics*, 56(2), 172-185.
- Lloyd, S., et al. (2014). Quantum algorithms for supervised and unsupervised machine learning. *arXiv preprint arXiv:1307.0411*.
- Rebentrost, P., et al. (2014). Quantum machine learning for quantum anomaly detection. *Physical Review Letters*, 113(13), 130503.

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Comments: 28 pages, 25 figures
Subjects: Quantum Physics (quant-ph); Machine Learning (cs.LG)
Cite as: arXiv:2201.04093 [quant-ph]
(or arXiv:2201.04093v1 [quant-ph] for this version)
<https://doi.org/10.48550/arXiv.2201.04093>

Submission history
From: David Peral García [view email]
[v1] Tue, 11 Jan 2022 17:36:34 UTC (2,137 KB)

Ejemplo de resumen de [91] realizado con Klavier



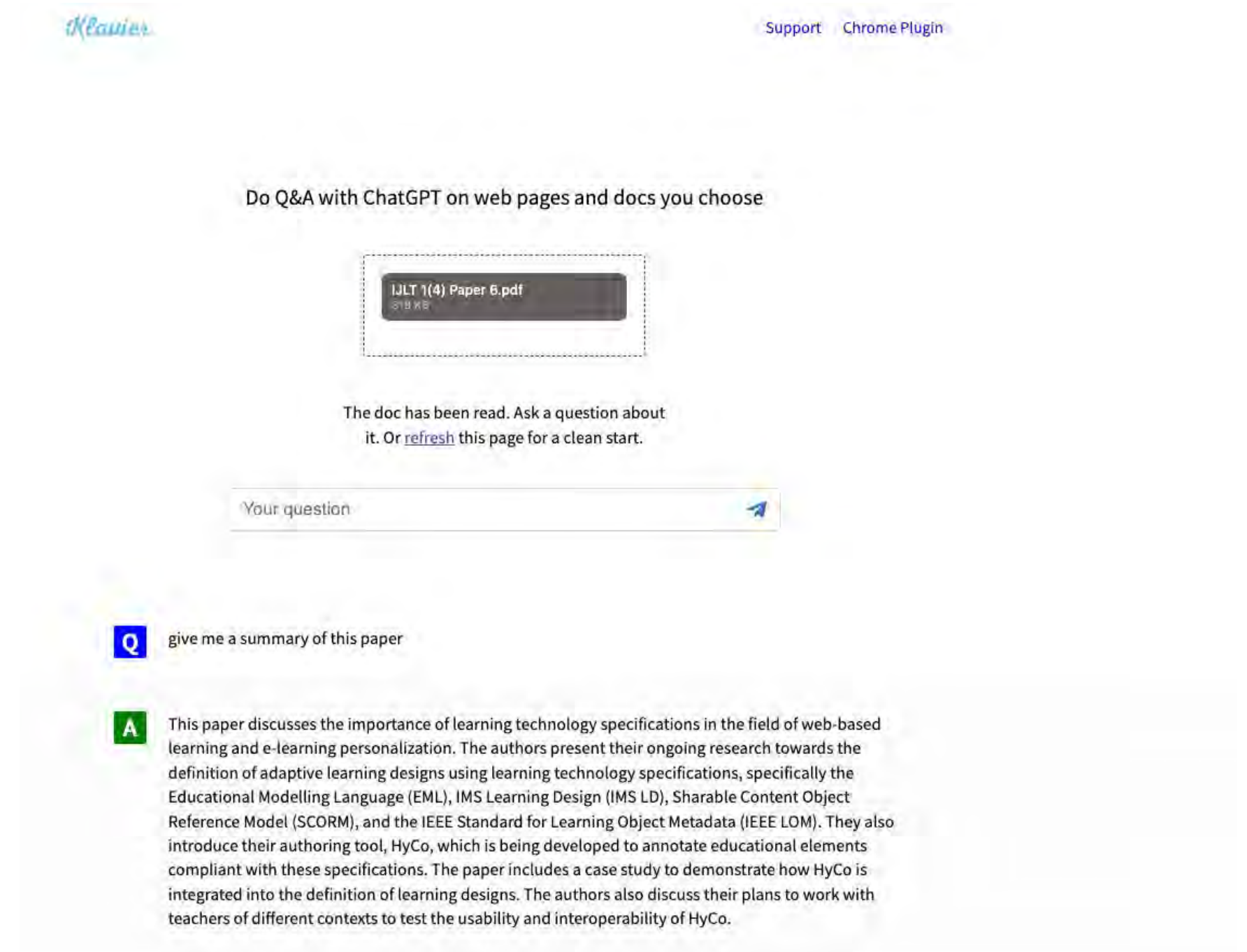
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Q give me a summary of this paper

A This paper discusses the importance of learning technology specifications in the field of web-based learning and e-learning personalization. The authors present their ongoing research towards the definition of adaptive learning designs using learning technology specifications, specifically the Educational Modelling Language (EML), IMS Learning Design (IMS LD), Sharable Content Object Reference Model (SCORM), and the IEEE Standard for Learning Object Metadata (IEEE LOM). They also introduce their authoring tool, HyCo, which is being developed to annotate educational elements compliant with these specifications. The paper includes a case study to demonstrate how HyCo is integrated into the definition of learning designs. The authors also discuss their plans to work with teachers of different contexts to test the usability and interoperability of HyCo.

Ejemplo de resumen de [92] realizado con Scholarcy



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Moodbile: A Framework to Integrate m-Learning Applications with the LMS

This paper proposes a way to integrate mobile devices and educational applications with the Management Systems

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Key concepts

Moodbile: A Framework to Integrate m-Learning Applications with the LMS

María José Casany; Marc Alier; Enric Mayol et al.

2012

This paper proposes a way to integrate mobile devices and educational applications with the Learning Management Systems through webservice; introducing the Moodbile project that provides an extension of Moodle 2.0 webservice for mobile integration and two mobile clients ready to use on real courses

Abstract

Learning Management Systems (LMS) have become widespread among most centres for education and training. Being a mature technology, LMS have left the vanguard of innovation. Educational usag based Learning and particul are happening outside the mobile devices and education introducing the Moodbile pr mobile integration and two r K.3 (computers in education

Scholarcy Synopsis

In this paper, the and educational a two mobile client

M-learning enhances collabo to be more personalized and The Moodbile project aims t applications with the LMS, st These activities are intended MS. Moodbile aims to propose an external applications with th

They take and organize learning content in a standard way, usually as a course divided into modules and lessons, supported with quizzes, tests, forums and discussions (Downes, 2006).

LMS have reached the goal of mimicking the structure and ways of schools, universities and other educational institutions.

The key points of the LMS success have been: 1) LMS copy the structure and practices of educational institutions, for example organizing contents in online courses; 2) LMS organize the processes and business rules.

Objectives

Our goal was not to create a web-service layer to access every single Moodle activity feature, but to design an extension of the Moodle Webservices Architecture that provides access to the most suitable Moodle features for mobile applications.

Findings

The success of LMS is so great that over 90% of Spanish universities and colleges use a LMS (Prendes, 2009), 95% of the learning institutions in the US use an LMS (Lonn and Teasley, 2009), and 79.5% of large companies use these systems during their training program (Wexler, Grey, Miller, Nguyen and Barnevelde, 2008).

Discussion

The Moodbile project aims to propose an interoperability solution to integrate m-learning applications with the LMS, starting with Moodle.

The Moodbile connector is an extension of the Moodle Webservices Architecture that has the following advantages regarding other approaches: 1) it is an extensible architecture where new services may be added 2) it supports the addition of new communication protocols, and 3) it may be updated when a new Moodle version appears.

The Moodbile project provides an open specification of services that could be implemented by other LMS and remains stable with indepe

Conclusion

Conclusions and Further Work m-learning enh learning flexibility by allowing it to be more p

The Moodbile project aims to propose an inter applications with the LMS, incorporating m-le of educational institutions.

This will allow m-learning applications to wid the learning process.

The initial version of the specification works for Moodle, but authors are working to adapt this specification to other LMS such as Sakai and Olat, to create an LMS-independent specification.

Since this specification is open-source, it is open for developers of third-part applications to use it.

These activities are intended to be used from mobile devices, but are created inside the LMS.

Confirmation of earlier findings

Considering these studies and our involvement in the Moodle community, we selected Moodle for the first step of our work. Moodle is a good candidate since it is the most used open source LMS, it is supported by a large international community, it has been translated to more than 75 languages and many Spanish educational institutions (our universities too) use it (Alier et al., 2010a; Aberdour, 2007).

The methodology used during this pilot experience is a quasi-experimental design (Campbell and Stanley, 1963; Campbell and Stanley, 1970). This methodology is adequate for these kinds of tests, since we have pre-established groups (class-groups) of users and it is not possible to have a complete randomized group of people (Dendaluze, 1994; Nieto and Necamán, 2010).

Contributions

Conclusions and Further Work m-learning enhances collaborative learning and increases learning flexibility by allowing it to be more personalized and student-centred. But on the other hand, m-learning faces interoperability problems with LMS (the basic e-learning infrastructure of many educational institutions). The Moodbile project aims to propose an interoperability solution to integrate m-learning applications with the LMS, incorporating m-learning applications into the learning process of educational institutions. This will allow m-learning applications to widen their scope instead of being isolated from the learning process. It also will allow LMS to be more flexible e-learning platforms. Although there are several solutions to this lack of integration problem, Moodbile aims to propose an open specification of webservices to support the integration of external applications with the LMS. The initial version of the specification works for Moodle, but authors are working to adapt this specification to other LMS such as Sakai and Olat, to create an LMS-independent specification. Since this specification is open-source, it is open for developers of third-part applications to use it. Authors are also working in the design of special m-learning activities inside the LMS. These activities are intended to be used from mobile devices, but are created inside the LMS.

the main advantages of the proposed arizes conclusions and future work.

ive learning and increases learning flexibility cent-centred. On the other hand, m-learning basic e-learning infrastructure of many t aims to propose an interoperability solution MS, incorporating m-learning applications tions. This will allow m-learning applications from the learning process. It will allow LMS to

be more flexible e-learning platforms.

Ejemplo de diálogo con SciSpace Copilot sobre [93]



The screenshot displays the SciSpace Copilot interface. On the left, a paper titled "Educational hypermedia resources facilitator" by Francisco José García and Joaquín García is shown. The paper is from the journal "Computers & Education" (Volume 44, 2005, pages 301-325). The abstract discusses the introduction of computers in universities and the role of hypermedia educational resources. On the right, the Copilot interface shows a summary of the paper's literature survey and conclusions. The literature survey highlights a comparison of HyCo, an authoring tool, with other hypermedia authoring tools. The conclusions state that hypermedia environments change the role of the teacher from a mere transmitter of knowledge to an organizer of activities and learning, giving students greater autonomy and responsibility. The Copilot interface also includes a search bar, a "Help?" button, and a "Write your question..." input field.

Extraer datos cuantitativos

- Este proceso permite al revisor examinar qué elementos de los datos están presentes en cada informe de estudio individual
- Sin herramientas formales para extraer y resumir los resultados, se debe confiar en una capacidad extraordinaria para hacer malabarismos mentales con las relaciones entre muchas variables. Una forma sistemática de explorar estas relaciones facilita la detección y la comprensión de estas [94]
- La extracción de datos puede realizarse al mismo tiempo que la evaluación de la calidad o por separado, antes o después de la evaluación general de la calidad [95]

Posibles elementos que incluir en un formulario de extracción de datos [66]



- **Elegibilidad:** declaración explícita de los criterios de inclusión y exclusión con la oportunidad de indicar si un estudio debe incluirse en la revisión o no
- **Datos descriptivos:** información sobre las características del estudio, incluyendo el entorno y la población
- **Datos de evaluación de la calidad:** información sobre la calidad del estudio. La documentación puede incluir una lista de comprobación formal
- **Resultados:** información sobre los resultados del estudio en forma de datos que se utilizarán en la revisión. Los datos pueden estar en un formato "crudo" tomados directamente del documento y/o en un formato uniforme. Lo ideal es que estén en ambas formas para indicar la variación de los métodos, pero también para poder comprobar su exactitud

Trazabilidad

- Se deben proporcionar explicaciones completas sobre cómo se ha llevado a cabo el proceso
- Se debe incluir los documentos revisados en cada fase, se debe especificar el criterio de inclusión/exclusión utilizar para seleccionar/rechazar los documentos en la revisión sistemática
- Si no se proporcionan estas explicaciones, quien revise un artículo o quien dirija una tesis, por ejemplo, no podrá confiar en la investigación
- La mayor parte de esta información no puede incluirse en un artículo o documento académico
 - Demasiada extensión y fatiga visual (en el caso de tablas muy grandes)

Soluciones para garantizar la trazabilidad

- Utilizar hojas de cálculo de Google
 - https://docs.google.com/spreadsheets/d/169RCtU7Q4Qq1eryq1d6c1XnMzDEhgyp_tYqZh1C8eaYA/edit#gid=0
- Utilizar sitios web
 - <https://sites.google.com/site/francilaneiva/research/pragmatic-interoperability-a-systematic-mapping>
- Repositorios GIT
 - <https://github.com/cbjuan/slr-softwareArchitectures-HCI-HMI>
- Utilizar repositorios de datos
 - <https://zenodo.org/>
- Utilizar herramientas
 - Parsifal <https://parsif.al/>

Trazabilidad. Ejemplo [32]

After the search, the selection of papers to be used for the literature review was performed following these steps:

1. All the raw-results were collected in a GIT repository (Cruz-Benito, 2017) and a spreadsheet (<https://goo.gl/QK5Qrd>), removing all the duplicates across the databases.
2. The resultant papers were analyzed based on the title and abstract and the inclusion/exclusion criteria. In those cases where the title and abstract were not sufficient to decide, the authors quickly assessed the entire content of the paper. The resultant candidate papers were added to another sheet of the spreadsheet document (<https://goo.gl/4xweXc>).
3. The papers were read in detail and analyzed following the previously-posed research questions. The selected papers passed a quality assessment checklist (see Table 1), and the information was collected in another spreadsheet (<https://goo.gl/cYBfyp>). Besides the papers selected in this manner, the authors also considered papers collected within the references of those that potentially could be interesting for the review process. It raised another three papers to be included in the review.



6. Fase de informe

Sintetizar los datos extraídos [66]

- Existen varias opciones para llevar a la síntesis
- El enfoque se deriva de la naturaleza de la revisión y de sus objetivos

| Type of review | Approaches used to synthesis | Application |
|-------------------|---|--|
| Scoping review | Coding Narrative synthesis Tabular presentation | Descriptive coding was applied to include study features such as design, country of origin, type of behaviour targeted, characteristics of population and type of incentive used. Outcome studies were coded in greater depth. Paragraphs described the features of studies for each variable (e.g. types of intervention and incentive). Tables complemented narrative synthesis with frequencies and percentages of each type. |
| Mapping review | Keywording Mapping studies not synthesised because they were 'disparate in their focus' | EPPI-Centre core keywording strategy used to classify studies according to a range of criteria, including bibliographic details (how the study was identified and whether it has been published), and contextual details (the language in which the study was written/published and the country where the study was conducted). Key aspects of the study also coded, such as topic focus of study, and information about the subjects of the study. Mapping stage of review describes studies found to be relevant, gives overview of the field of study, and enables reviewers to focus on particular areas of map. Brief commentary given on each study with emphasis on conclusions not methods. |
| Meta-analysis | Data extraction Translation into common metrics Computation of missing values | Extracted data in a standardised way: weights in pounds (lbs) transformed into kilograms (kg) and weeks transformed into months. Attempted contact with authors to obtain missing information. Assessed each study using a modified version of the Ottawa-Newcastle Scale. |
| Systematic review | Categorisation Data extraction Quality assessment Narrative synthesis Tabular presentation Meta-analysis not possible because of variability of studies. | Articles categorised by type of publication. Data from intervention studies included study design, sample and intervention characteristics, and data collection methods and measures. Studies assessed using checklist. Narrative description and tabulation of study features and of methodological adequacy. |

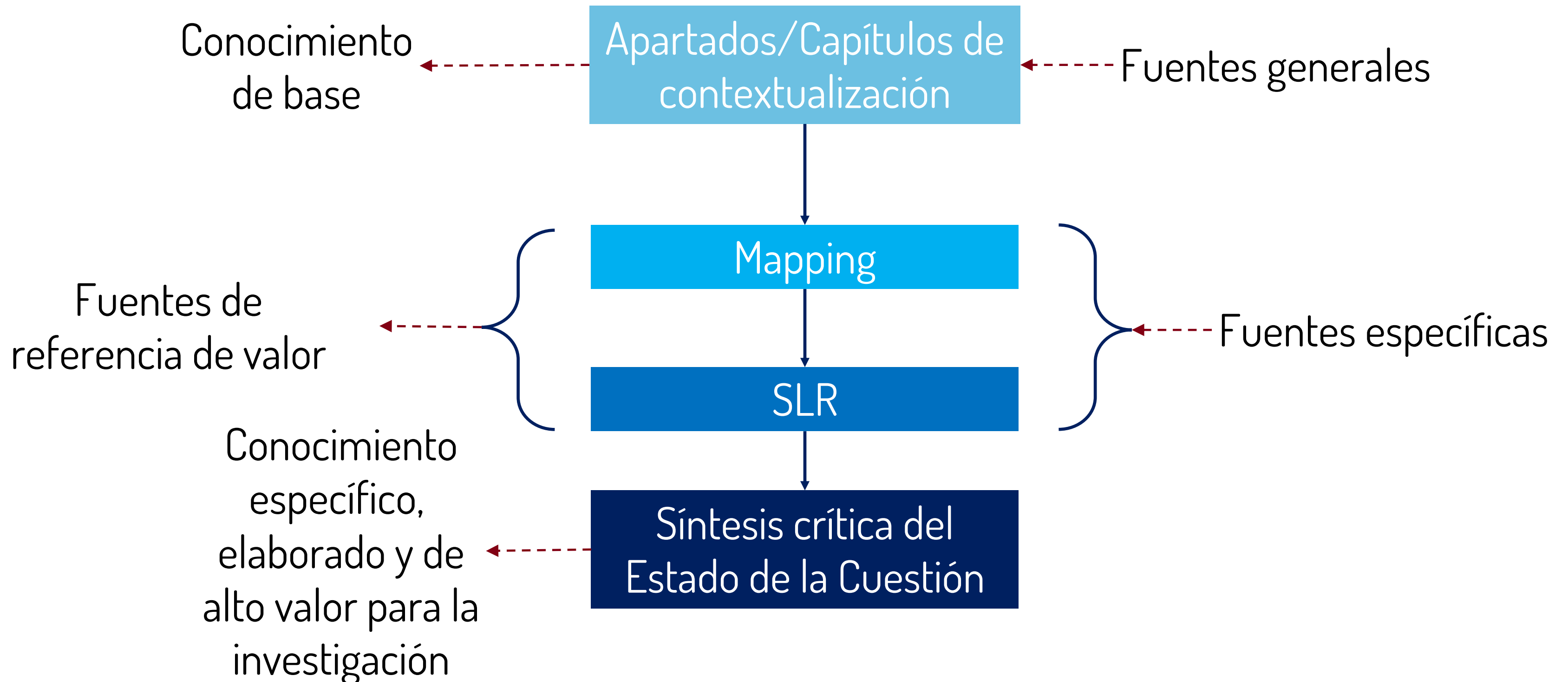
Redactar el informe de revisión

- La redacción del informe de la revisión sistemática debe incluir la descripción y la presentación de los métodos seguidos, así como y los resultados obtenidos a partir de la bibliografía seleccionada
- Esta fase puede constar de dos pasos [96]
 - Descripción detallada
 - Presentación pública en formato de artículo académico
- Por tanto, va a depender del tipo de documento en el que se vayan a presentar los resultados

Cómo orientar la redacción del informe

- En un documento académico, se puede tener una sección de contextualización del estado de la cuestión basada en los textos más fundamentales, una sección de *mapping*, una sección de revisión sistemática y una sección de discusión de los resultados obtenidos como respuestas a las preguntas de investigación
- Cuando se enfoca a un artículo científico, normalmente la revisión sistemática completa es muy difícil de incorporar de forma íntegra (salvo que sea muy concreta y tenga un tamaño reducido) por motivos de extensión y habrá que seleccionar aquellas partes que sean más adecuadas para el objetivo del artículo
- Los *mappings* y SLR también se pueden realizar de forma independiente, lo que daría lugar a diferentes trabajos más centrados en objetivos específicos y que suelen ser de mayor interés para revistas y conferencias
- Se deben usar gráficos, tablas y explicaciones visuales, pero debe haber siempre una sección de discusión de los resultados donde se ponga en valor las aportaciones del estudio sistemático

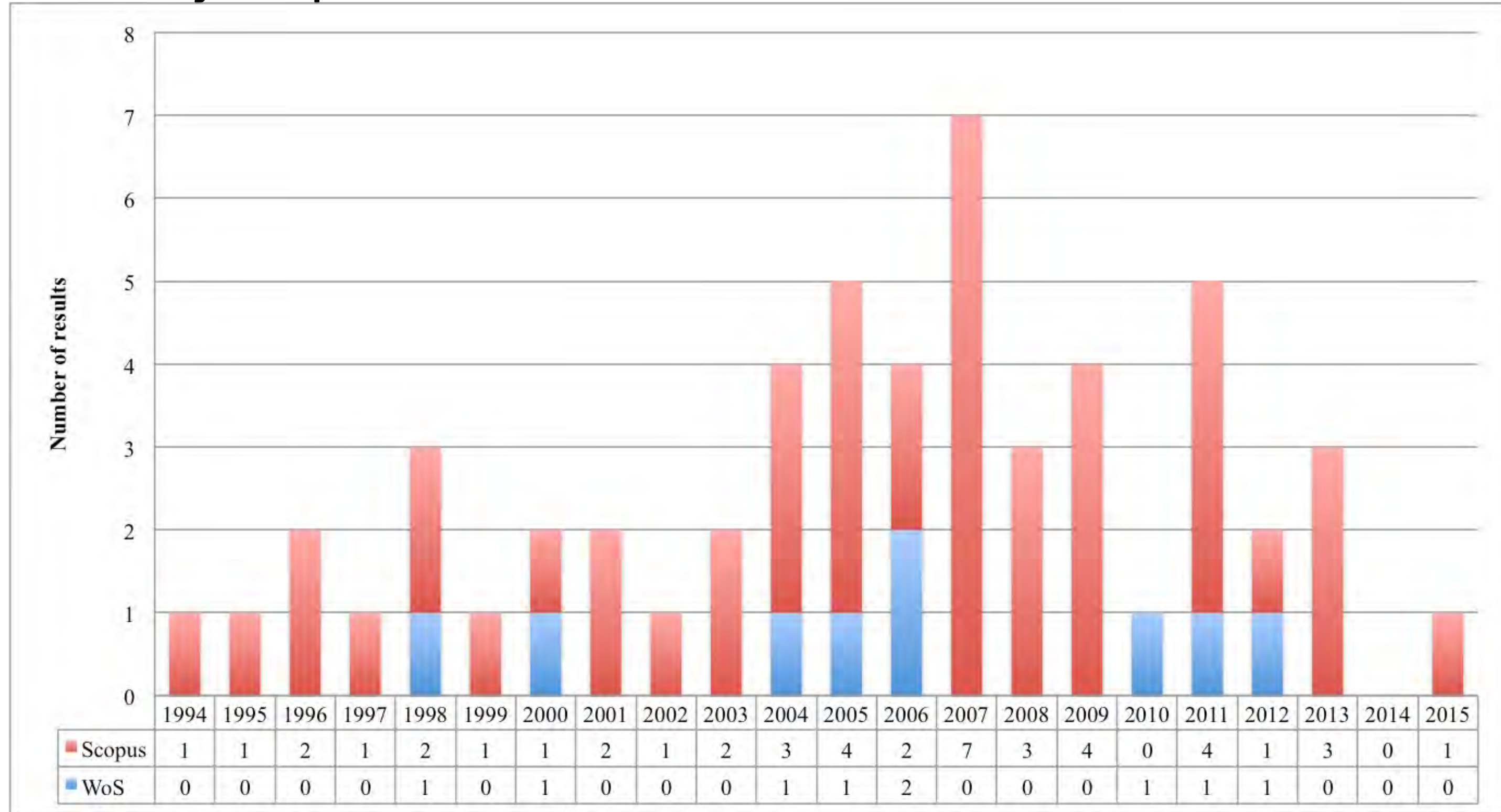
Estructura del apartado del Estado de la Cuestión en un trabajo académico [86, 87, 97, 98]



Gráficos

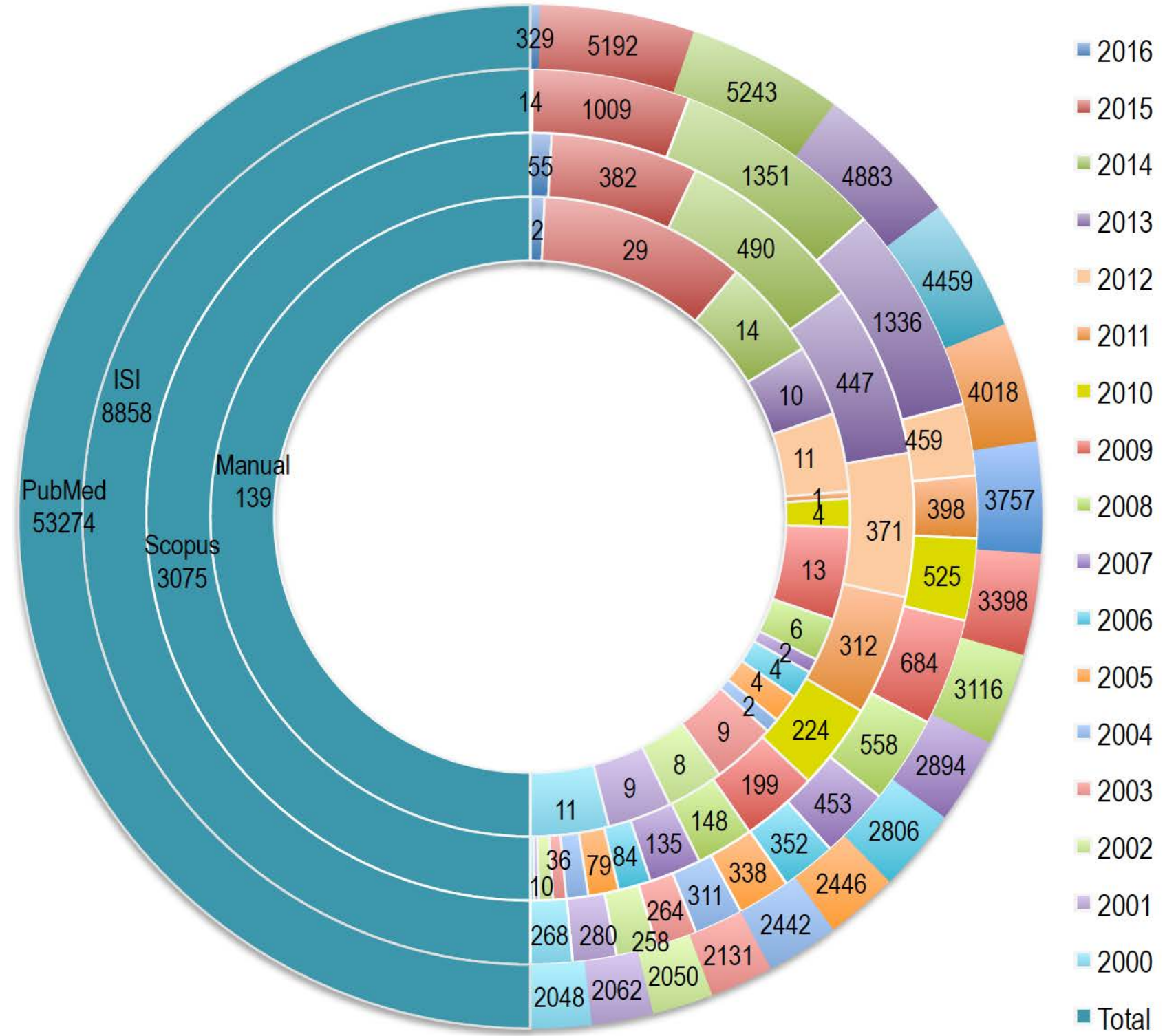
- Los enfoques gráficos pueden contribuir de forma importante a la síntesis al ayudar a identificar patrones
- Tienen un papel especial a la hora de ayudar a visualizar la relación de las partes con el conjunto
- También pueden utilizarse para establecer vínculos entre distintas características de una revisión, por ejemplo, para representar un vínculo entre las características del estudio y los resultados
- La creatividad y el análisis crítico de los datos y su visualización son elementos clave para la comparación de datos y la identificación de patrones y temas importantes y precisos [99]
- En esta categoría se encuentran las representaciones gráficas de los datos, mapas conceptuales, modelos lógicos, mapas geográficos, etc.

Gráficos. Ejemplo [63]



Gráficos. Ejemplo [86]

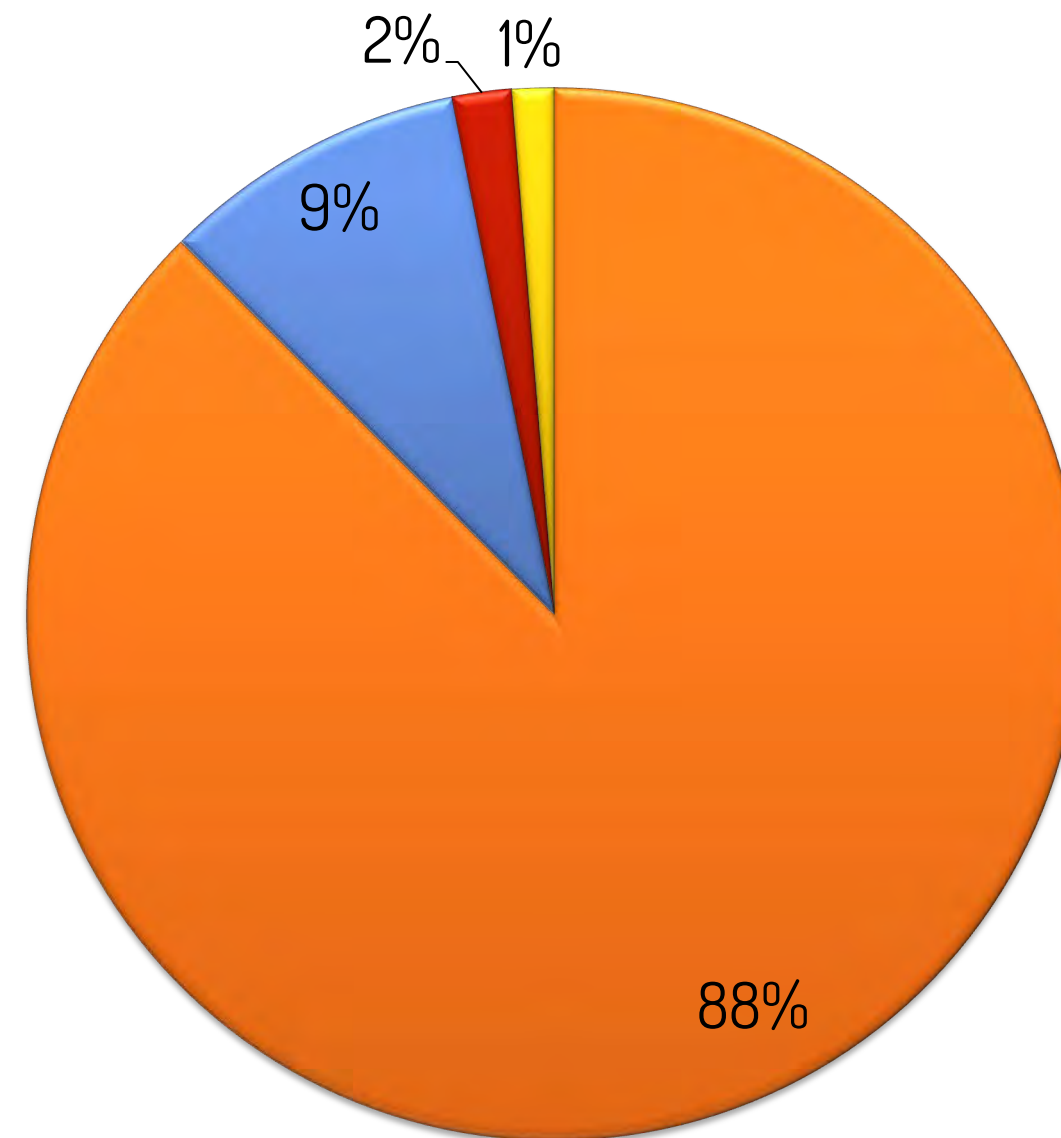
Resultado completo en la extracción de la base de datos



Gráficos. Ejemplo [87]

Tipología de la literatura

■ Journal article
 ■ Conference
 ■ Book Chapter
 ■ Other



Gráficos. Ejemplo [100]



Tablas

- Además de la síntesis narrativa, los estudios pueden describirse mediante tablas
- Las tablas son, probablemente, la forma más útil y más general de organizar y representar conocimiento
- Dado que se utilizan las tablas para describir los estudios, no para analizarlos, es útil para todos los tipos de estudios
- Se pueden usar tablas para describir las características de la población, la intervención, el comparador y el resultado (medidas), las características del estudio (por ejemplo, el diseño del estudio)

Tablas. Ejemplo [32]

Summary of review findings on the main interfaces/systems presented in HCI papers.

| Reference | Graphical User Interface | Laser Pointer | Touch display/ interface | Camera | Microphone | BCIs (Brain-Computer interface) | Motion tracking sensors | Mouse, Keyboard & Joystick | Force pressure sensors & Haptics | Smartphone/mobile devices/tablet | Gaze trackers | Wearables |
|--------------------------------|--------------------------|---------------|--------------------------|--------|------------|---------------------------------|-------------------------|----------------------------|----------------------------------|----------------------------------|---------------|-----------|
| Vega-Barbas et al. (2015) | | | | | | | X | | | | | |
| Chaczko et al. (2015) | | | | X | | | X | | X | | | |
| Mackin et al. (2012) | | | X | X | | | | | | | | |
| Biel et al. (2010) | | | | | | | | | | X | | |
| Jacquet et al. (2009) | X | | X | X | X | | X | | | X | | |
| Dimakis et al. (2009) | X | | | X | X | | X | | | | | |
| Seffah et al. (2008) | X | | | | | | | | | | | |
| Capilla et al. (2014) | X | | | | | | | | | X | | |
| Tiefenbacher et al. (2014) | X | | X | | | | | | | | | |
| Calandra et al. (2013) | X | | X | | X | | | | | | X | |
| Caruso et al. (2013) | X | | X | | | X | | | | X | | |
| Pittarello (2011) | X | | | | | | | | | X | | |
| Folmer and Bosch (2008) | | | | | | | | | | | | |
| Jacquet et al. (2007) | | | | X | | | | | | | | |
| Marsic and Dorohonceanu (2003) | X | | | X | X | | | X | | X | X | X |
| Nigay and Coutaz (1995) | X | | | | | | | X | | | | |
| Bass et al. (2001) | | | | | | | | | | | | |
| Jalaliniya et al. (2015) | | | | | | | | | | X | X | X |
| Wang and Canedo (2014) | X | | | | | | | | | X | | |
| König et al. (2010) | X | X | | | X | | | | | X | | |
| Olmedo et al. (2015) | X | | | | X | | | X | | | | |
| de Alencar et al. (2014) | | | | | | | | | | X | | |
| Rego et al. (2014) | | | | X | X | X | X | X | X | | | |
| Malandrino et al. (2010) | | | | | | | | | | X | | |
| Bongartz et al. (2012) | X | | | | X | | X | | | X | | X |
| Sutcliffe et al. (2011) | X | | | | | | | | | | | |

Tablas. Ejemplo [63]



| Categories | Physical context / devices | | | | | | Software Engineering specifications | | | | | | Human-Computer Interaction specifications | | | | | | Learning | | | | |
|--|----------------------------|-----------|---------------------|---------|----------|--------|-------------------------------------|------------------------|--|--|-------------------------|-----------|---|-----------------------------|-----------------------|-------------------------|-------------------------|-----------------------|-------------|-----------|---------------------|-----------|-----------------|
| | Personal Computers | Wearables | Mobile/ smartphones | Servers | Domotics | Robots | Components' communication | Information collectors | Architecture diagrams (ADL, UML, etc.) | Design details (patterns, use cases, etc.) | Technologies, languages | Standards | Measurement process description | React to users' interaction | Centered on usability | HCI - software elements | HCI - hardware elements | Laboratory experiment | Field study | Standards | Purpose of analysis | Standards | Potential users |
| An Information System Prototype for Analysis of Astronaut/Computer Interaction During Simulated EVA | I | E | U | I | U | U | E | I | U | U | E | U | E | U | I | I | E | E | I | U | U | U | U |
| Experiences with Software Architecture Analysis of Usability | E | U | E | E | U | U | I | I | E | E | I | I | E | I | E | E | U | I | I | U | U | U | U |
| Exploring the benefits of the combination of a software architecture analysis and a usability evaluation of a mobile application | E | U | E | I | U | U | I | I | E | E | U | I | E | I | E | E | E | I | E | E | U | U | U |
| Bridging patterns: An approach to bridge gaps between SE and HCI | E | U | I | U | U | U | I | I | E | E | I | I | E | I | I | E | I | U | I | U | U | U | U |
| A unified architecture to develop interactive knowledge based systems | E | U | U | U | U | U | I | I | E | E | E | U | E | U | U | E | U | U | U | U | U | U | U |
| Mockup-based Navigational Diagram for the Development of Interactive Web Applications | E | U | U | U | U | U | E | E | E | E | E | I | E | I | U | E | U | I | U | U | U | U | U |
| An Integration Framework for Motion and Visually Impaired Virtual Humans in Interactive Immersive Environments | U | U | U | I | E | U | E | E | E | E | E | I | E | I | I | I | E | I | U | U | U | U | U |
| Towards improving user interfaces: a proposal for integrating functionality and usability since early phases | I | U | U | U | U | U | I | I | E | E | U | E | E | I | E | E | U | E | U | E | U | U | U |
| A case study of post-deployment user feedback triage | I | U | U | I | U | U | U | I | U | U | E | U | I | U | U | E | U | U | U | U | U | U | U |
| Context-aware mobile augmented reality architecture for lifelong learning | I | E | E | I | U | U | I | I | E | E | E | U | I | I | I | E | E | I | U | U | E | U | E |
| Development of a communication robot (Ibot) | U | U | U | U | U | E | U | E | E | U | I | U | E | E | U | U | E | E | I | U | U | I | U |
| Autonomous Behavior Control Architecture of Entertainment Humanoid Robot SDR-4X | E | U | U | I | U | E | U | I | E | I | U | U | I | E | U | U | E | E | I | U | U | U | U |
| Usability and software architecture | U | U | U | U | U | U | I | I | E | E | U | I | I | E | I | E | U | E | I | U | U | U | U |
| An architecture for automatic gesture analysis | I | U | U | I | U | E | U | I | U | U | U | U | E | I | U | U | E | E | U | U | U | U | U |
| Inconsistency Management for Multiple-View Software Development Environments | E | U | U | U | U | U | U | U | I | E | E | U | U | U | U | E | U | E | U | U | U | U | U |
| Linking usability to software architecture patterns through general scenarios | I | U | U | I | U | U | U | I | E | E | U | U | I | E | E | E | U | E | I | U | U | U | U |

<https://goo.gl/3TJvbY>

Tablas. Ejemplo [101]

TABLE 1 Studies classification by topic about the application of PD&R in STEAM

| Topic | References | No. of papers |
|---|---|---------------|
| 1: Studies focused on describing the application of PD&R in STEAM Education | [11,36,49,79,81,84,104,112] | 8 |
| 2: Studies devoted to describing the application of PD&R as a way to foster STEAM disciplines | [11,12,20,30,35–37,44,48,52,57,61,64,65,70,73,74,76,78,103,104,107,111] | 23 |
| 3: Studies focused on the development of certain competencies in the context of STEAM Education | [14,16,22,31,42,44,51,57,58,63,70,76,86,92,105,107,109] | 17 |
| 4: Studies that describe the application of different tools and techniques in STEAM Education | [10,20,21,24,26,30,38,52,56,58,66,85–87,90,93,96,97,102] | 19 |

Abbreviations: PD&R, physical devices and robotics; STEAM, science, technology, engineering, arts, and mathematics.

Tablas. Ejemplo [101]

TABLE 2 Distribution of selected studies for MQ2, MQ3, MQ4, and MQ5

| Description | References | No. of studies |
|-------------------------------|--|----------------|
| Section A—Associated benefits | | |
| Technology | [21,35,51,52,61,76,78,79,81,85–87,93,97,109] | 15 |
| Methodologies | [10,11,20,21,24,26,30,31,37,38,44,48,49,51,61,64,65,73,74,76,81,85,87,90,93,104,109,111,112] | 29 |
| Competencies acquisition | [14,16,20,22,30,31,42,57,58,63,64,66,70,84,92,96,97,102] | 18 |
| Application Contexts | [12,36,42,48,58,70,79,81,84,85,87,103,105] | 13 |
| Section B—Tool employed | | |
| Robotics | [12,16,24,31,35–37,48,49,52,56–58,61,63,70,73,76,78,81,84,86,87,93,97,103,109,112] | 28 |
| Physical devices | [10,14,21,38,42,44,51,65,74,90,92,96,102,107] | 14 |
| Both | [11,20,22,26,30,64,66,79,85,104,105,111] | 12 |
| Section C—Methodology | | |
| PBL | [11,14,42,48,51,52,57,76,79,92,93,105,107,112] | 14 |
| PrBL | [10,11,22,24,30,31,35,36,38,44,56,58,61,64,65,73,74,78,81,84,85,87,90,102,103,107,109,111,112] | 29 |
| ChBL | [16,20,21,26,37,49,70,96,97] | 9 |
| Other | [12,66,86] | 3 |
| Section D—Educational level | | |
| Elementary school | [57,81,86,93] | 4 |
| Middle school | [11,12,16,20,21,24,26,30,31,42,48,49,51,52,57,65,66,78,79,81,85,90,92,96,97,103,104,107,109,112] | 30 |
| High school | [10,44,52,58,61,79,81,84] | 8 |
| Higher education | [35,36,38,56,63,64,70,73,74,76] | 10 |
| Not specified | [14,22,37,87,102,105,111] | 7 |

Matrices de revisión de literatura

- Son la herramienta basada en tablas que puede usarse para analizar y sintetizar los registros del corpus de la revisión sistemática
- Una matriz de revisión de la literatura es una tabla donde las filas son las referencias o documentos que forman el corpus y las columnas son las variables que se van a analizar de cada referencia [102]
- La matriz es una clase de tabla que presenta algunas restricciones [103]
 - La estructura de la tabla debe ser homogénea
 - Las filas deben representar entidades únicas bien identificadas (regla de las filas)
 - Las columnas deben representar propiedades de las entidades
 - Adicionalmente, es útil que las filas tengan algún tipo de identificador único, aunque sea un simple número

Matrices de revisión de literatura

- Las columnas (las variables) puede estar determinadas por diversas estrategias
 - **Ejes** para caracterizar la investigación. Se trata de obtener datos sobre variables comunes a toda investigación, como los objetivos, la metodología, el marco conceptual, los resultados principales, etc.
 - **Temas** que han sido abordados en las investigaciones. Son específicos de cada proyecto concreto, que es el que determina las variables de estudio. Los temas o variables se pueden determinar a priori, esto es, pueden ser de origen deductivo (por el conocimiento previo de la materia) o pueden ser obtenidos de forma inductiva, a partir de la revisión de los documentos
- En todos los casos, las variables de las columnas proporcionan las **preguntas** con las que se analizan los documentos
- El orden de las filas debe ser cronológico de forma ascendente [102] (primero los más antiguos para observar la evolución de los ítems analizados)

Matrices de revisión de literatura

- Beneficios [103]
 - Se trata por igual cada referencia
 - La estructura propia de la tabla facilita las comparaciones, así como identificar patrones y temas emergentes

Matriz basada en ejes. Esquema general [103]

| <i>ID</i> | <i>Referencia</i> | <i>Eje 1</i> | <i>Eje 2</i> | <i>Eje 3</i> |
|-----------|-------------------|--------------|--------------|--------------|
| | | | | |
| | | | | |
| | | | | |

En [102] se recomienda separar la información de la referencia en dos columnas, una para los datos de la fuente y otra para el año de publicación

Matriz basada en ejes. Ejemplo [103]

Los tres ejes o elementos de análisis elegidos y las preguntas que generan son

- **Métodos:** ¿qué métodos se han usado en cada investigación?
- **Problema principal:** ¿cuál es el enfoque o el problema principal manejado?
- **Resultados principales:** ¿cuáles son los principales resultados obtenidos?

| <i>ID</i> | <i>Referencia</i> | <i>Métodos</i> | <i>Problema principal</i> | <i>Resultados principales</i> |
|-----------|-------------------|----------------|---------------------------|-------------------------------|
|-----------|-------------------|----------------|---------------------------|-------------------------------|

Matriz basada en temas o códigos

- En el análisis se busca respuesta a cómo trata cada investigación un tema o código específico
- Por ejemplo, en una revisión sobre Inteligencia Artificial aplicada al periodismo, se podrían usar estos temas [103]
 - **Ética:** ¿qué aspectos sobre la dimensión ética recoge cada investigación?
 - **Percepción:** ¿cómo perciben los diferentes actores -expertos, periodistas, lectores, empresas, etc.- la entrada de la IA en el periodismo?
 - **Países:** ¿qué países están afectados por cada estudio?

| <i>ID</i> | <i>Referencia</i> | <i>Ética</i> | <i>Percepción</i> | <i>Países</i> |
|-----------|-------------------|--------------|-------------------|---------------|
|-----------|-------------------|--------------|-------------------|---------------|

Matriz de presencia/ausencia [103]

- Pretenden detectar la presencia o ausencia de un conjunto de indicadores o ítems predefinidos
- Las columnas representan la lista de ítems y las filas los registros

| <i>ID</i> | <i>Ref.</i> | <i>Item1</i> | <i>Ítem2</i> | <i>Ítem3</i> | <i>Ítem4</i> | <i>Ítem5</i> | <i>Ítem6</i> |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 01 | Referencia 1 | + | - | + | - | + | + |
| 02 | Referencia 2 | - | + | + | + | + | + |
| 03 | Referencia 3 | + | - | - | - | + | + |
| ... | | | | | | | |
| N | Referencia N | + | - | - | + | - | + |

Las matrices como herramienta de síntesis

- Las matrices son una herramienta potente de análisis, pero también de síntesis [103]
 - Las propias tablas que forman las matrices, con o sin elaboración adicional, actúan como síntesis de forma directa. Con más razón aún, si una vez llevada a cabo la extracción de datos y representados en tablas, se ve la oportunidad de crear nuevas tablas mediante operaciones que aislen determinadas filas o creando nuevas tablas que combinen filas y columnas, de modo que pongan de relieve patrones o tendencias
 - Aplicando la regla de las columnas [103], esto es, examinando cada columna independientemente podrá obtenerse una información valiosa para la síntesis narrativa: cómo evoluciona un ítem, si hay repeticiones, ausencias, semejanzas, oposiciones, patrones o tendencias

7. Caso de estudio

Enunciado

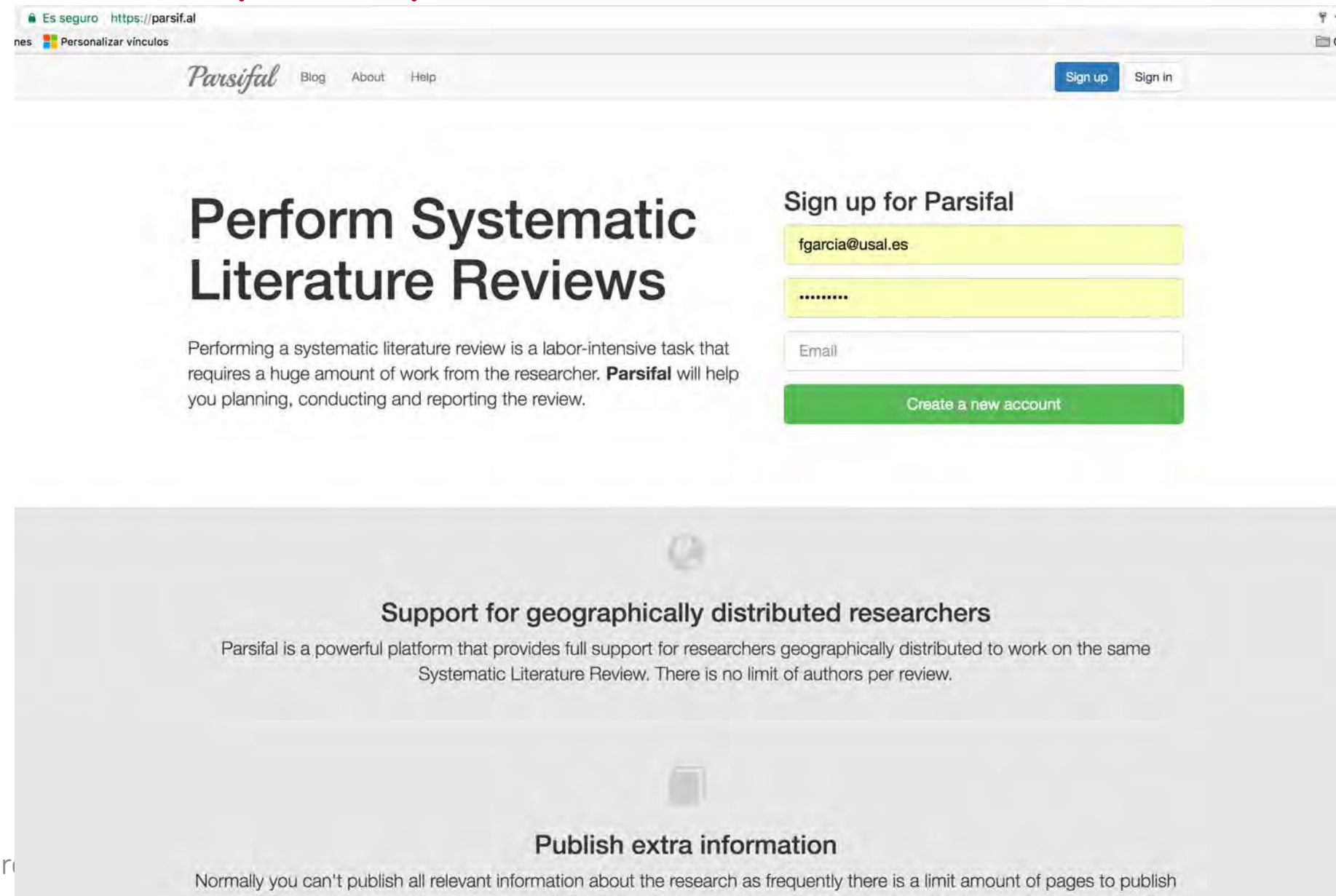
- El Grupo de Investigación e Innovación en Educación del Tecnológico de Monterrey (<http://sitios.itesm.mx/ehe/iie/>) desea hacer un estudio de las tendencias en su línea de investigación en desarrollo y uso de la tecnología en educación
- El desarrollo de este caso de estudio dio como resultado la publicación de este libro [104]

Planteamiento

- Se va a enfocar como un *mapping*, pero sin ser parte de una SLR
- Es una línea muy amplia, habrá que delimitar
 - Temporalmente: 2015-Actualidad
 - Bases de datos
 - Scopus
 - WoS colección principal
 - Idioma
 - Búsquedas solo con términos en inglés
 - Se aceptarán artículos en español o inglés
 - Tipo de documento
 - Solo artículos en revistas

Planteamiento

- Se va a mostrar como iniciar el proceso, utilizando de apoyo la herramienta Parsifal <https://parsif.al/>



The screenshot shows the Parsifal website interface. At the top, there is a navigation bar with the Parsifal logo, links for 'Blog', 'About', and 'Help', and buttons for 'Sign up' and 'Sign in'. The main content area features a large heading 'Perform Systematic Literature Reviews' and a sub-heading 'Sign up for Parsifal'. Below the heading, there is a text block explaining that performing a systematic literature review is labor-intensive and that Parsifal helps with planning, conducting, and reporting. To the right, there is a sign-up form with fields for email (containing 'fgarcia@usal.es'), a password field (masked with dots), and a 'Create a new account' button. Below the sign-up form, there is a section titled 'Support for geographically distributed researchers' with a sub-heading and a paragraph explaining that Parsifal provides full support for researchers geographically distributed to work on the same Systematic Literature Review, with no limit on the number of authors per review. At the bottom, there is a section titled 'Publish extra information' with a sub-heading and a paragraph explaining that normally you can't publish all relevant information about the research as frequently there is a limit amount of pages to publish.

Definición del sistemático y establecimiento del equipo de trabajo



Parsifal Blog About Help fgarcia04

fgarcia04 / **Desarrollo y uso de la tecnología en educación** [Review settings](#)

Review Planning Conducting Reporting

Review details

Title
Desarrollo y uso de la tecnología en educación

Description
Para el capítulo del GIIE, Tecnológico de Monterrey, México, Noviembre de 2017

Save

Authors

| | |
|--------------|-------------|
| fgarcia04 | main author |
| lauraicela25 | |
| cangeles | |

[+ Add author](#)

Definición del protocolo

- Se define el objetivo de la acción y el PICOC

Parsifal Blog About Help fgarcia04 | ⚙️ 🔄

fgarcia04 / [Desarrollo y uso de la tecnología en educación](#) ⚙️ Review settings

Review **Planning** Conducting Reporting

Protocol [Quality Assessment Checklist](#) [Data Extraction Form](#)

Protocol

Objectives

PICOC

Research Questions

Keywords and Synonyms

Search String

Sources

Selection Criteria

Objectives ?

Making a systematic literature mapping of the "Development and use of technology in education" research line

✔ Save

PICOC ?

Separate the terms used in the PICOC using commas. This will make possible to save them separately as keywords so we can help you design your search string.

If any of the sections of PICOC doesn't apply to your research, please leave it blank.

Population

Intervention

Comparison

Outcome

Context

✔ Save

Definición del protocolo

- Preguntas de investigación

Research Questions ?

| | | | |
|---|---|--------|----------|
| ⌵ | Which is the geographical distribution of the authors? | ✎ edit | 🗑 remove |
| ⌵ | Which are the most important authors? | ✎ edit | 🗑 remove |
| ⌵ | Which is the topics list in this research line? | ✎ edit | 🗑 remove |
| ⌵ | Which are the affected educational levels? | ✎ edit | 🗑 remove |
| ⌵ | How the discovered topics list is mapped with the current descriptors of the research line? | ✎ edit | 🗑 remove |

[+ Add Question](#)

Definición del protocolo

- El siguiente paso es definir los términos clave, relacionados con los campos PICOC

| Keywords and Synonyms ? | | |
|---|----------|---|
| To edit or remove a certain keyword or synonym you may click on it's description to enable the field. | | |
| Keyword | Synonyms | Related to |
| Acceptation | | Intervention edit remove |
| Development | | Intervention edit remove |
| Educational technol* | | Population edit remove |
| Experience | | Intervention edit remove |
| Impact | | Intervention edit remove |
| Innovat* | | Population edit remove |
| Learning techno* | | Population edit remove |
| Use | | Intervention edit remove |

+ Add Keyword
Import PICO Keywod

Definición del protocolo

- Se plantea cuál podría ser la ecuación de búsqueda canónica

Search String ?




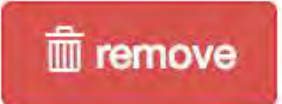
i Use uppercase for boolean operators (**AND, OR**), double quotes for composite words and parentheses to logically separate the keywords and synonyms.



```
(( "Educational technol*" OR "Learning techno*" ) AND ("innovat*")) AND ("Acceptation" OR "Development" OR "Experience" OR "Impact" OR "Use")
```

✓ Save
Suggested Search String

Definición del protocolo

- Se eligen las fuentes de datos de las que extraer los estudios

| Sources | | |
|--------------------|---|---|
| Name | URL | |
| ISI Web of Science | http://www.isiknowledge.com |  edit  remove |
| Scopus | http://www.scopus.com |  edit  remove |

Definición del protocolo

- Se definen los criterios de inclusión y exclusión

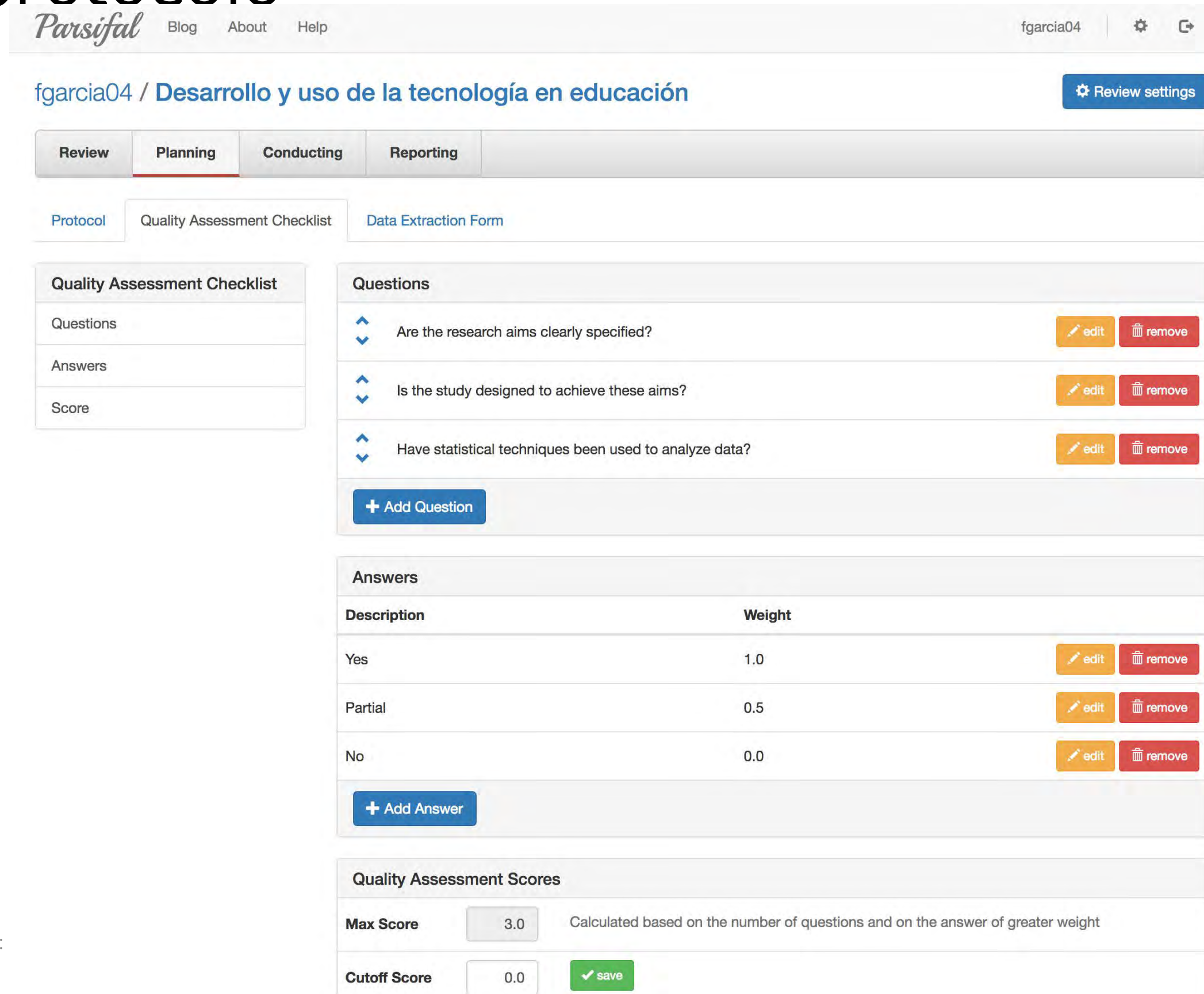
Selection Criteria

Inform your inclusion or exclusion criteria and press **Enter** to add.

| | |
|--|---|
| <p>Inclusion Criteria</p> <div style="border: 1px solid #ccc; height: 40px; margin-bottom: 10px;"></div> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Journal paper Paper in Spanish or English The paper has been peer reviewed The paper presents an experience or study with tested results</p> </div> <div style="border: 1px solid #ccc; background-color: #e74c3c; color: white; padding: 5px; text-align: center; margin-top: 10px;"> remove selected </div> | <p>Exclusion Criteria</p> <div style="border: 1px solid #ccc; height: 40px; margin-bottom: 10px;"></div> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Paper has not been peer reviewed Paper does not present an experience or study with tested results Paper is not in English or in Spanish This is not a journal paper Paper is not accessible</p> </div> <div style="border: 1px solid #ccc; background-color: #e74c3c; color: white; padding: 5px; text-align: center; margin-top: 10px;"> remove selected </div> |
|--|---|

Definición del protocolo

- Se definen las preguntas para evaluar la calidad de los artículos seleccionados



The screenshot shows the Parsiful web application interface. At the top, there is a navigation bar with the Parsiful logo, links for 'Blog', 'About', and 'Help', and a user profile 'fgarcia04' with settings and share icons. Below the navigation bar, the page title is 'fgarcia04 / Desarrollo y uso de la tecnología en educación' with a 'Review settings' button. The main content area is divided into several sections:

- Review Planning Conducting Reporting**: A horizontal navigation bar with 'Planning' selected.
- Protocol Quality Assessment Checklist Data Extraction Form**: A sub-navigation bar with 'Quality Assessment Checklist' selected.
- Quality Assessment Checklist**: A sidebar menu with 'Questions', 'Answers', and 'Score' options.
- Questions**: A list of three questions with 'edit' and 'remove' buttons for each:
 - Are the research aims clearly specified?
 - Is the study designed to achieve these aims?
 - Have statistical techniques been used to analyze data?
- + Add Question**: A button to add a new question.
- Answers**: A table defining the possible answers and their weights:

| Description | Weight | edit | remove |
|-------------|--------|------|--------|
| Yes | 1.0 | edit | remove |
| Partial | 0.5 | edit | remove |
| No | 0.0 | edit | remove |
- + Add Answer**: A button to add a new answer.
- Quality Assessment Scores**: A section for setting scores:
 - Max Score**: 3.0 (Calculated based on the number of questions and on the answer of greater weight)
 - Cutoff Score**: 0.0 (with a 'save' button)

Definición del protocolo

- Se define un formulario para la extracción de datos

Parsifal Blog About Help fgarcia04 | ⚙️ ↻

fgarcia04 / [Desarrollo y uso de la tecnología en educación](#) [Review settings](#)

Review **Planning** Conducting Reporting

[Protocol](#) [Quality Assessment Checklist](#) **Data Extraction Form**

| Data Extraction Form | | | |
|----------------------|-------------|---------------|---|
| | Description | Type | Values |
| ⌵ | Authors | String Field | n/a edit remove |
| ⌵ | Journal | String Field | n/a edit remove |
| ⌵ | Year | Integer Field | n/a edit remove |
| ⌵ | DOI | String Field | n/a edit remove |

[+ Add Field](#)

Proceso de revisión

- Se debe transformar la ecuación canónica en ecuaciones específicas para cada una de las fuentes de datos y que sean equivalentes
- Para ello se irá a la fuente de datos y se utilizará la herramienta de búsqueda con los refinamientos que sean necesarios
- Finalmente, se capturará la ecuación con la que se va a trabajar, es decir, la que genera el conjunto de artículos con el que se va a trabajar

Proceso de revisión


fgarcia04 / **Desarrollo y uso de la tecnología en educación**

 Review settings

Review Planning **Conducting** Reporting


1. Search 2. Import Studies 3. Study Selection 4. Quality Assessment 5. Data Extraction 6. Data Analysis

Search Strings

 Add digital source-specific search strings. Use this space to save all search string formats used during the research.

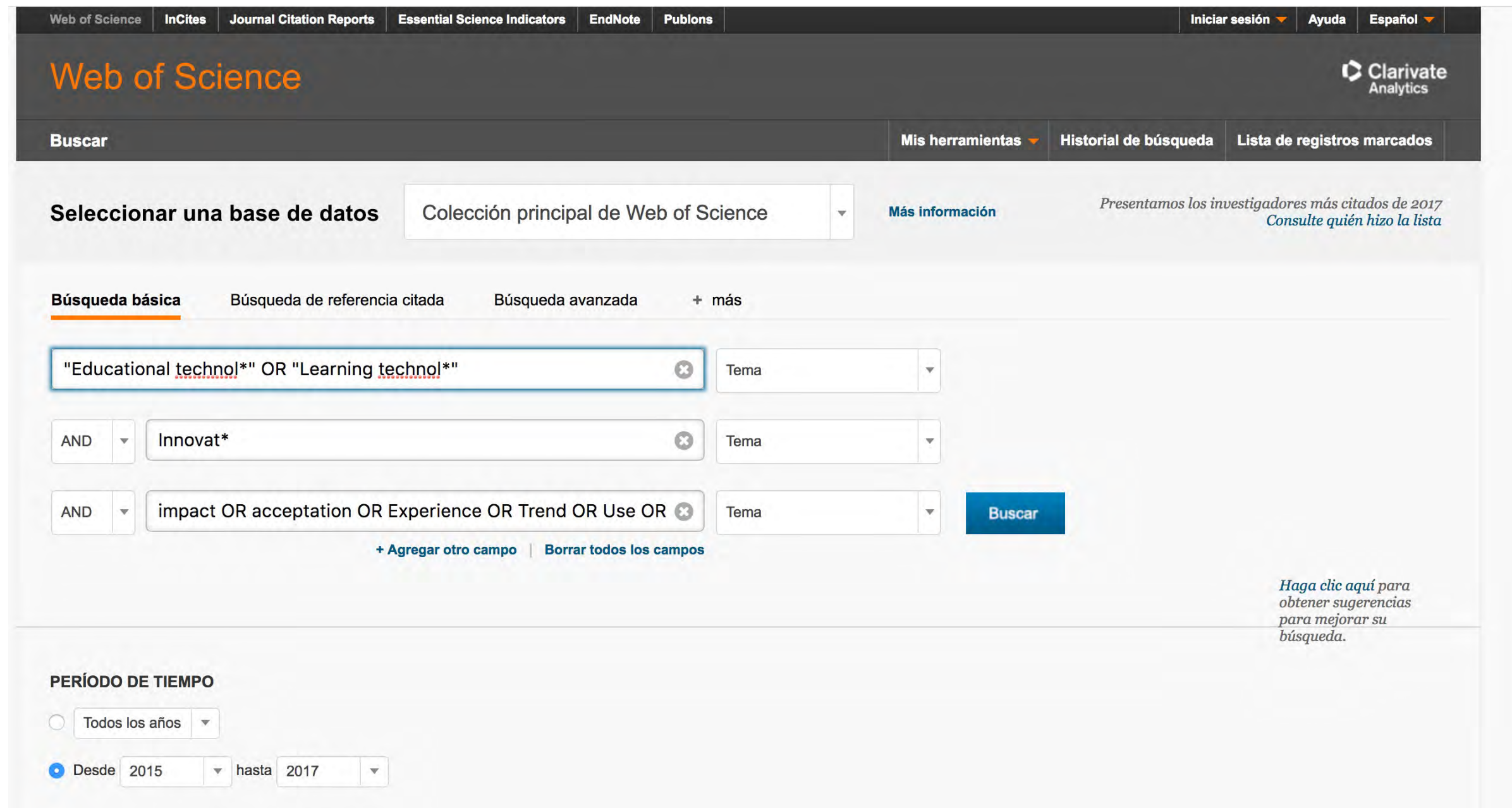
Base String ISI Web of Science Scopus

```
((("Educational technol*" OR "Learning techno*") AND ("innovat*")) AND ("Acceptation" OR "Development" OR "Experience" OR "Impact" OR "Use"))
```

 Add source-specific search string

Proceso de revisión

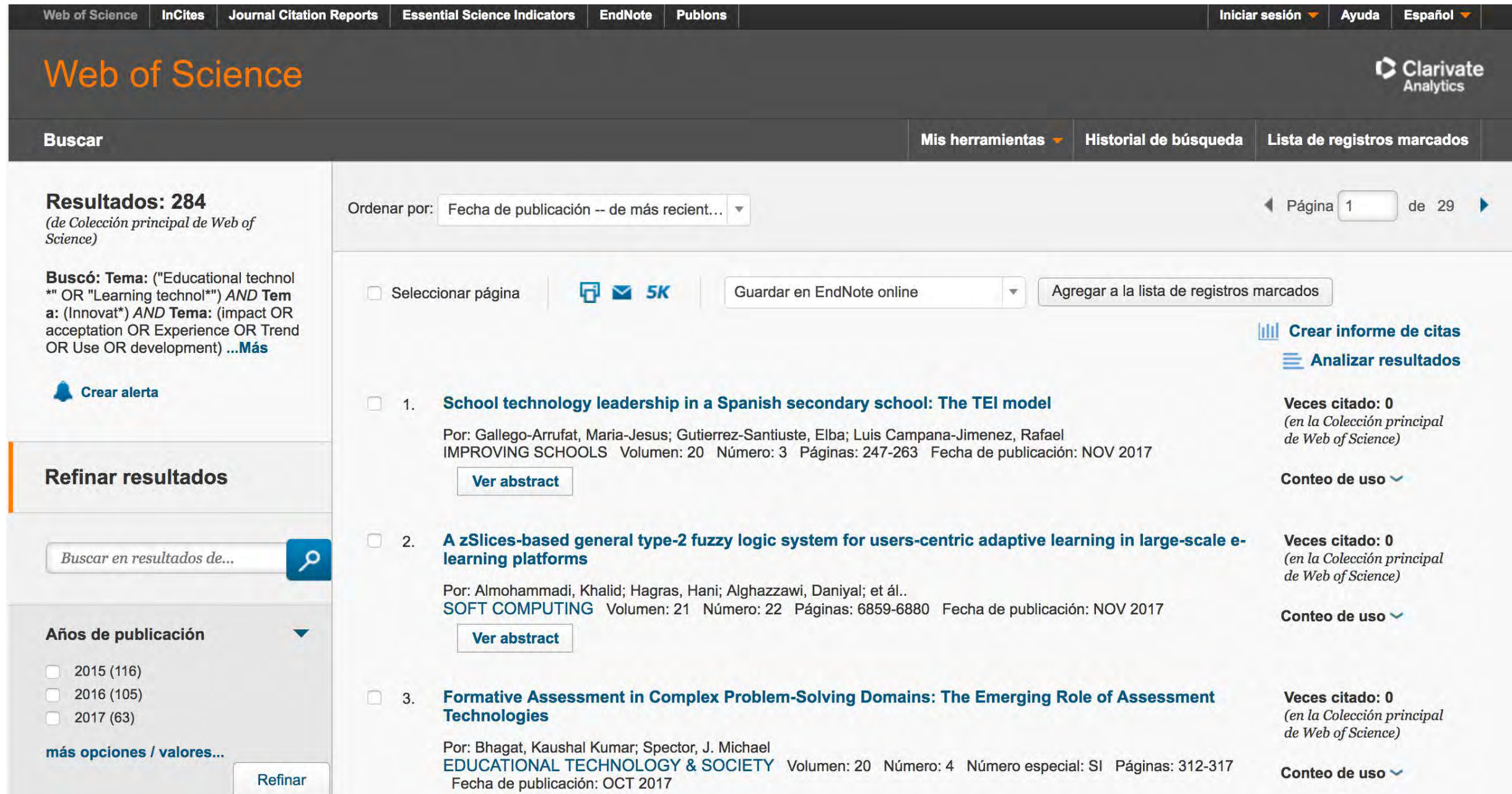
- Se realiza la búsqueda en WoS



The screenshot shows the Web of Science search interface. At the top, there are navigation links for 'Web of Science', 'InCites', 'Journal Citation Reports', 'Essential Science Indicators', 'EndNote', and 'Publons'. On the right, there are links for 'Iniciar sesión', 'Ayuda', and 'Español'. The main header features the 'Web of Science' logo and 'Clarivate Analytics'. Below the header, there are navigation options: 'Buscar', 'Mis herramientas', 'Historial de búsqueda', and 'Lista de registros marcados'. The main content area is titled 'Seleccionar una base de datos' and shows 'Colección principal de Web of Science' selected. There are links for 'Más información' and a promotional message: 'Presentamos los investigadores más citados de 2017. Consulte quién hizo la lista'. Below this, there are search options: 'Búsqueda básica', 'Búsqueda de referencia citada', and 'Búsqueda avanzada'. The 'Búsqueda básica' option is selected. The search query is entered in three fields: '"Educational technol*" OR "Learning technol*"', 'Innovat*', and 'impact OR acceptance OR Experience OR Trend OR Use OR'. Each field has a dropdown menu for 'Tema'. There is a 'Buscar' button and links for '+ Agregar otro campo' and 'Borrar todos los campos'. At the bottom, there is a 'PERÍODO DE TIEMPO' section with radio buttons for 'Todos los años' and 'Desde 2015 hasta 2017'.

Proceso de revisión

- Se realiza la búsqueda en WoS



The screenshot shows the Web of Science search results interface. At the top, there are navigation tabs for 'Web of Science', 'InCites', 'Journal Citation Reports', 'Essential Science Indicators', 'EndNote', and 'Publons'. On the right, there are links for 'Iniciar sesión', 'Ayuda', and 'Español'. The main header includes the 'Web of Science' logo and 'Clarivate Analytics'.

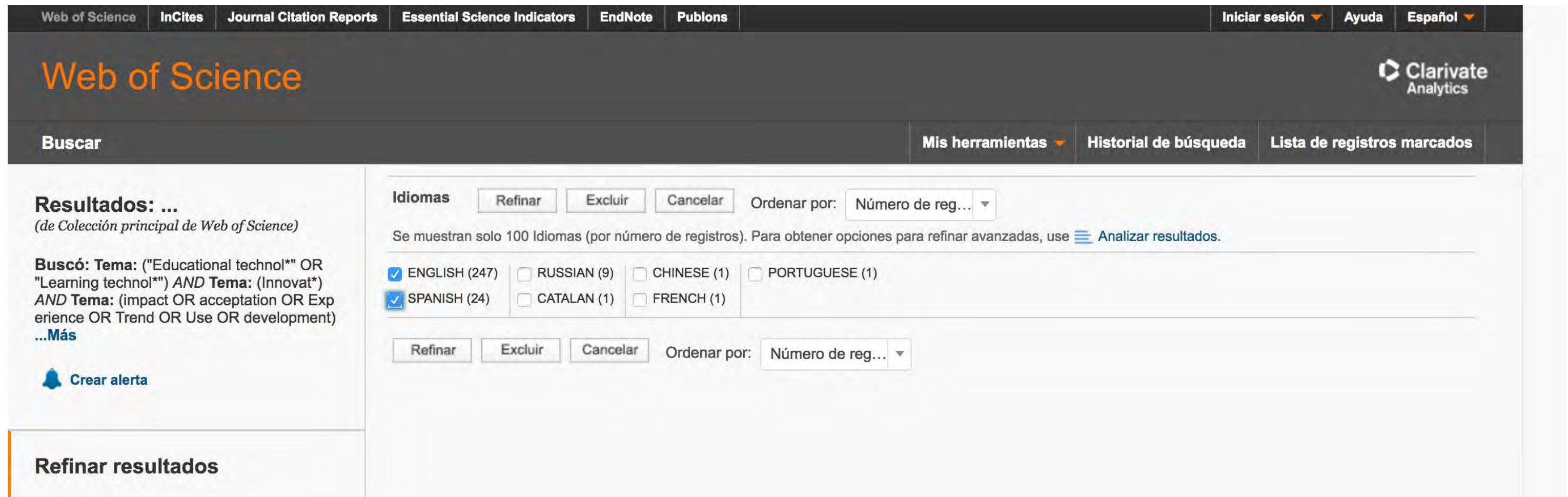
The search results are displayed on page 1 of 29. The search criteria are: "Educational technol*" OR "Learning technol*" AND Tema: (Innovat*) AND Tema: (impact OR acceptance OR Experience OR Trend OR Use OR development) ...Más. The search results are ordered by 'Fecha de publicación -- de más recent...'. There are three search results listed:

- School technology leadership in a Spanish secondary school: The TEI model**
Por: Gallego-Arrufat, Maria-Jesus; Gutierrez-Santiuste, Elba; Luis Campana-Jimenez, Rafael
IMPROVING SCHOOLS Volumen: 20 Número: 3 Páginas: 247-263 Fecha de publicación: NOV 2017
- A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e-learning platforms**
Por: Almohammadi, Khalid; Hagrass, Hani; Alghazzawi, Daniyal; et ál..
SOFT COMPUTING Volumen: 21 Número: 22 Páginas: 6859-6880 Fecha de publicación: NOV 2017
- Formative Assessment in Complex Problem-Solving Domains: The Emerging Role of Assessment Technologies**
Por: Bhagat, Kaushal Kumar; Spector, J. Michael
EDUCATIONAL TECHNOLOGY & SOCIETY Volumen: 20 Número: 4 Número especial: SI Páginas: 312-317
Fecha de publicación: OCT 2017

Each result includes a 'Ver abstract' button and a 'Conteo de uso' dropdown menu. The interface also features a 'Refinar resultados' section on the left with a search box and a list of publication years (2015, 2016, 2017) to filter the results.

Proceso de revisión

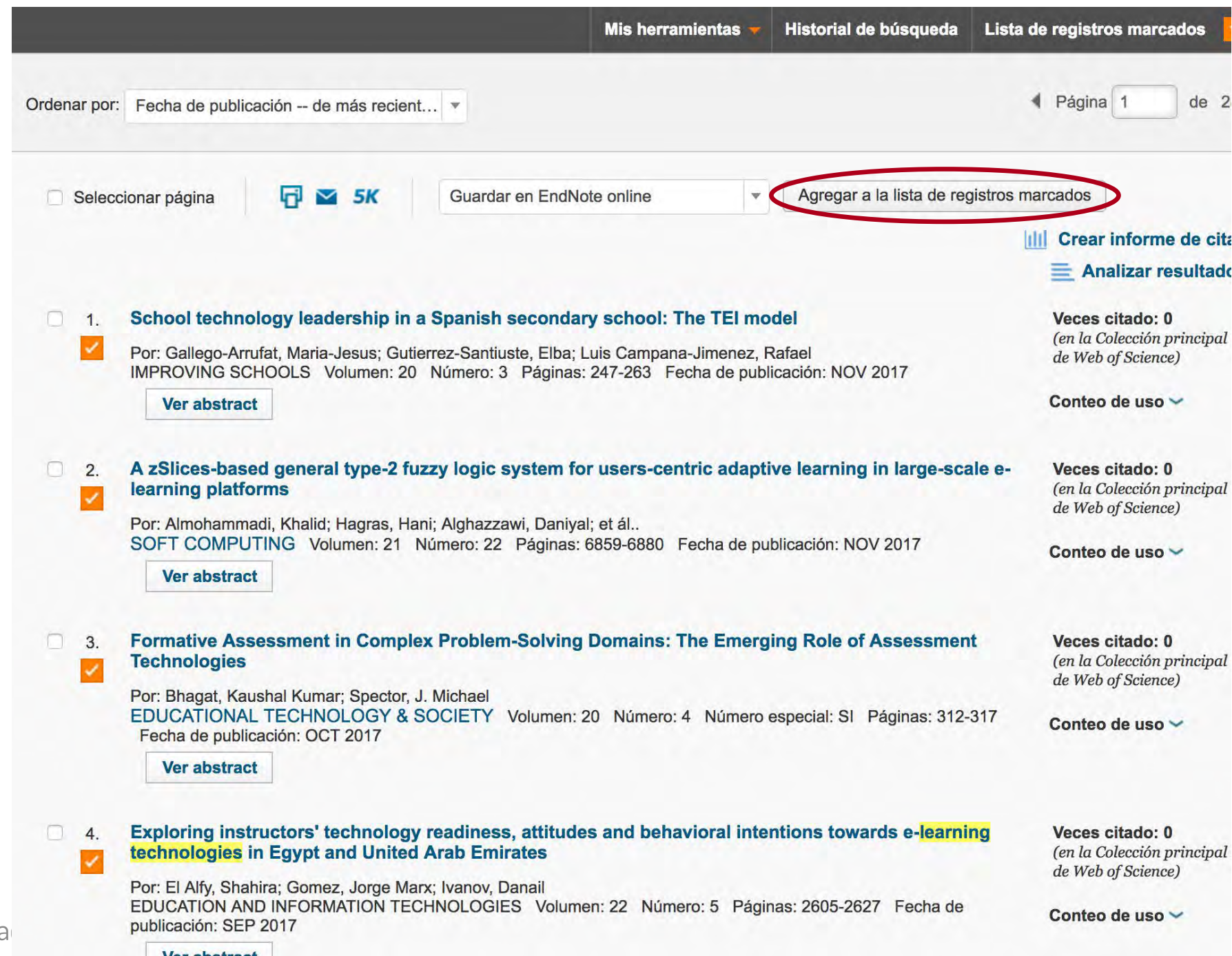
- Se van haciendo los refinamientos oportunos hasta haber incluido las diferentes restricciones y tener el conjunto de datos con el que se va a trabajar



The screenshot shows the Web of Science interface. At the top, there is a navigation bar with links to 'Web of Science', 'InCites', 'Journal Citation Reports', 'Essential Science Indicators', 'EndNote', and 'Publons'. On the right side of the navigation bar, there are links for 'Iniciar sesión', 'Ayuda', and 'Español'. Below the navigation bar, the 'Web of Science' logo is displayed on the left, and the 'Clarivate Analytics' logo is on the right. A search bar is located below the logo, with the text 'Buscar' inside. To the right of the search bar, there are links for 'Mis herramientas', 'Historial de búsqueda', and 'Lista de registros marcados'. The main content area shows search results. On the left side, there is a section titled 'Resultados: ...' with a subtitle '(de Colección principal de Web of Science)'. Below this, the search criteria are displayed: 'Buscó: Tema: ("Educational technol*" OR "Learning technol*") AND Tema: (Innovat*) AND Tema: (impact OR acceptance OR Exp experience OR Trend OR Use OR development) ...Más'. There is also a 'Crear alerta' button. On the right side, there is a section for refining results. It includes a 'Idiomas' section with buttons for 'Refinar', 'Excluir', and 'Cancelar'. Below this, there is a list of languages with checkboxes and counts: ENGLISH (247), SPANISH (24), RUSSIAN (9), CATALAN (1), CHINESE (1), FRENCH (1), and PORTUGUESE (1). There is also an 'Ordenar por:' dropdown menu set to 'Número de reg...'. At the bottom of the refinement section, there are buttons for 'Refinar', 'Excluir', and 'Cancelar', and another 'Ordenar por:' dropdown menu set to 'Número de reg...'. A 'Refinar resultados' button is located at the bottom left of the main content area.

Proceso de revisión

- Una vez se tiene el conjunto de datos, se seleccionan los registros



Mis herramientas ▾ Historial de búsqueda Lista de registros marcados

Ordenar por: Fecha de publicación -- de más recient... ▾

◀ Página 1 de 2

Seleccionar página
 SK

 Agregar a la lista de registros marcados

1. School technology leadership in a Spanish secondary school: The TEI model
 Por: Gallego-Arrufat, Maria-Jesus; Gutierrez-Santiuste, Elba; Luis Campana-Jimenez, Rafael
 IMPROVING SCHOOLS Volumen: 20 Número: 3 Páginas: 247-263 Fecha de publicación: NOV 2017

2. A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e-learning platforms
 Por: Almohammadi, Khalid; Hagrass, Hani; Alghazzawi, Daniyal; et ál..
 SOFT COMPUTING Volumen: 21 Número: 22 Páginas: 6859-6880 Fecha de publicación: NOV 2017

3. Formative Assessment in Complex Problem-Solving Domains: The Emerging Role of Assessment Technologies
 Por: Bhagat, Kaushal Kumar; Spector, J. Michael
 EDUCATIONAL TECHNOLOGY & SOCIETY Volumen: 20 Número: 4 Número especial: SI Páginas: 312-317
 Fecha de publicación: OCT 2017

4. Exploring instructors' technology readiness, attitudes and behavioral intentions towards e-learning technologies in Egypt and United Arab Emirates
 Por: El Alfy, Shahira; Gomez, Jorge Marx; Ivanov, Danail
 EDUCATION AND INFORMATION TECHNOLOGIES Volumen: 22 Número: 5 Páginas: 2605-2627 Fecha de publicación: SEP 2017

Veces citado: 0
(en la Colección principal de Web of Science)
 Conteo de uso ▾

Proceso de revisión

- Se exportan los registros para trabajar con ellos en el formato que se desee: Bibtex, EndNote, Fichero delimitado, etc.

registros totales en la lista de registros marcados
 Extraer el autor, el título, la fuente y el abstract de todos los registros de la lista de registros marcados así como las veces que se han citado.

registros de **Colección principal de Web of Science**
 Extraer de este producto datos completos de estos registros.

Extraer registros [- Ocultar opciones de salida] | 5K

Paso 1: Seleccionar registros

Todos los registros en esta lista (hasta 500)

Todos los registros en página

Registros hasta

Paso 2: Seleccionar contenido
 Seleccionar de los siguientes campos:

Autor(es)/Editor(es) Título Fuente Información sobre la conferencia

Abstract* Referencias citadas* Tipo de documento Patrocinadores de la conferencia

Direcciones Veces citado Palabras clave Información sobre la editorial

ISSN/ISBN Número de referencias citadas Abrev. de fuente Número de páginas

Número IDS Idioma Categorías de Web of Science Áreas de investigación

Información de financiación Número de acceso Identificadores de autores Conteo de uso

ID de PubMed Acceso abierto Artículo popular Muy citado

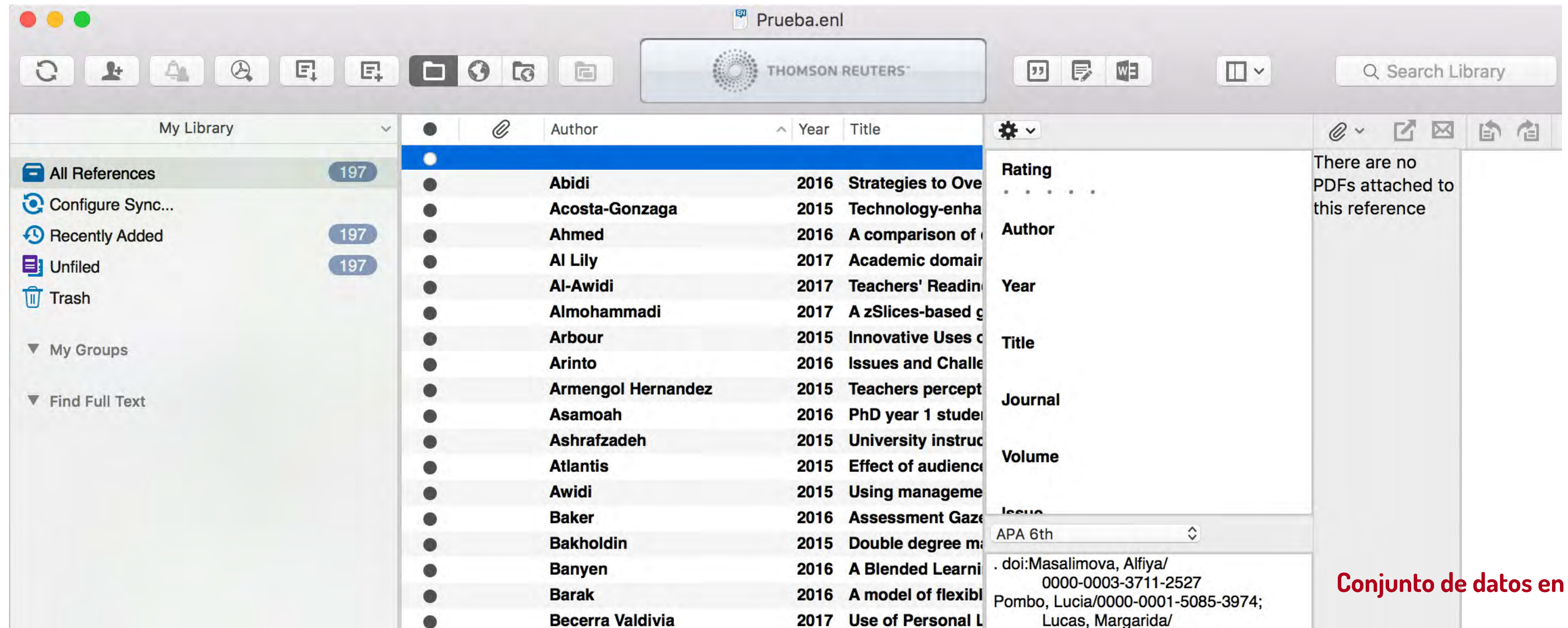
Seleccionar todo | Restablecer

**Al seleccionar estos elementos, el tiempo de procesamiento aumentará.*

Paso 3: Seleccionar destino [Más información sobre cómo guardar contenido en un programa de gestión bibliográfica]

Proceso de revisión

- Ya se tiene el conjunto de datos para trabajar con él

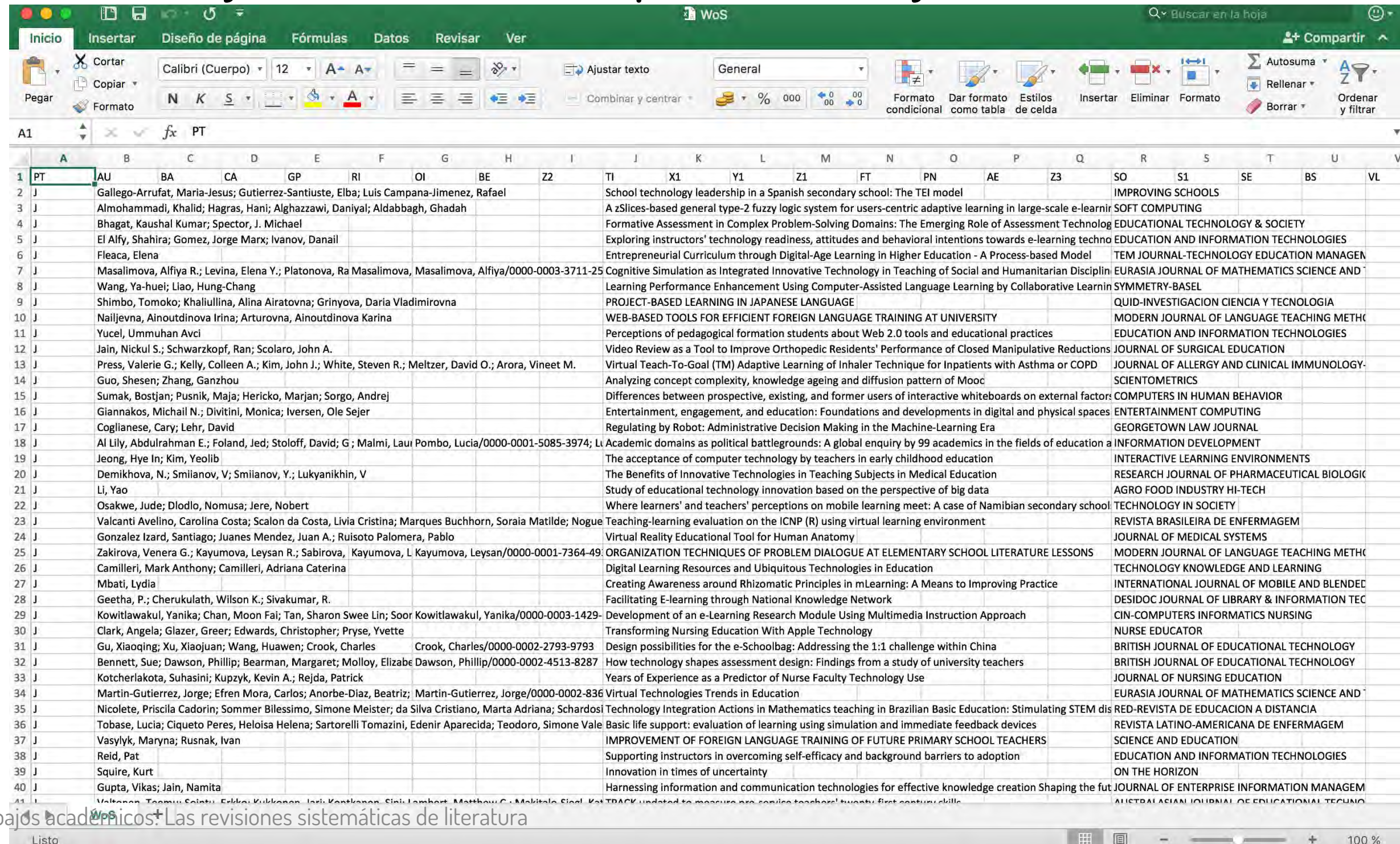


| Author | Year | Title |
|--------------------|------|--------------------|
| Abidi | 2016 | Strategies to Ove |
| Acosta-Gonzaga | 2015 | Technology-enha |
| Ahmed | 2016 | A comparison of |
| Al Lily | 2017 | Academic domain |
| Al-Awidi | 2017 | Teachers' Reading |
| Almohammadi | 2017 | A zSlices-based g |
| Arbour | 2015 | Innovative Uses c |
| Arinto | 2016 | Issues and Challe |
| Armengol Hernandez | 2015 | Teachers percept |
| Asamoah | 2016 | PhD year 1 studen |
| Ashrafzadeh | 2015 | University instruc |
| Atlantis | 2015 | Effect of audience |
| Awidi | 2015 | Using manageme |
| Baker | 2016 | Assessment Gaze |
| Bakholdin | 2015 | Double degree ma |
| Banyen | 2016 | A Blended Learnin |
| Barak | 2016 | A model of flexibl |
| Becerra Valdivia | 2017 | Use of Personal L |

Conjunto de datos en Endnote

Proceso de revisión

- Ya se tiene el conjunto de datos para trabajar con él



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V |
|----|----|---|----|----|----|----|----|----|----|---|----|----|----|----|----|----|----|--|----|----|----|----|
| 1 | PT | AU | BA | CA | GP | RI | OI | BE | Z2 | TI | X1 | Y1 | Z1 | FT | PN | AE | Z3 | SO | S1 | SE | BS | VL |
| 2 | J | Gallego-Arrufat, Maria-Jesus; Gutierrez-Santiuste, Elba; Luis Campana-Jimenez, Rafael | | | | | | | | School technology leadership in a Spanish secondary school: The TEI model | | | | | | | | IMPROVING SCHOOLS | | | | |
| 3 | J | Almohammadi, Khalid; Hagra, Hani; Alghazzawi, Daniyal; Aldabbagh, Ghadah | | | | | | | | A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e-learning | | | | | | | | SOFT COMPUTING | | | | |
| 4 | J | Bhagat, Kaushal Kumar; Spector, J. Michael | | | | | | | | Formative Assessment in Complex Problem-Solving Domains: The Emerging Role of Assessment Technology | | | | | | | | EDUCATIONAL TECHNOLOGY & SOCIETY | | | | |
| 5 | J | El Alfy, Shahira; Gomez, Jorge Marx; Ivanov, Danail | | | | | | | | Exploring instructors' technology readiness, attitudes and behavioral intentions towards e-learning technology | | | | | | | | EDUCATION AND INFORMATION TECHNOLOGIES | | | | |
| 6 | J | Fleaca, Elena | | | | | | | | Entrepreneurial Curriculum through Digital-Age Learning in Higher Education - A Process-based Model | | | | | | | | TEM JOURNAL-TECHNOLOGY EDUCATION MANAGEM | | | | |
| 7 | J | Masalimova, Alfiya R.; Levina, Elena Y.; Platonova, Ra Masalimova, Masalimova, Alfiya/0000-0003-3711-25 | | | | | | | | Cognitive Simulation as Integrated Innovative Technology in Teaching of Social and Humanitarian Disciplines | | | | | | | | EURASIA JOURNAL OF MATHEMATICS SCIENCE AND | | | | |
| 8 | J | Wang, Ya-huei; Liao, Hung-Chang | | | | | | | | Learning Performance Enhancement Using Computer-Assisted Language Learning by Collaborative Learning | | | | | | | | SYMMETRY-BASEL | | | | |
| 9 | J | Shimbo, Tomoko; Khaliullina, Alina Airatovna; Grinyova, Daria Vladimirovna | | | | | | | | PROJECT-BASED LEARNING IN JAPANESE LANGUAGE | | | | | | | | QUID-INVESTIGACION CIENCIA Y TECNOLOGIA | | | | |
| 10 | J | Nailjevna, Ainoutdinova Irina; Arturovna, Ainoutdinova Karina | | | | | | | | WEB-BASED TOOLS FOR EFFICIENT FOREIGN LANGUAGE TRAINING AT UNIVERSITY | | | | | | | | MODERN JOURNAL OF LANGUAGE TEACHING METHO | | | | |
| 11 | J | Yucel, Ummuhan Avci | | | | | | | | Perceptions of pedagogical formation students about Web 2.0 tools and educational practices | | | | | | | | EDUCATION AND INFORMATION TECHNOLOGIES | | | | |
| 12 | J | Jain, Nickul S.; Schwarzkopf, Ran; Scolaro, John A. | | | | | | | | Video Review as a Tool to Improve Orthopedic Residents' Performance of Closed Manipulative Reductions | | | | | | | | JOURNAL OF SURGICAL EDUCATION | | | | |
| 13 | J | Press, Valerie G.; Kelly, Colleen A.; Kim, John J.; White, Steven R.; Meltzer, David O.; Arora, Vineet M. | | | | | | | | Virtual Teach-To-Goal (TM) Adaptive Learning of Inhaler Technique for Inpatients with Asthma or COPD | | | | | | | | JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY- | | | | |
| 14 | J | Guo, Shesen; Zhang, Ganzhou | | | | | | | | Analyzing concept complexity, knowledge ageing and diffusion pattern of Moodle | | | | | | | | SCIENTOMETRICS | | | | |
| 15 | J | Sumak, Bostjan; Pusnik, Maja; Hericko, Marjan; Sorgo, Andrej | | | | | | | | Differences between prospective, existing, and former users of interactive whiteboards on external factors | | | | | | | | COMPUTERS IN HUMAN BEHAVIOR | | | | |
| 16 | J | Giannakos, Michail N.; Divitini, Monica; Iversen, Ole Sejer | | | | | | | | Entertainment, engagement, and education: Foundations and developments in digital and physical spaces | | | | | | | | ENTERTAINMENT COMPUTING | | | | |
| 17 | J | Coglianese, Cary; Lehr, David | | | | | | | | Regulating by Robot: Administrative Decision Making in the Machine-Learning Era | | | | | | | | GEORGETOWN LAW JOURNAL | | | | |
| 18 | J | Al Lily, Abdulrahman E.; Foland, Jed; Stoloff, David; G; Malmi, Laur Pombo, Lucia/0000-0001-5085-3974; Lu | | | | | | | | Academic domains as political battlegrounds: A global enquiry by 99 academics in the fields of education a | | | | | | | | INFORMATION DEVELOPMENT | | | | |
| 19 | J | Jeong, Hye In; Kim, Yeolib | | | | | | | | The acceptance of computer technology by teachers in early childhood education | | | | | | | | INTERACTIVE LEARNING ENVIRONMENTS | | | | |
| 20 | J | Demikhova, N.; Smilianov, V; Smilianov, Y.; Lukyanikhin, V | | | | | | | | The Benefits of Innovative Technologies in Teaching Subjects in Medical Education | | | | | | | | RESEARCH JOURNAL OF PHARMACEUTICAL BIOLOGIC | | | | |
| 21 | J | Li, Yao | | | | | | | | Study of educational technology innovation based on the perspective of big data | | | | | | | | AGRO FOOD INDUSTRY HI-TECH | | | | |
| 22 | J | Osakwe, Jude; Dlodlo, Nomusa; Jere, Nobert | | | | | | | | Where learners' and teachers' perceptions on mobile learning meet: A case of Namibian secondary school | | | | | | | | TECHNOLOGY IN SOCIETY | | | | |
| 23 | J | Valcanti Avelino, Carolina Costa; Scalon da Costa, Livia Cristina; Marques Buchhorn, Soraia Matilde; Nogue | | | | | | | | Teaching-learning evaluation on the ICNP (R) using virtual learning environment | | | | | | | | REVISTA BRASILEIRA DE ENFERMAGEM | | | | |
| 24 | J | Gonzalez Izard, Santiago; Juanes Mendez, Juan A.; Ruisoto Palomera, Pablo | | | | | | | | Virtual Reality Educational Tool for Human Anatomy | | | | | | | | JOURNAL OF MEDICAL SYSTEMS | | | | |
| 25 | J | Zakirova, Venera G.; Kayumova, Leysan R.; Sabirova, Kayumova, L Kayumova, Leysan/0000-0001-7364-49 | | | | | | | | ORGANIZATION TECHNIQUES OF PROBLEM DIALOGUE AT ELEMENTARY SCHOOL LITERATURE LESSONS | | | | | | | | MODERN JOURNAL OF LANGUAGE TEACHING METHO | | | | |
| 26 | J | Camilleri, Mark Anthony; Camilleri, Adriana Caterina | | | | | | | | Digital Learning Resources and Ubiquitous Technologies in Education | | | | | | | | TECHNOLOGY KNOWLEDGE AND LEARNING | | | | |
| 27 | J | Mbatia, Lydia | | | | | | | | Creating Awareness around Rhizomatic Principles in mLearning: A Means to Improving Practice | | | | | | | | INTERNATIONAL JOURNAL OF MOBILE AND BLENDED | | | | |
| 28 | J | Geetha, P.; Cherukulath, Wilson K.; Sivakumar, R. | | | | | | | | Facilitating E-learning through National Knowledge Network | | | | | | | | DESIDOC JOURNAL OF LIBRARY & INFORMATION TEC | | | | |
| 29 | J | Kowitlawakul, Yanika; Chan, Moon Fai; Tan, Sharon Swee Lin; Soor Kowitlawakul, Yanika/0000-0003-1429 | | | | | | | | Development of an e-Learning Research Module Using Multimedia Instruction Approach | | | | | | | | CIN-COMPUTERS INFORMATICS NURSING | | | | |
| 30 | J | Clark, Angela; Glazer, Greer; Edwards, Christopher; Pryse, Yvette | | | | | | | | Transforming Nursing Education With Apple Technology | | | | | | | | NURSE EDUCATOR | | | | |
| 31 | J | Gu, Xiaoping; Xu, Xiaojuan; Wang, Huawen; Crook, Charles Crook, Charles/0000-0002-2793-9793 | | | | | | | | Design possibilities for the e-Schoolbag: Addressing the 1:1 challenge within China | | | | | | | | BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY | | | | |
| 32 | J | Bennett, Sue; Dawson, Phillip; Bearman, Margaret; Molloy, Elizabeth Dawson, Phillip/0000-0002-4513-8287 | | | | | | | | How technology shapes assessment design: Findings from a study of university teachers | | | | | | | | BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY | | | | |
| 33 | J | Kotcherlakota, Suhasini; Kupzyk, Kevin A.; Rejda, Patrick | | | | | | | | Years of Experience as a Predictor of Nurse Faculty Technology Use | | | | | | | | JOURNAL OF NURSING EDUCATION | | | | |
| 34 | J | Martin-Gutierrez, Jorge; Efrén Mora, Carlos; Anorbe-Díaz, Beatriz; Martin-Gutierrez, Jorge/0000-0002-836 | | | | | | | | Virtual Technologies Trends in Education | | | | | | | | EURASIA JOURNAL OF MATHEMATICS SCIENCE AND | | | | |
| 35 | J | Nicolete, Priscila Cadorin; Sommer Bilissimo, Simone Meister; da Silva Cristiano, Marta Adriana; Schardosi | | | | | | | | Technology Integration Actions in Mathematics teaching in Brazilian Basic Education: Stimulating STEM dis | | | | | | | | RED-REVISTA DE EDUCACION A DISTANCIA | | | | |
| 36 | J | Tobase, Lucia; Ciqueto Peres, Heloisa Helena; Sartorelli Tomazini, Edenir Aparecida; Teodoro, Simone Vale | | | | | | | | Basic life support: evaluation of learning using simulation and immediate feedback devices | | | | | | | | REVISTA LATINO-AMERICANA DE ENFERMAGEM | | | | |
| 37 | J | Vasylyk, Maryna; Rusnak, Ivan | | | | | | | | IMPROVEMENT OF FOREIGN LANGUAGE TRAINING OF FUTURE PRIMARY SCHOOL TEACHERS | | | | | | | | SCIENCE AND EDUCATION | | | | |
| 38 | J | Reid, Pat | | | | | | | | Supporting instructors in overcoming self-efficacy and background barriers to adoption | | | | | | | | EDUCATION AND INFORMATION TECHNOLOGIES | | | | |
| 39 | J | Squire, Kurt | | | | | | | | Innovation in times of uncertainty | | | | | | | | ON THE HORIZON | | | | |
| 40 | J | Gupta, Vikas; Jain, Namita | | | | | | | | Harnessing information and communication technologies for effective knowledge creation Shaping the fut | | | | | | | | JOURNAL OF ENTERPRISE INFORMATION MANAGEM | | | | |
| 41 | J | Valtonen, Teemu Sainio; Edlén, Kirsi; Kulkkanen, Jari; Kontkanen, Sini; Lambert, Matthew C.; Mokkala, Sini; K | | | | | | | | TRACK updated to measure pre-service teachers' twenty-first century skills | | | | | | | | AUSTRALASIAN JOURNAL OF EDUCATIONAL TECHNO | | | | |

Conjunto de datos en CSV

Proceso de revisión

- Ya se tiene el conjunto de datos para trabajar con él

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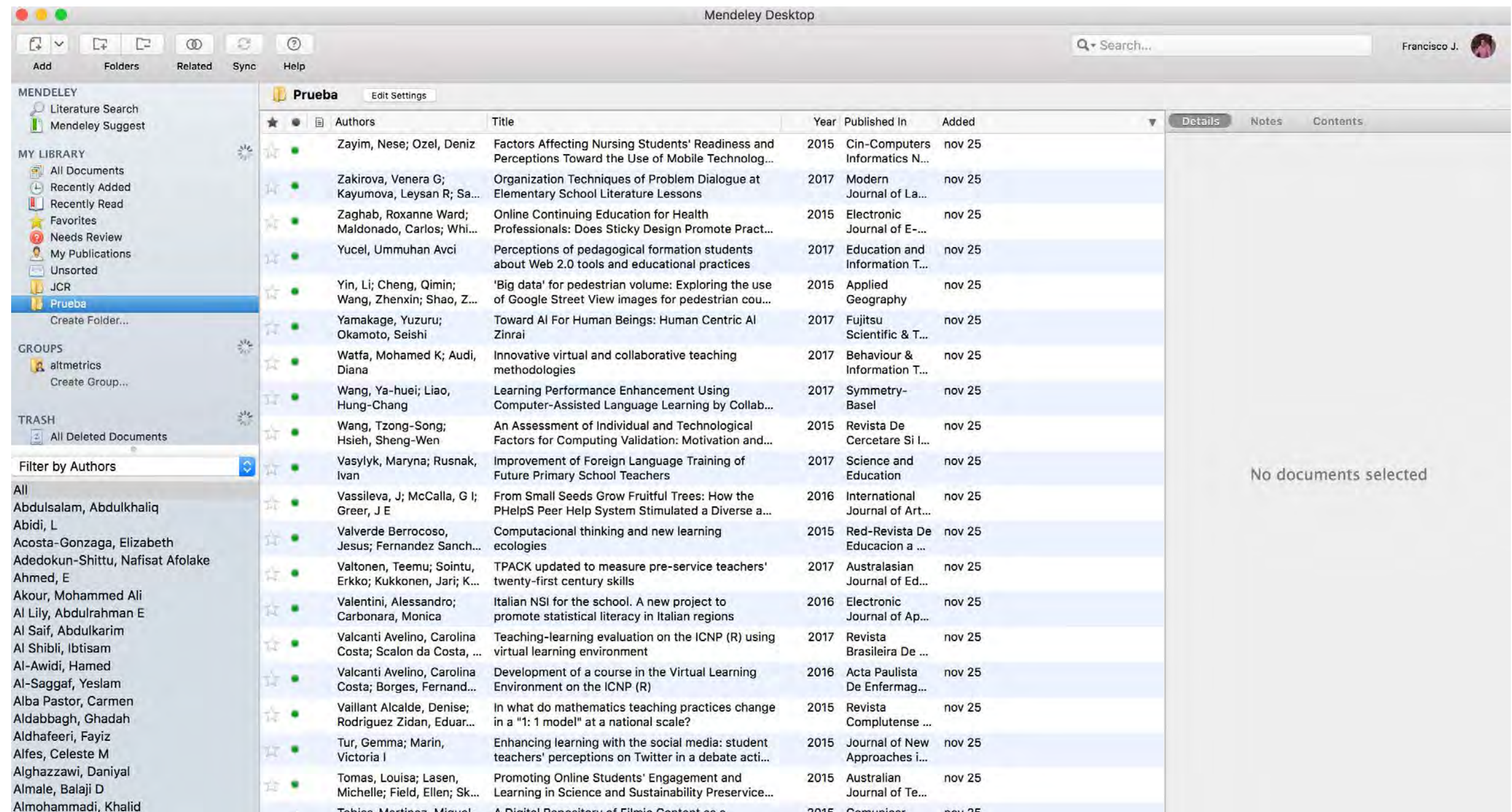
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Conjunto de datos en XML

Proceso de revisión

- Ya se tiene el conjunto de datos para trabajar con él



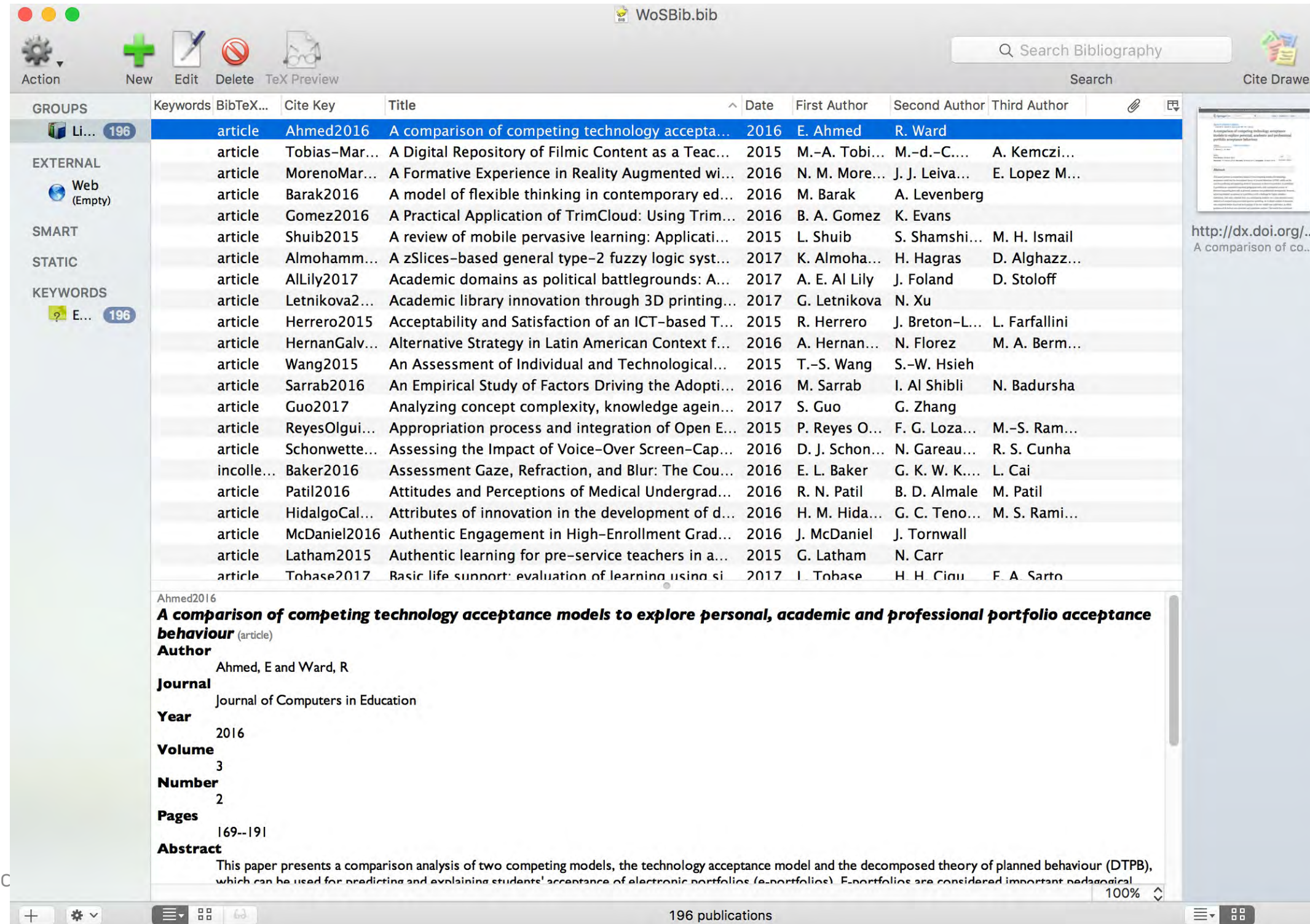
The screenshot shows the Mendeley Desktop interface. On the left, there is a sidebar with sections for 'MENDELEY', 'MY LIBRARY', 'GROUPS', and 'TRASH'. The 'MY LIBRARY' section is expanded to show a folder named 'Prueba'. Below this, there is a 'Filter by Authors' dropdown menu with a list of author names. The main area displays a table of documents with columns for Authors, Title, Year, Published In, and Added. The table contains 20 rows of document entries. On the right side of the interface, there are tabs for 'Details', 'Notes', and 'Contents', and a message that says 'No documents selected'.

| Authors | Title | Year | Published In | Added |
|--|--|------|---------------------------------|--------|
| Zayim, Nese; Ozel, Deniz | Factors Affecting Nursing Students' Readiness and Perceptions Toward the Use of Mobile Technolog... | 2015 | Cin-Computers Informatics N... | nov 25 |
| Zakirova, Venera G; Kayumova, Leysan R; Sa... | Organization Techniques of Problem Dialogue at Elementary School Literature Lessons | 2017 | Modern Journal of La... | nov 25 |
| Zaghab, Roxanne Ward; Maldonado, Carlos; Whi... | Online Continuing Education for Health Professionals: Does Sticky Design Promote Pract... | 2015 | Electronic Journal of E-... | nov 25 |
| Yucel, Ummuhan Avci | Perceptions of pedagogical formation students about Web 2.0 tools and educational practices | 2017 | Education and Information T... | nov 25 |
| Yin, Li; Cheng, Qimin; Wang, Zhenxin; Shao, Z... | 'Big data' for pedestrian volume: Exploring the use of Google Street View images for pedestrian cou... | 2015 | Applied Geography | nov 25 |
| Yamakage, Yuzuru; Okamoto, Seishi | Toward AI For Human Beings: Human Centric AI Zinrai | 2017 | Fujitsu Scientific & T... | nov 25 |
| Watfa, Mohamed K; Audi, Diana | Innovative virtual and collaborative teaching methodologies | 2017 | Behaviour & Information T... | nov 25 |
| Wang, Ya-huei; Liao, Hung-Chang | Learning Performance Enhancement Using Computer-Assisted Language Learning by Collab... | 2017 | Symmetry-Basel | nov 25 |
| Wang, Tzong-Song; Hsieh, Sheng-Wen | An Assessment of Individual and Technological Factors for Computing Validation: Motivation and... | 2015 | Revista De Cercetare Si I... | nov 25 |
| Vasylyk, Maryna; Rusnak, Ivan | Improvement of Foreign Language Training of Future Primary School Teachers | 2017 | Science and Education | nov 25 |
| Vassileva, J; McCalla, G I; Greer, J E | From Small Seeds Grow Fruitful Trees: How the PHelpS Peer Help System Stimulated a Diverse a... | 2016 | International Journal of Art... | nov 25 |
| Valverde Berrocoso, Jesus; Fernandez Sanch... | Computacional thinking and new learning ecologies | 2015 | Red-Revista De Educacion a ... | nov 25 |
| Valtonen, Teemu; Sointu, Erkko; Kukkonen, Jari; K... | TPACK updated to measure pre-service teachers' twenty-first century skills | 2017 | Australasian Journal of Ed... | nov 25 |
| Valentini, Alessandro; Carbonara, Monica | Italian NSI for the school. A new project to promote statistical literacy in Italian regions | 2016 | Electronic Journal of Ap... | nov 25 |
| Valcanti Avelino, Carolina Costa; Scalon da Costa, ... | Teaching-learning evaluation on the ICNP (R) using virtual learning environment | 2017 | Revista Brasileira De ... | nov 25 |
| Valcanti Avelino, Carolina Costa; Borges, Fernand... | Development of a course in the Virtual Learning Environment on the ICNP (R) | 2016 | Acta Paulista De Enfermag... | nov 25 |
| Vaillant Alcalde, Denise; Rodriguez Zidan, Eduar... | In what do mathematics teaching practices change in a "1: 1 model" at a national scale? | 2015 | Revista Complutense ... | nov 25 |
| Tur, Gemma; Marin, Victoria I | Enhancing learning with the social media: student teachers' perceptions on Twitter in a debate acti... | 2015 | Journal of New Approaches i... | nov 25 |
| Tomas, Louisa; Lasen, Michelle; Field, Ellen; Sk... | Promoting Online Students' Engagement and Learning in Science and Sustainability Preservice... | 2015 | Australian Journal of Te... | nov 25 |
| Thies-Martinez, Miguel | A Digital Repository of Filmic Content as a | 2015 | Comunicar | nov 25 |

Conjunto de datos en Mendely

Proceso de revisión

- Ya se tiene el conjunto de datos para trabajar con él



The screenshot shows the WoSbib application window with a list of 196 publications. The selected entry is:

| GROUPS | Keywords | BibTeX... | Cite Key | Title | Date | First Author | Second Author | Third Author |
|-----------|----------|-----------|-----------|---|------|--------------|---------------|--------------|
| Li... 196 | article | Ahmed2016 | Ahmed2016 | A comparison of competing technology accepta... | 2016 | E. Ahmed | R. Ward | |

The detailed view of the selected article shows the following information:

- Author:** Ahmed, E and Ward, R
- Journal:** Journal of Computers in Education
- Year:** 2016
- Volume:** 3
- Number:** 2
- Pages:** 169--191
- Abstract:** This paper presents a comparison analysis of two competing models, the technology acceptance model and the decomposed theory of planned behaviour (DTPB), which can be used for predicting and explaining students' acceptance of electronic portfolios (e-portfolios). E-portfolios are considered important pedagogical...

Conjunto de datos en BibTeX

Proceso de revisión

- Se guarda la ecuación de búsqueda en WoS

fgarcia04 / [Desarrollo y uso de la tecnología en educación](#) Review settings

Review Planning **Conducting** Reporting

1. Search 2. Import Studies 3. Study Selection 4. Quality Assessment 5. Data Extraction 6. Data Analysis

Search Strings ?

i Add digital source-specific search strings. Use this space to save all search string formats used during the research.

Base String ISI Web of Science Scopus

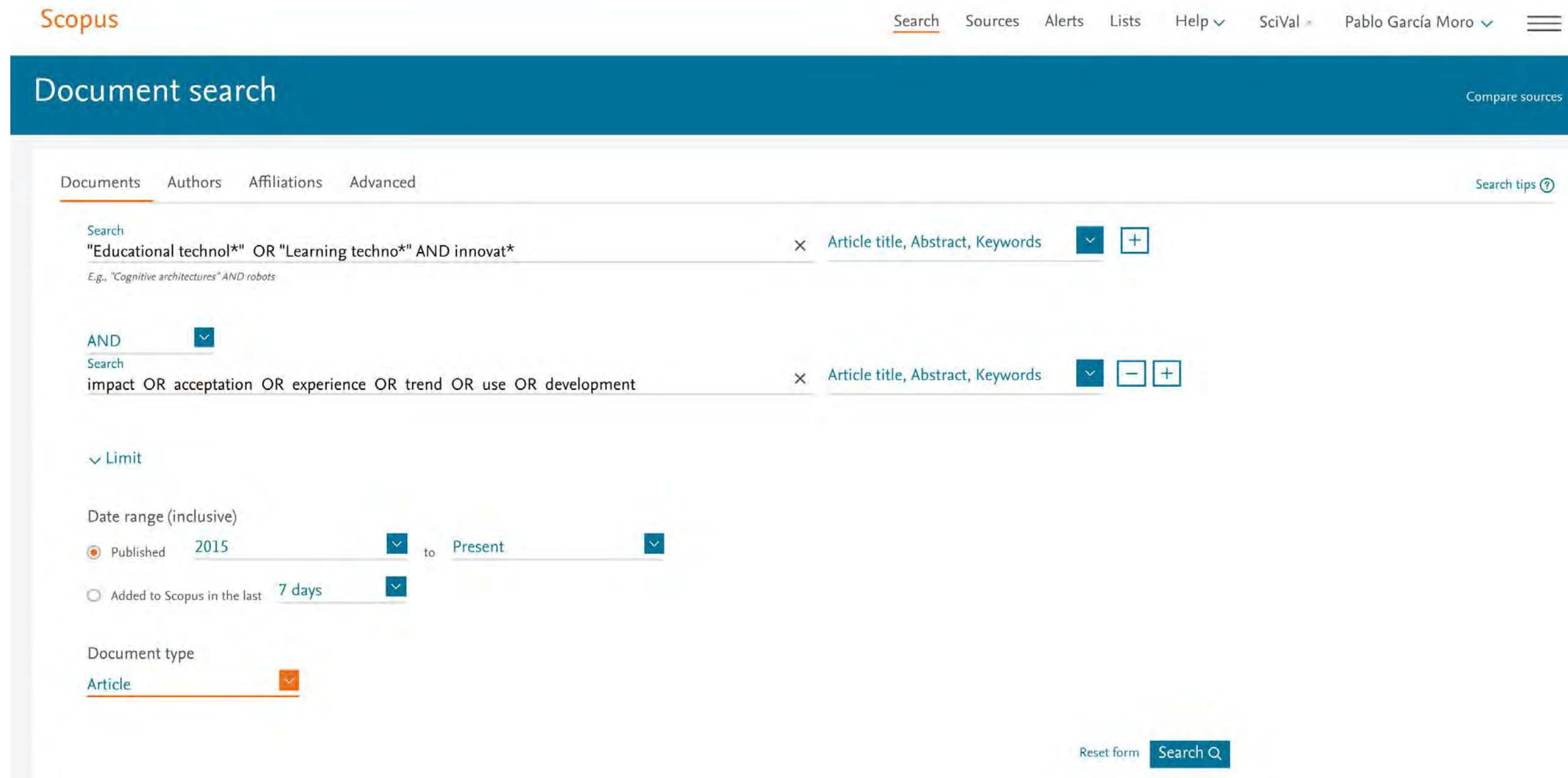
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 Período de tiempo: 2015-2017.
 Idioma de búsqueda=Auto

Save Import Base String Remove ISI Web of Science

+ Add source-specific search string

Proceso de revisión

- Se hace la búsqueda en Scopus



Scopus [Search](#) [Sources](#) [Alerts](#) [Lists](#) [Help](#) [SciVal](#) [Pablo García Moro](#) [Compare sources](#)

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[Documents](#) [Authors](#) [Affiliations](#) [Advanced](#) [Search tips](#)

Search
 "Educational technol*" OR "Learning techno*" AND innovat* × [Article title, Abstract, Keywords](#) [-](#) [+](#)
E.g., "Cognitive architectures" AND robots

AND [-](#) [+](#)
 Search
 impact OR acceptance OR experience OR trend OR use OR development × [Article title, Abstract, Keywords](#) [-](#) [+](#)

Limit

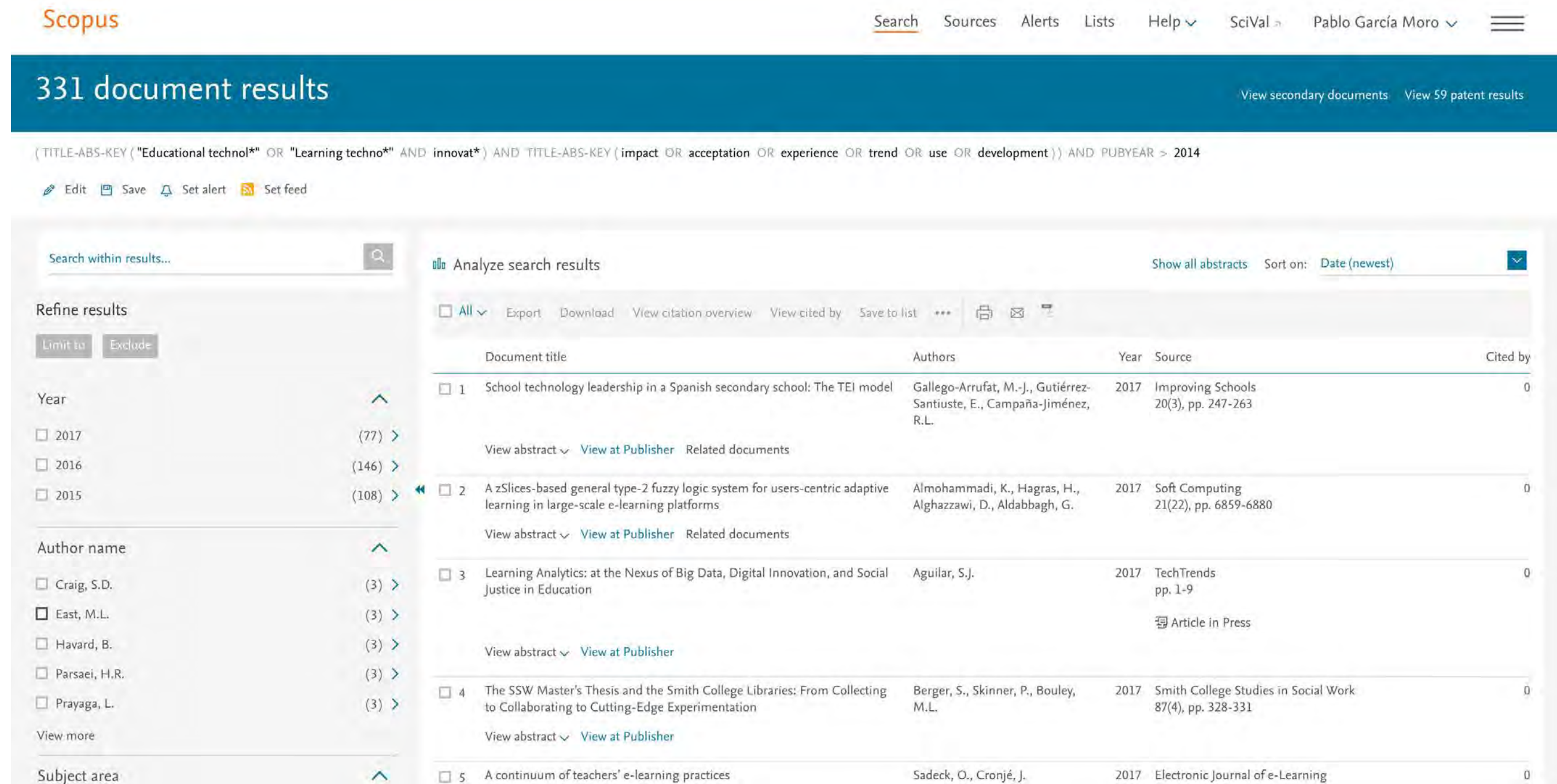
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 Added to Scopus in the last [7 days](#) [-](#) [+](#)

Document type
[Article](#) [-](#) [+](#)

[Reset form](#) [Search](#)

Proceso de revisión

- Se hace la búsqueda en Scopus



Scopus Search Sources Alerts Lists Help ▾ SciVal ▸ Pablo García Moro ▾ ☰

331 document results [View secondary documents](#) [View 59 patent results](#)

(TITLE-ABS-KEY ("Educational technol*" OR "Learning techno*" AND innovat*) AND TITLE-ABS-KEY (impact OR acceptance OR experience OR trend OR use OR development)) AND PUBYEAR > 2014

Edit Save Set alert Set feed

Search within results... Analyze search results Show all abstracts Sort on: Date (newest)

| | Document title | Authors | Year | Source | Cited by |
|---------------------------------------|---|--|------|---|----------|
| <input type="checkbox"/> 1 | School technology leadership in a Spanish secondary school: The TEI model | Gallego-Arrufat, M.-J., Gutiérrez-Santiuste, E., Campaña-Jiménez, R.L. | 2017 | Improving Schools 20(3), pp. 247-263 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input checked="" type="checkbox"/> 2 | A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e-learning platforms | Almohammadi, K., Hagra, H., Alghazzawi, D., Aldabbagh, G. | 2017 | Soft Computing 21(22), pp. 6859-6880 | 0 |
| | View abstract View at Publisher Related documents | | | | |
| <input type="checkbox"/> 3 | Learning Analytics: at the Nexus of Big Data, Digital Innovation, and Social Justice in Education | Aguilar, S.J. | 2017 | TechTrends pp. 1-9 | 0 |
| | View abstract View at Publisher | | | | |
| <input type="checkbox"/> 4 | The SSW Master's Thesis and the Smith College Libraries: From Collecting to Collaborating to Cutting-Edge Experimentation | Berger, S., Skinner, P., Bouley, M.L. | 2017 | Smith College Studies in Social Work 87(4), pp. 328-331 | 0 |
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| <input type="checkbox"/> 5 | A continuum of teachers' e-learning practices | Sadeck, O., Cronjé, J. | 2017 | Electronic Journal of e-Learning | 0 |

Refine results Limit to Exclude

Year

- 2017 (77) >
- 2016 (146) >
- 2015 (108) >

Author name

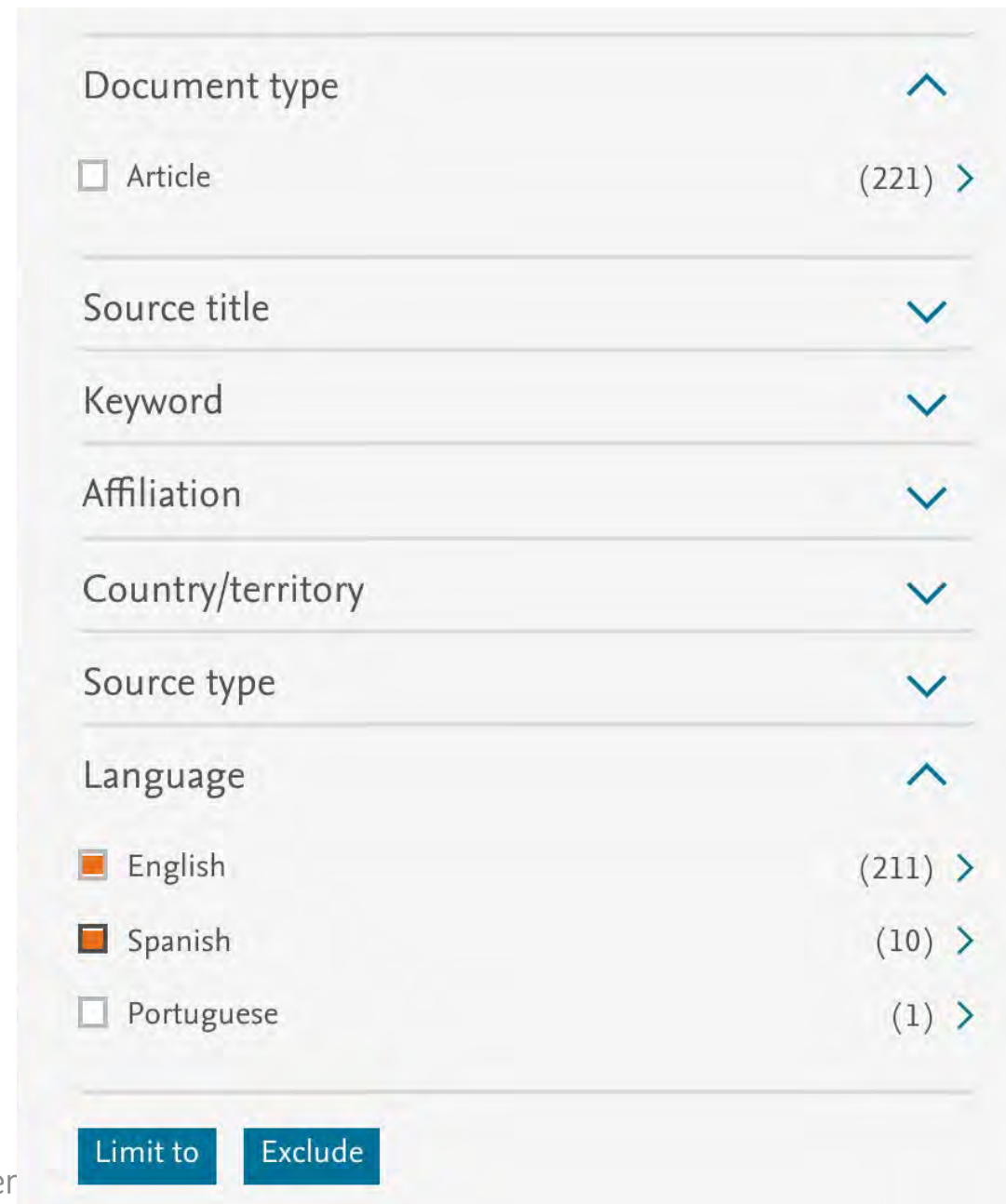
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- Parsaei, H.R. (3) >
- Prayaga, L. (3) >

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Subject area

Proceso de revisión

- Se van haciendo los refinamientos oportunos hasta haber incluido las diferentes restricciones y tener el conjunto de datos con el que se va a trabajar



Document type ^

- Article (221) >

Source title v

Keyword v

Affiliation v

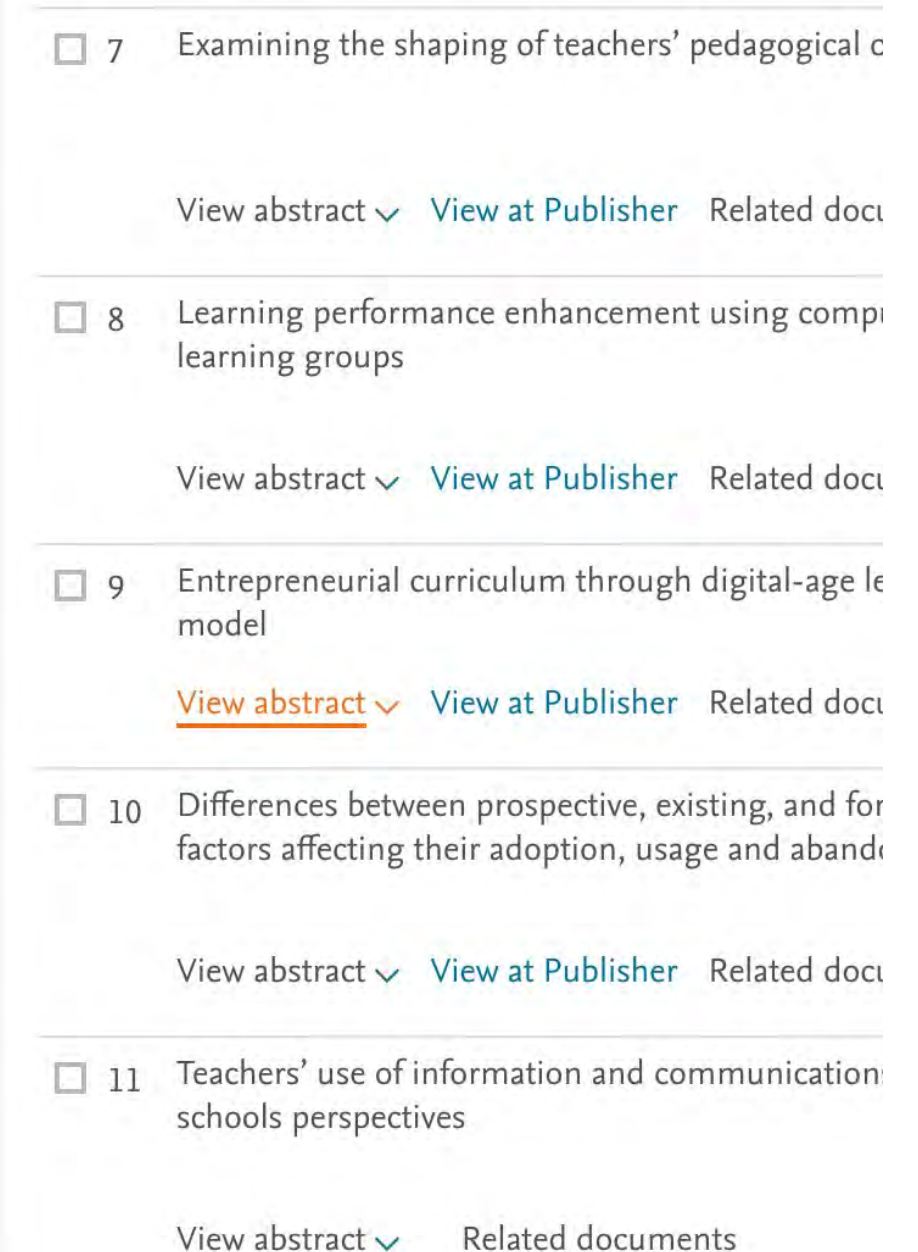
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Language ^

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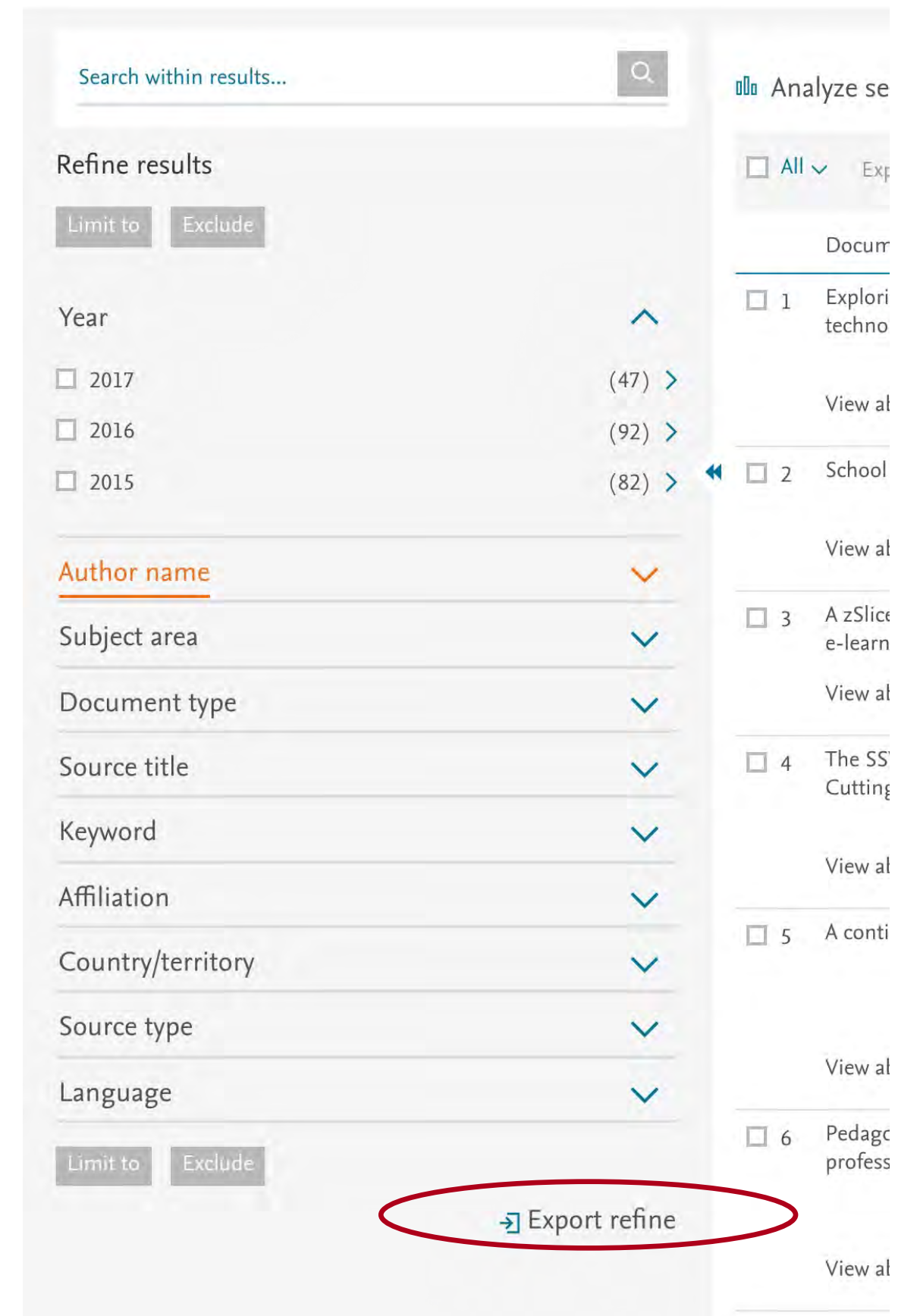
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- 7 Examining the shaping of teachers' pedagogical c
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- 8 Learning performance enhancement using compi
learning groups
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- 9 Entrepreneurial curriculum through digital-age le
model
[View abstract](#) v [View at Publisher](#) Related doc
- 10 Differences between prospective, existing, and for
factors affecting their adoption, usage and aband
View abstract v [View at Publisher](#) Related doc
- 11 Teachers' use of information and communication
schools perspectives
View abstract v Related documents

Proceso de revisión

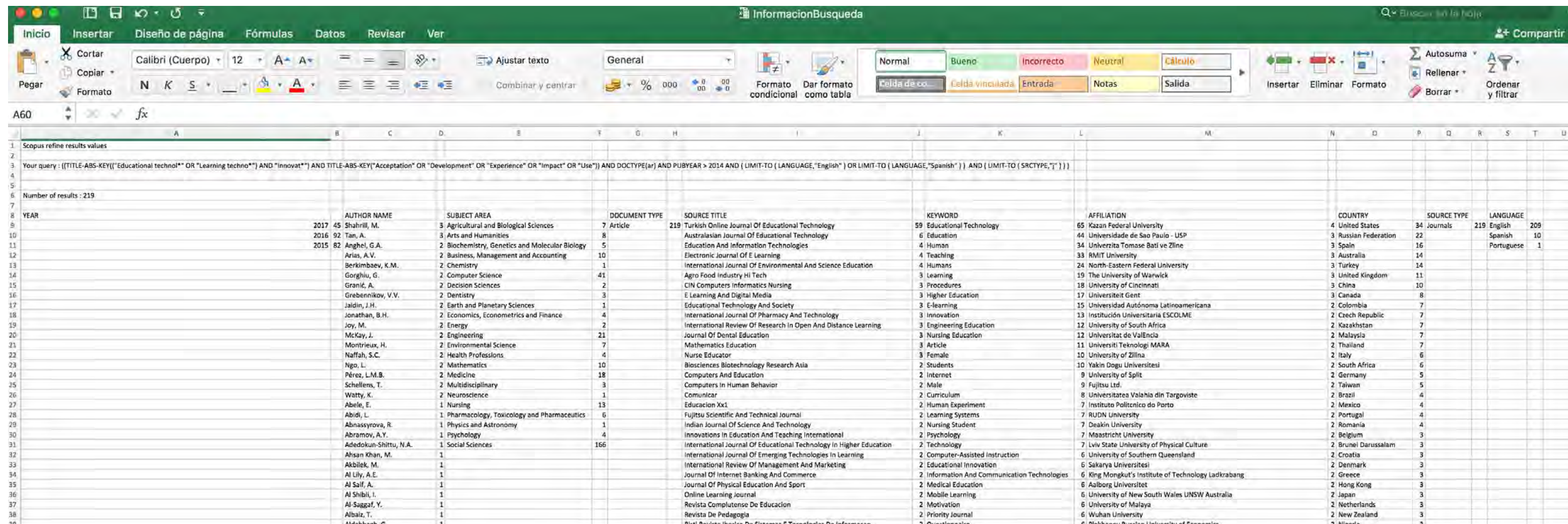
- Una vez se tiene el conjunto de datos, se puede obtener información general del conjunto de datos seleccionado en un fichero CSV



The screenshot shows a search interface with a 'Refine results' sidebar on the left and a list of search results on the right. The sidebar includes a search bar, 'Limit to' and 'Exclude' buttons, and several filter categories: Year (2017: 47, 2016: 92, 2015: 82), Author name, Subject area, Document type, Source title, Keyword, Affiliation, Country/territory, Source type, and Language. Each filter has a dropdown arrow. At the bottom of the sidebar, there are 'Limit to' and 'Exclude' buttons, and a red circle highlights the 'Export refine' button. The right sidebar shows a list of search results with checkboxes and document titles.

Proceso de revisión

- Una vez se tiene el conjunto de datos, se puede obtener información general del conjunto de datos seleccionado en un fichero CSV



| YEAR | AUTHOR NAME | SUBJECT AREA | DOCUMENT TYPE | SOURCE TITLE | KEYWORD | AFFILIATION | COUNTRY | SOURCE TYPE | LANGUAGE |
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| 2017 | 45 Shahrii, M. | 3 Agricultural and Biological Sciences | 7 Article | 219 Turkish Online Journal Of Educational Technology | 59 Educational Technology | 65 Kazan Federal University | 4 United States | 34 Journals | 219 English |
| 2016 | 92 Tan, A. | 3 Arts and Humanities | 8 | Australasian Journal Of Educational Technology | 6 Education | 44 Universidade de Sao Paulo - USP | 3 Russian Federation | 22 | Spanish |
| 2015 | 82 Anghel, G.A. | 2 Biochemistry, Genetics and Molecular Biology | 5 | Education And Information Technologies | 4 Human | 34 Universita Tomase Bati ve Zline | 3 Spain | 16 | Portuguese |
| | Arias, A.V. | 2 Business, Management and Accounting | 10 | Electronic Journal Of E Learning | 4 Teaching | 33 RMIT University | 3 Australia | 14 | |
| | Berkimbaev, K.M. | 2 Chemistry | 1 | International Journal Of Environmental And Science Education | 4 Humans | 24 North-Eastern Federal University | 3 Turkey | 14 | |
| | Gorghiu, G. | 2 Computer Science | 41 | Agro Food Industry Hi Tech | 3 Learning | 19 The University of Warwick | 3 United Kingdom | 11 | |
| | Granic, A. | 2 Decision Sciences | 2 | CIN Computers Informatics Nursing | 3 Procedures | 18 University of Cincinnati | 3 China | 10 | |
| | Grebennikov, V.V. | 2 Dentistry | 3 | E Learning And Digital Media | 3 Higher Education | 17 Universiteit Gent | 3 Canada | 8 | |
| | Jaldin, J.H. | 2 Earth and Planetary Sciences | 1 | Educational Technology And Society | 3 E-learning | 15 Universidad Autónoma Latinoamericana | 2 Colombia | 7 | |
| | Jonathan, B.H. | 2 Economics, Econometrics and Finance | 4 | International Journal Of Pharmacy And Technology | 3 Innovation | 13 Institución Universitaria ESCOLME | 2 Czech Republic | 7 | |
| | Joy, M. | 2 Energy | 2 | International Review Of Research In Open And Distance Learning | 3 Engineering Education | 12 University of South Africa | 2 Kazakhstan | 7 | |
| | McKay, J. | 2 Engineering | 21 | Journal Of Dental Education | 3 Nursing Education | 12 Universitat de València | 2 Malaysia | 7 | |
| | Montrieux, H. | 2 Environmental Science | 7 | Mathematics Education | 3 Article | 11 Universiti Teknologi MARA | 2 Thailand | 7 | |
| | Naffah, S.C. | 2 Health Professions | 4 | Nurse Educator | 3 Female | 10 University of Zilina | 2 Italy | 6 | |
| | Ngo, L. | 2 Mathematics | 10 | Biosciences Biotechnology Research Asia | 2 Students | 10 Yakin Dogu Universitesi | 2 South Africa | 6 | |
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| | Schellens, T. | 2 Multidisciplinary | 3 | Computers In Human Behavior | 2 Male | 9 Fujitsu Ltd. | 2 Taiwan | 5 | |
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| | Abele, E. | 1 Nursing | 13 | Educacion Xx1 | 2 Human Experiment | 7 Instituto Politecnico do Porto | 2 Mexico | 4 | |
| | Abidi, L. | 1 Pharmacology, Toxicology and Pharmaceutics | 6 | Fujitsu Scientific And Technical Journal | 2 Learning Systems | 7 RUDN University | 2 Portugal | 4 | |
| | Abnassyrova, R. | 1 Physics and Astronomy | 1 | Indian Journal Of Science And Technology | 2 Nursing Student | 7 Deakin University | 2 Romania | 4 | |
| | Abramov, A.Y. | 1 Psychology | 4 | Innovations In Education And Teaching International | 2 Psychology | 7 Maastricht University | 2 Belgium | 3 | |
| | Adedokun-Shittu, N.A. | 1 Social Sciences | 166 | International Journal Of Educational Technology In Higher Education | 2 Technology | 7 Lviv State University of Physical Culture | 2 Brunei Darussalam | 3 | |
| | Ahsan Khan, M. | 1 | 1 | International Journal Of Emerging Technologies In Learning | 2 Computer-Assisted Instruction | 6 University of Southern Queensland | 2 Croatia | 3 | |
| | Akbilek, M. | 1 | 1 | International Review Of Management And Marketing | 2 Information Innovation | 6 Sakarya Universitesi | 2 Denmark | 3 | |
| | Al Lily, A.E. | 1 | 1 | Journal Of Internet Banking And Commerce | 2 Information And Communication Technologies | 6 King Mongkut's Institute of Technology Ladkrabang | 2 Greece | 3 | |
| | Al Saif, A. | 1 | 1 | Journal Of Physical Education And Sport | 2 Medical Education | 6 Aalborg Universitet | 2 Hong Kong | 3 | |
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| 4 | The SSW Master's Thesis and the Smith College Libraries: From Collecting to Collaborating to Cutting-Edge Experimentation | Berger, S., Skinner, P., Bouley, M.L. | 2017 | Smith College Studies in Social Work 87(4), pp. 328-331 | 0 |
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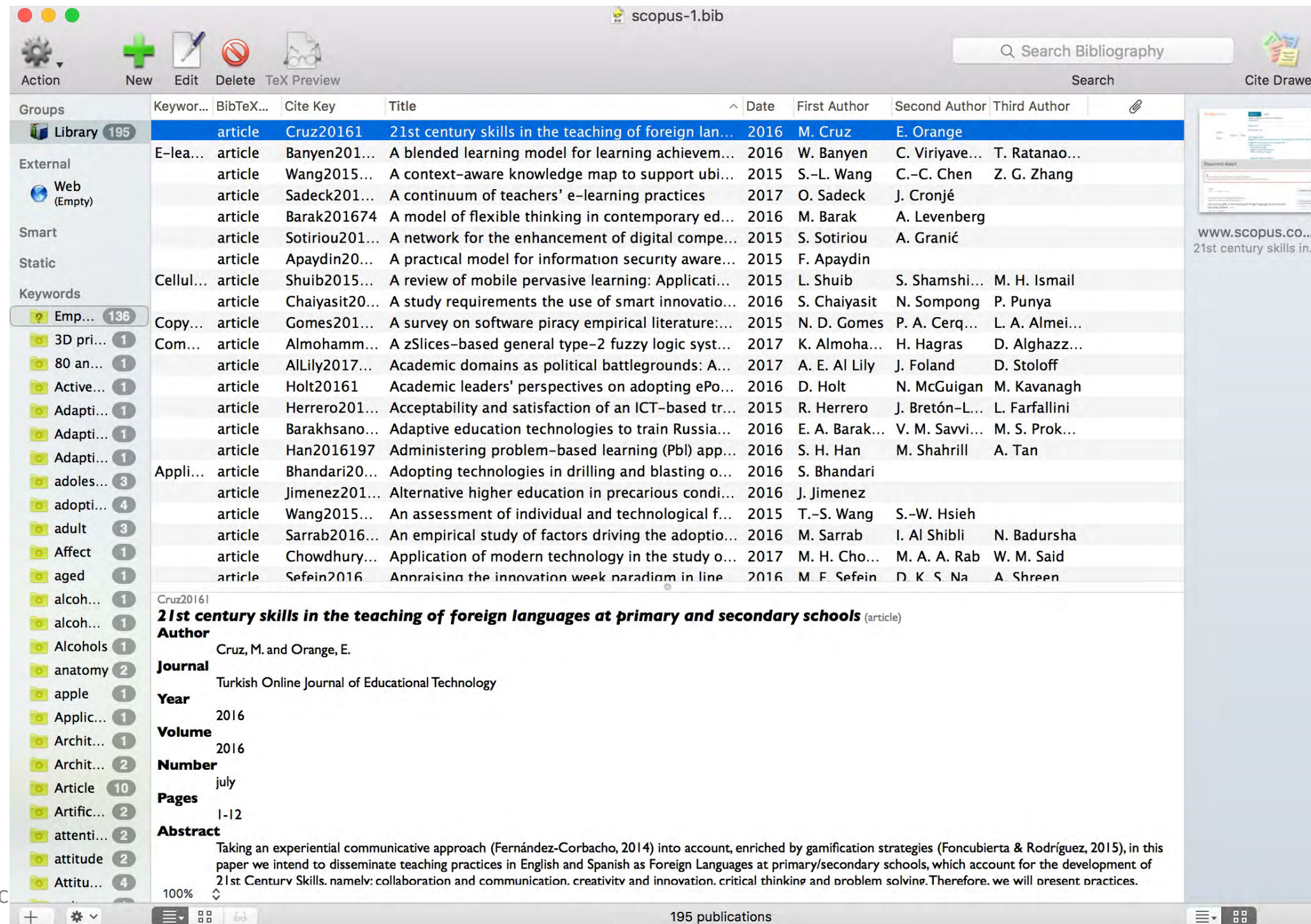
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| | Authors | Title | Year | Source title | Volume | Issue | Art. No. | Page start | Page end | Page count | Cited by | DOI |
| 1 | El Alfí S., Gómez J.M., Ivanov D. | Exploring instructors' technology readiness, attitudes and behavioral intentions towards e-learning | 2017 | Education and Information Technologies | 22 | | 5 | 2605 | 2627 | | | 10.1007 |
| 2 | Gallego-Arrufat M.-J., Gutiérrez-Santiuste E., Campaña-Jiménez R.L. | School technology leadership in a Spanish secondary school: The TEI model | 2017 | Improving Schools | 20 | | 3 | 247 | 263 | | | 10.1177 |
| 3 | Almohammadi K., Hagras H., Alghazzawi D., Aldabbagh G. | A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e | 2017 | Soft Computing | 21 | | 22 | 6859 | 6880 | | | 10.1007 |
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| 5 | Sadeck D., Cronjé J. | A continuum of teachers' e-learning practices | 2017 | Electronic Journal of e-Learning | 15 | | 5 | 395 | 408 | | | |
| 6 | Myroslava D., Olha R., Iryna H., Victoria I. | Pedagogical conditions of introduction of innovative educational technologies into the professional | 2017 | Journal of Physical Education and Sport | 17 | | 3 | 171 | 1113 | 1119 | | 10.7752 |
| 7 | Prestridge S. | Examining the shaping of teachers' pedagogical orientation for the use of technology | 2017 | Technology, Pedagogy and Education | 26 | | 4 | 367 | 381 | | 1 | 10.1080 |
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| 10 | Šumak B., Pušnik M., Heričko M., Šorgo A. | Differences between prospective, existing, and former users of interactive whiteboards on externa | 2017 | Computers in Human Behavior | 72 | | | 733 | 756 | | | 10.1016 |
| 11 | Haji S.A. | Teachers' use of information and communications technology in education: Cameroon secondary s | 2017 | Turkish Online Journal of Educational Technology | 16 | | 3 | 146 | 152 | | | |
| 12 | Avcı Yücel Ü. | Perceptions of pedagogical formation students about Web 2.0 tools and educational practices | 2017 | Education and Information Technologies | 22 | | 4 | 1571 | 1585 | | | 10.1007 |
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| 33 | Clark A., Glazer G., Edwards C., Pryse Y. | Transforming nursing education with apple technology | 2017 | Nurse Educator | 42 | | 2 | 91 | 94 | | | 10.1097 |
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| 35 | Kowitlakul Y., Chan M.F., Tan S.S.L., Soong A.S.K., Chan S.W.C. | Development of an e-Learning research module using multimedia instruction approach | 2017 | CIN - Computers Informatics Nursing | 35 | | 3 | 158 | 166 | | | 10.1097 |
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The detailed view of the selected article shows the following information:

- Title:** 21st century skills in the teaching of foreign languages at primary and secondary schools (article)
- Author:** Cruz, M. and Orange, E.
- Journal:** Turkish Online Journal of Educational Technology
- Year:** 2016
- Volume:** 2016
- Number:** july
- Pages:** 1-12
- Abstract:** Taking an experiential communicative approach (Fernández-Corbacho, 2014) into account, enriched by gamification strategies (Foncubierta & Rodríguez, 2015), in this paper we intend to disseminate teaching practices in English and Spanish as Foreign Languages at primary/secondary schools, which account for the development of 21st Century Skills. namely: collaboration and communication. creativty and innovation. critical thinking and problem solving. Therefore, we will present practices.

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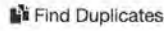

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Title

A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e-learning platforms

Abstract

uncertainty could affect these views, including how accurately the proposed adaptive educational methods actually assess student responses and the corresponding uncertainties associated with how students receive and comprehend the resulting instruction. E-learning environments contain high levels of linguistic uncertainties, whereby students can interpret and act on the same terms, words, or methods (e.g., course difficulty, length of study time, or preferred learning style) in various ways according to varying levels of motivation, pre-knowledge, cognition, and future plans. Thus, one adaptive instructional model does not fit the needs of all students. Being the instructional model on determining learners' interactions within the learning environment is interpretable and easily read...

Year

2017

Author

Almohammadi, K. and Hagra, H. and Alghazzawi, D. and Aldabbagh, G.

Keywords

Computational linguistics; Computer aided instruction; Computer circuits; Digital storage; Education; Fuzzy logic; Learning systems

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Status Rejected **Selection Criteria** Paper does not present an experience or study with tested resu

Title
The SSW Master's Thesis and the Smith College Libraries: From Collecting to Collaborating to Cutting-Edge Experimentation

Abstract
Smith College is one of a handful of liberal arts colleges to offer a master's degree in social work. The Smith College School for Social Work (SCSSW)'s thesis requirement has had a major impact on the Smith College Libraries over the years, as the library role shifted from simply collecting books and journals in support of SCSSW—and warehousing the SCSSW thesis output—to developing a large array of services and teaching practices in support of the program. This reflection piece will detail the evolution of these services, practices, and support; it will also illustrate several ways the libraries used SCSSW as the proverbial “guinea pig” to test new services,

Year
2017

Author
Berger, S. and Skinner, P. and Bouley, M.L.

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| <input type="checkbox"/> | Berger2017328 | The SSW Master's Thesis and the Smith College Libraries: From Collecting to Collaborating to Cutting-Edge Experimentation | Berger, S. and Skinner, P. and Bouley, M.L. | Smith College Studies in Social Work | 2017 | fgarcia04 | 25 Nov 2017 18:28:07 | Rejected |
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Quality Assessment

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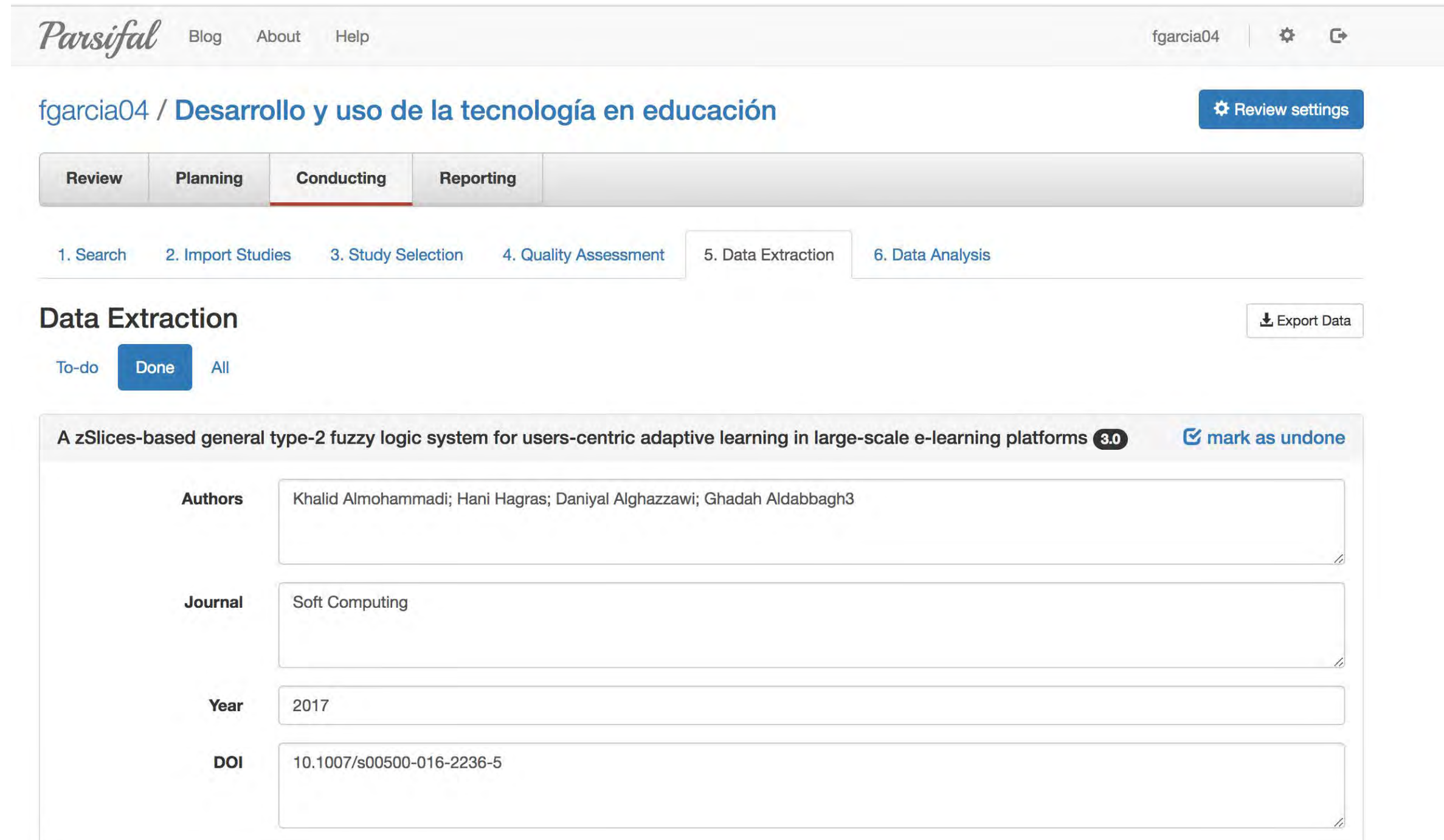
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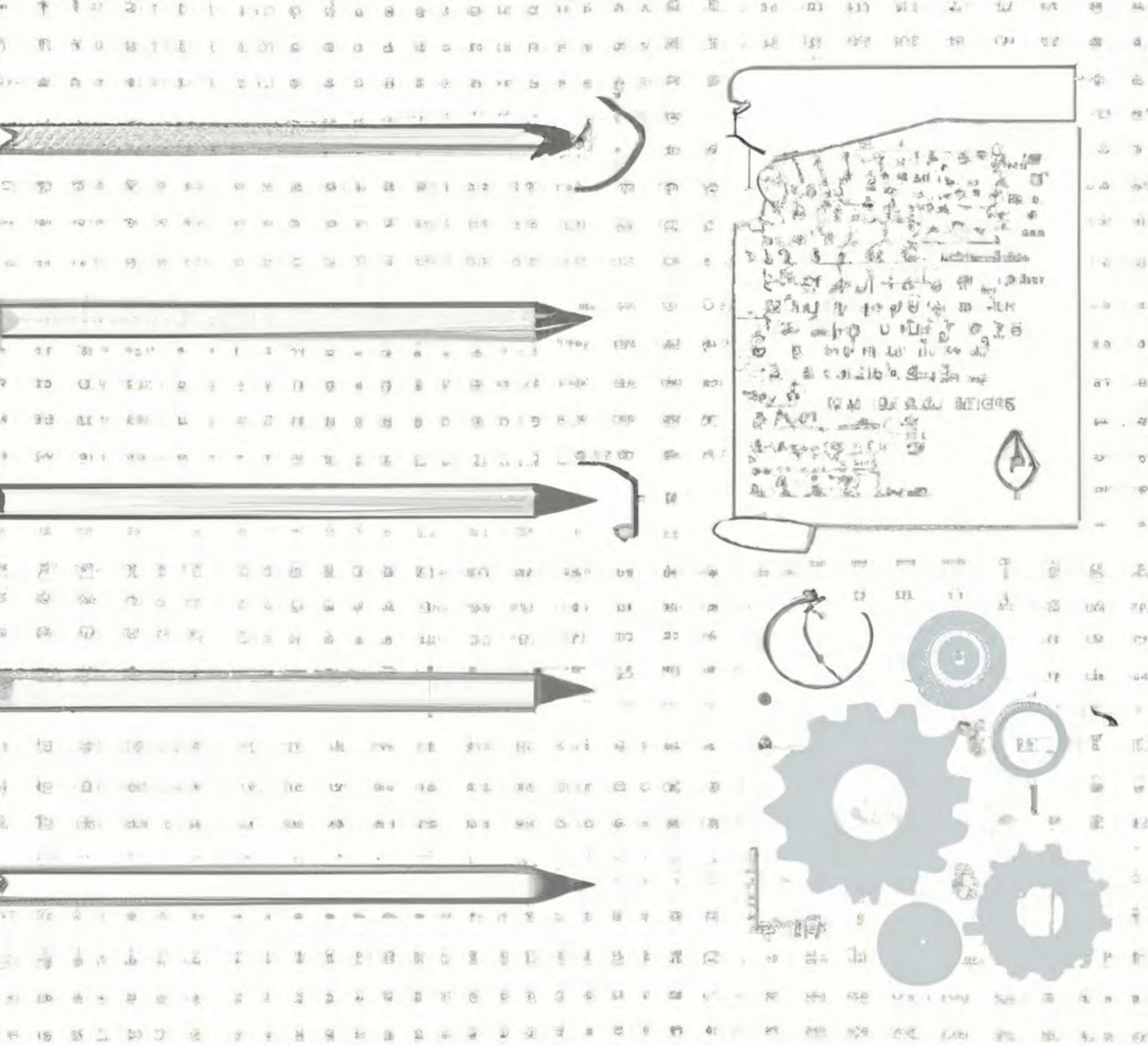
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- Se van rellenando los campos del formulario de extracción de datos



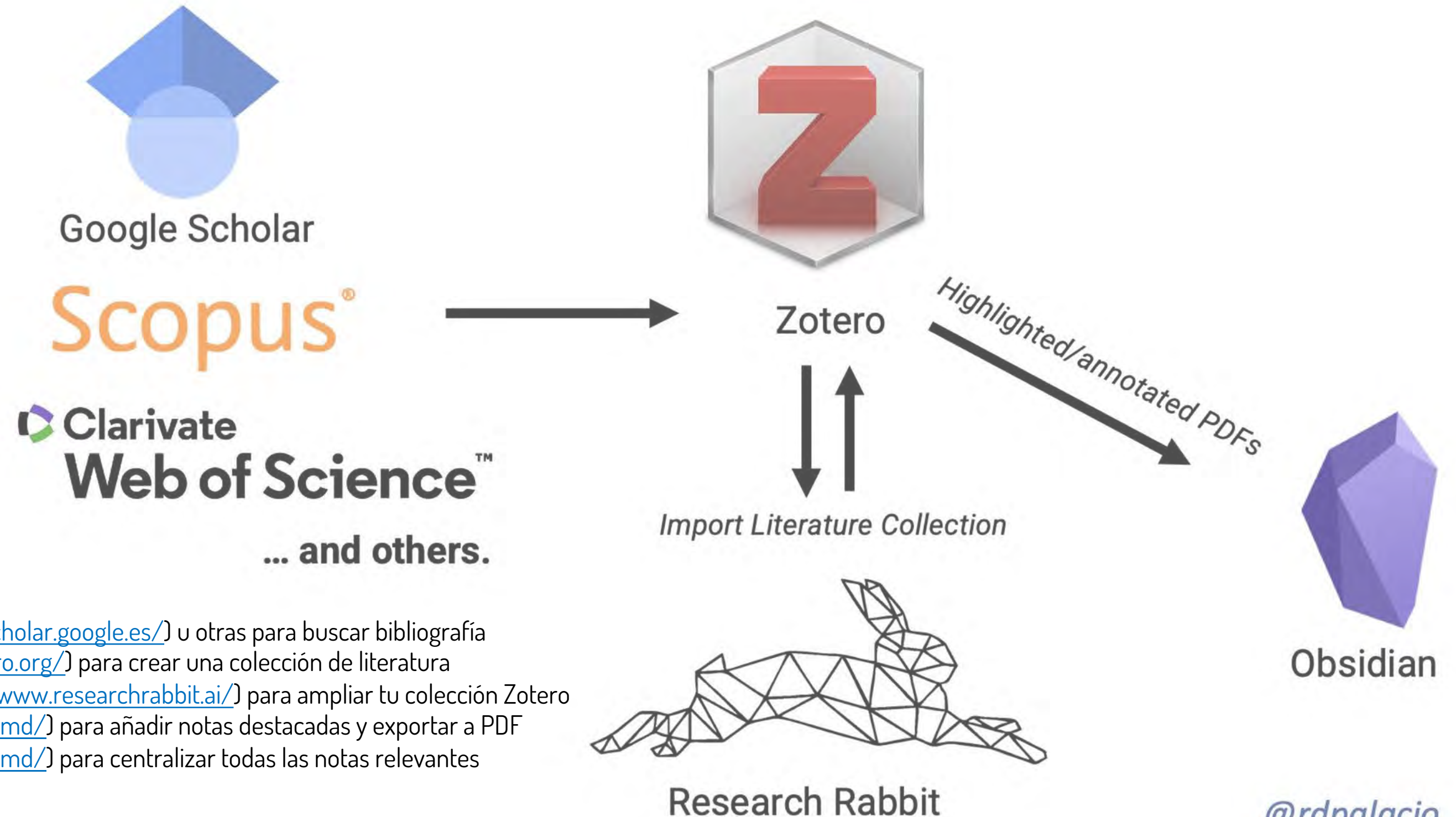
The screenshot shows the Parsifal web interface. At the top, there is a navigation bar with the Parsifal logo, links for 'Blog', 'About', and 'Help', and a user profile 'fgarcia04' with settings and share icons. Below this, the current project is identified as 'fgarcia04 / Desarrollo y uso de la tecnología en educación', with a 'Review settings' button. A progress bar indicates the current step is 'Conducting', with sub-steps 'Review', 'Planning', 'Conducting', and 'Reporting'. A detailed progress bar below shows six steps: '1. Search', '2. Import Studies', '3. Study Selection', '4. Quality Assessment', '5. Data Extraction' (highlighted), and '6. Data Analysis'. The main section is titled 'Data Extraction' and includes an 'Export Data' button. There are filters for 'To-do', 'Done', and 'All', with 'Done' selected. A list of items is shown, with the first item being 'A zSlices-based general type-2 fuzzy logic system for users-centric adaptive learning in large-scale e-learning platforms 3.0', which is marked as 'done'. The form fields for this item are filled with: Authors: Khalid Almohammadi; Hani Hagrass; Daniyal Alghazzawi; Ghadah Aldabbagh3; Journal: Soft Computing; Year: 2017; DOI: 10.1007/s00500-016-2236-5.



8. Colección de flujos de trabajo y herramientas para realizar revisiones de literatura

The Literature Review Workflow

Ruben Dario Palacio, PhD



1. **Google Scholar** (<https://scholar.google.es/>) u otras para buscar bibliografía
2. **Zotero** (<https://www.zotero.org/>) para crear una colección de literatura
3. **Research Rabbit** (<https://www.researchrabbit.ai/>) para ampliar tu colección Zotero
4. **Obsidian** (<https://obsidian.md/>) para añadir notas destacadas y exportar a PDF
5. **Obsidian** (<https://obsidian.md/>) para centralizar todas las notas relevantes

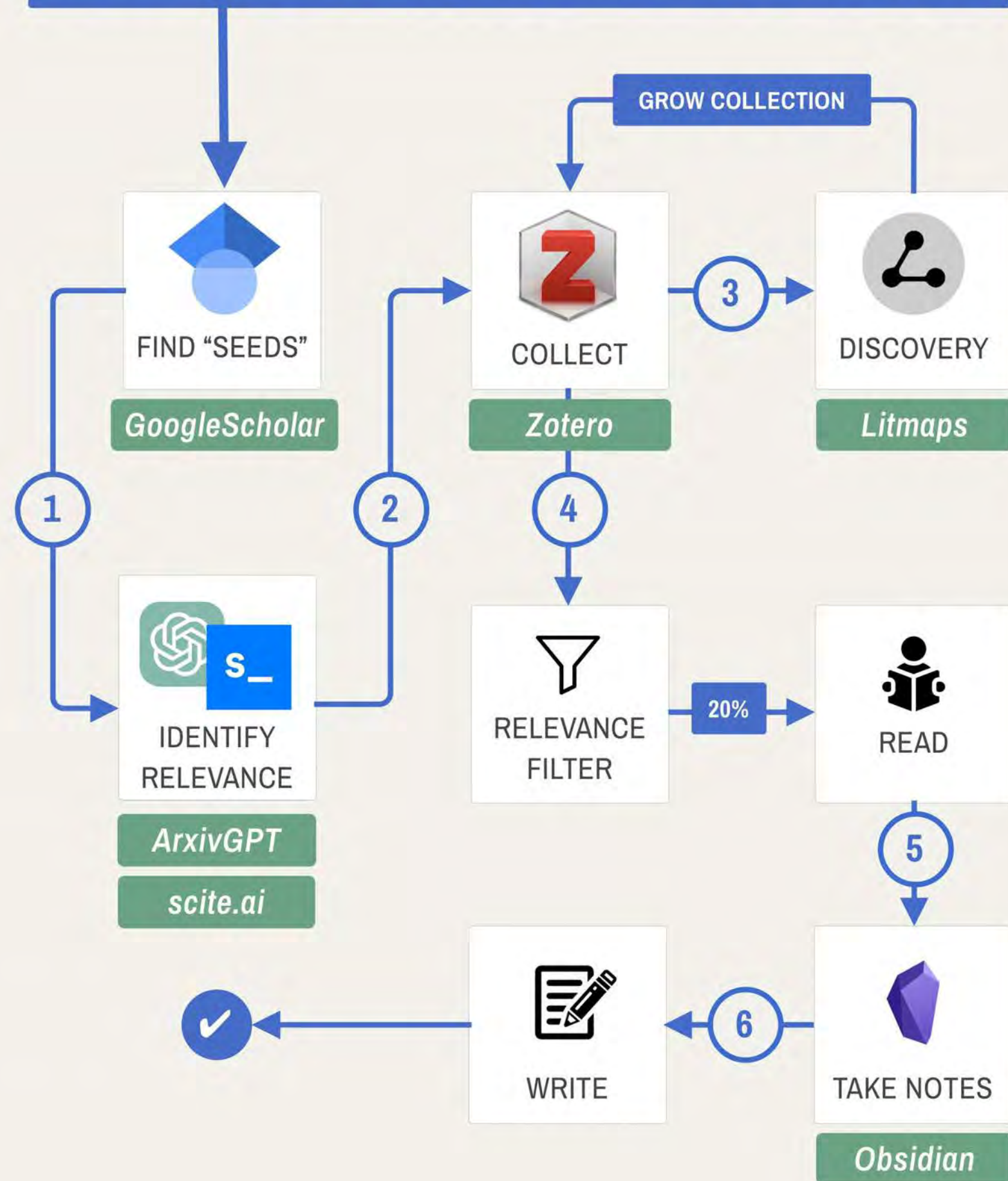
<https://twitter.com/rdpalacio/status/1601640985858957312?s=20>

∞ The Effortless Literature Review



<https://twitter.com/Artifexx/status/1632277025472888833?s=20>

1. **Google Scholar** (<https://scholar.google.es/>) buscar semillas de bibliografía
2. **Scite_** (<https://scite.a>) para filtrar y añadir a **Zotero** (<https://www.zotero.org/>)
3. **Litmaps** para gestionar la colección (<https://www.litmaps.com/>)
4. **Priorizar la colección**
5. **Obsidian** (<https://obsidian.md/>) para tomar notas
6. **Escribir informe**



Automate the Literature Discovery Process

1



COLLECTION



LABS/AUTHORS

2



PUBLICATION
MONITORING

3



LAB/AUTHOR
MONITORING



KEYWORD
MONITORING

GoogleScholar

Litmaps

Visualping



GET NOTIFIED

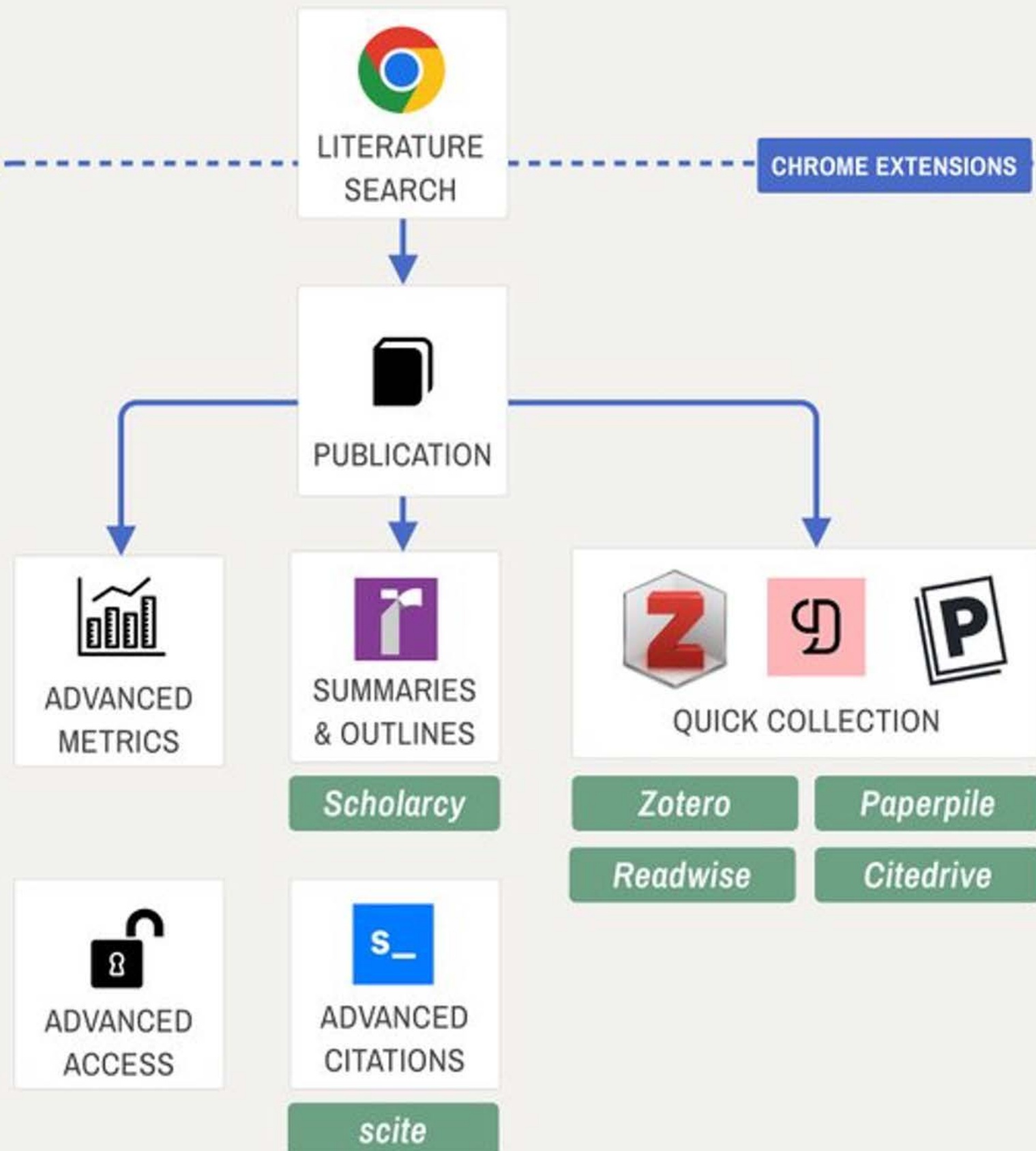
Stay updated on your research.



<https://twitter.com/Artifexx/status/1633748341946458112?s=20>

1. **Google Scholar Alerts** (<https://scholar.google.es/>)
2. **Litmaps** para gestionar la colección (<https://www.litmaps.com/>)
3. **Visualping** (<https://visualping.io>)

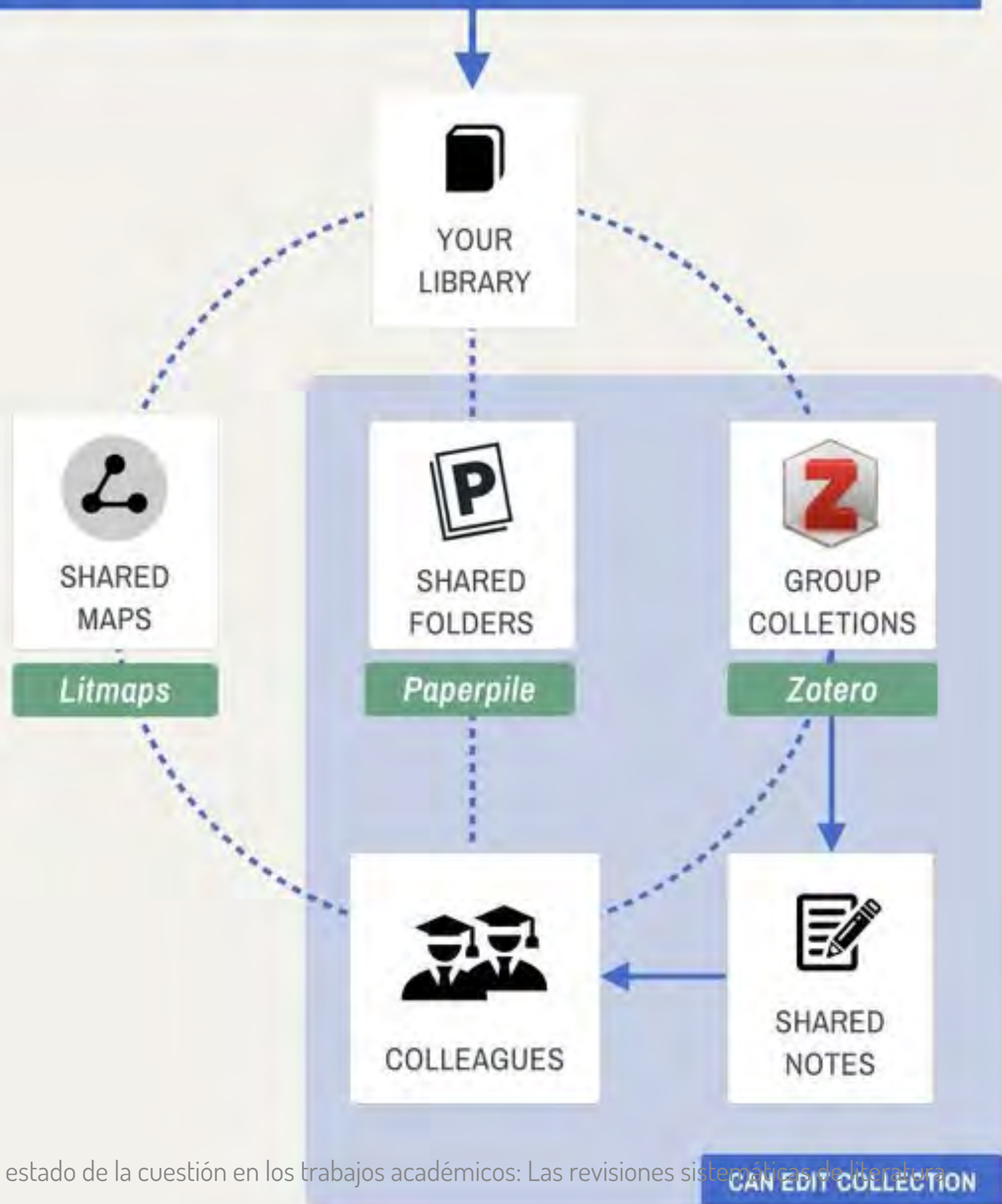
The Literature Review Browser Setup



<https://twitter.com/Artifexx/status/1633330298569072647?s=20>

1. **Scholarcy** (<https://www.scholarcy.com/>) para resumir artículos automáticamente
2. **Scite_** (<https://scite.a>) para analizar la fiabilidad de un artículo en base a sus citas, menciones y contrastes
3. **arXivGPT** (<http://bit.ly/3L9mUTX>) resume automáticamente artículos de arXiv
4. **Zotero** (<https://www.zotero.org/>), **Paperpile** (<https://paperpile.com/>), **CiteDrive** (<https://www.citedrive.com/>) como gestores de bibliografía
5. **Scholar H-Index Calculator for Google Chrome** (<http://bit.ly/3F9sJNe>) para cálculo de métricas sobre **Google Scholar** (<https://scholar.google.es/>)
6. **Readwise** (<https://readwise.io/read>) para guardar documentos de la web e importarlos en **Obsidian** (<https://obsidian.md/>) para añadir notas
7. **Unpaywall** (<https://unpaywall.org/>) acceso a artículos a texto completo cuando hay una versión abierta

Sharing your Literature Review with Colleagues



1. **Zotero** (<https://www.zotero.org/>), **Paperpile** (<https://paperpile.com/>) o **Litmaps** (<https://www.litmaps.com/>) tienen opciones de compartir las colecciones con otros investigadores
2. **Obsidian** (<https://obsidian.md/>) para añadir notas y compartirlas



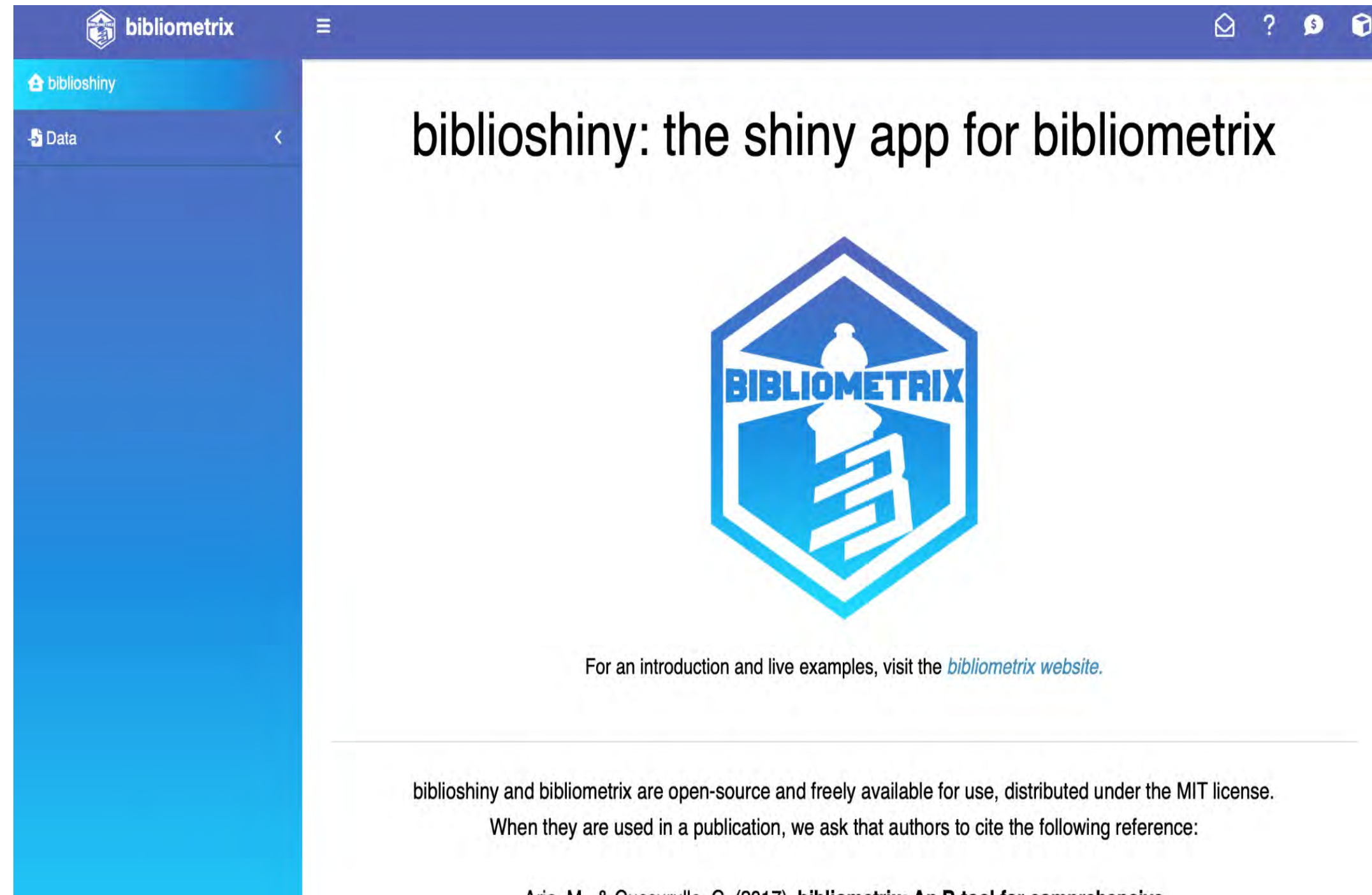
9. Bibliometrix

Bibliometrix

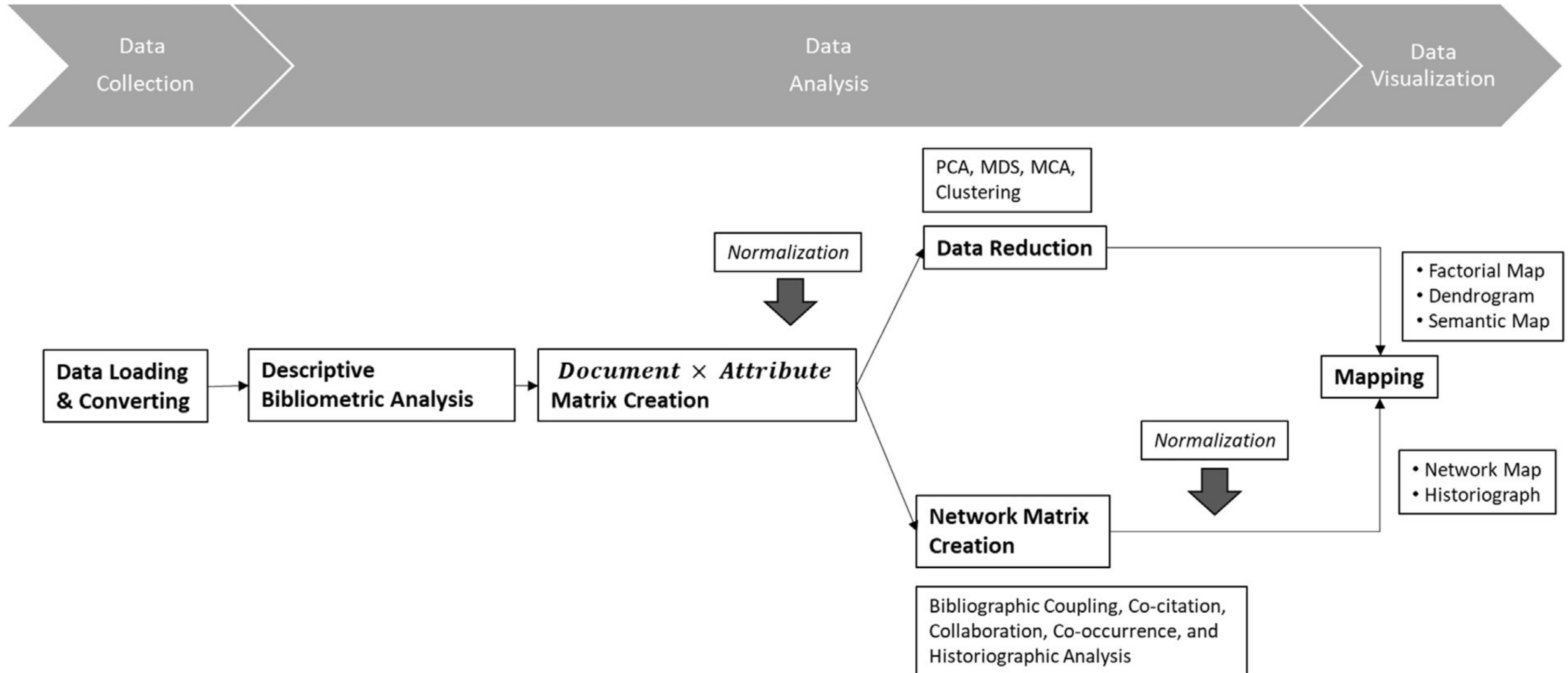
- Bibliometrix (<https://www.bibliometrix.org/home/index.php>) es una herramienta de código abierto que permite realizar un análisis exhaustivo de la literatura científica
- Está desarrollado en lenguaje R para ser flexible y facilitar la integración con otros paquetes estadísticos y gráficos
- Como la bibliometría es una ciencia en constante cambio, bibliometrix tiene la flexibilidad para actualizarse e integrarse rápidamente

Biblioshiny App

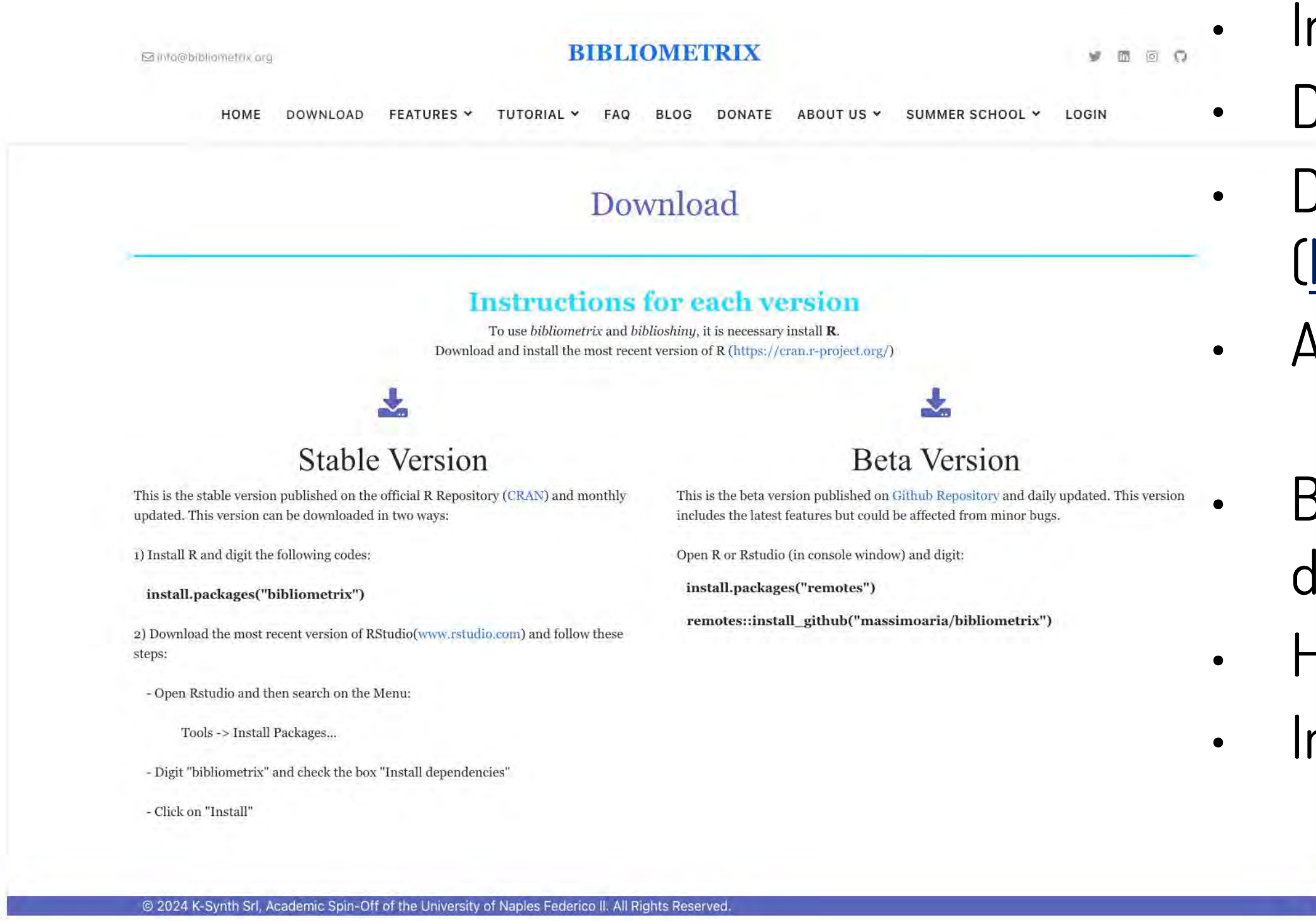
- Biblioshiny (<https://d66z.short.gy/rlmalz>) [105] es una aplicación web que se incluyen en el paquete bibliometrix
- Biblioshiny permite que los investigadores utilicen bibliometrix sin conocimientos de R
- Se ha desarrollado en el entorno Shiny (<https://shiny.posit.co/>)



Flujo de trabajo recomendado con bibliometrix [106]



Instalación de bibliometrix



The screenshot shows the 'BIBLIOMETRIX' website with a navigation menu including HOME, DOWNLOAD, FEATURES, TUTORIAL, FAQ, BLOG, DONATE, ABOUT US, SUMMER SCHOOL, and LOGIN. The main content area is titled 'Download' and 'Instructions for each version'. It provides instructions for installing the 'Stable Version' and the 'Beta Version'.

Stable Version

This is the stable version published on the official R Repository (CRAN) and monthly updated. This version can be downloaded in two ways:

- 1) Install R and digit the following codes:
`install.packages("bibliometrix")`
- 2) Download the most recent version of RStudio(www.rstudio.com) and follow these steps:
 - Open Rstudio and then search on the Menu:
Tools -> Install Packages...
 - Digit "bibliometrix" and check the box "Install dependencies"
 - Click on "Install"

Beta Version

This is the beta version published on Github Repository and daily updated. This version includes the latest features but could be affected from minor bugs.

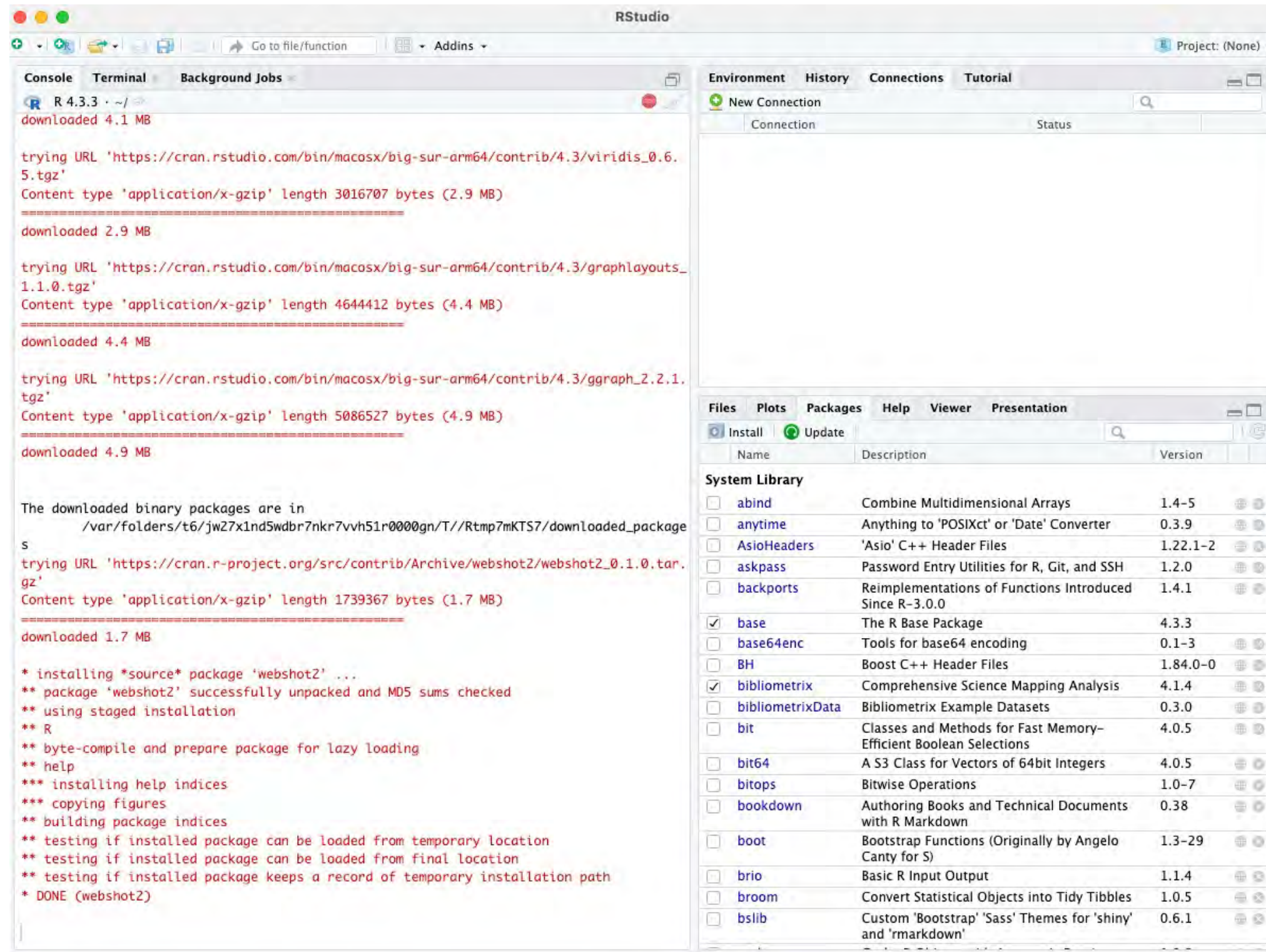
Open R or Rstudio (in console window) and digit:

```
install.packages("remotes")
remotes::install_github("massimoaria/bibliometrix")
```

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- Ir a <https://www.bibliometrix.org/home/>
- Descargar la versión estable R
- Descargar Rstudio (<https://www.rstudio.com>)
- Abrir Rstudio e ir al menú
Tools -> Install Packages
- Buscar “bibliometrix” y marcar “Install dependencias”
- Hacer clic en “Install”
- Instalar biblioshiny
`bibliometrix::biblioshiny()`

Instalación de bibliometrix



The screenshot shows the RStudio interface during the installation of the `bibliometrix` package. The console window displays the following output:

```

R 4.3.3 ~-
downloaded 4.1 MB

trying URL 'https://cran.rstudio.com/bin/macosx/big-sur-arm64/contrib/4.3/viridis_0.6.5.tgz'
Content type 'application/x-gzip' length 3016707 bytes (2.9 MB)
=====
downloaded 2.9 MB

trying URL 'https://cran.rstudio.com/bin/macosx/big-sur-arm64/contrib/4.3/graphlayouts_1.1.0.tgz'
Content type 'application/x-gzip' length 4644412 bytes (4.4 MB)
=====
downloaded 4.4 MB

trying URL 'https://cran.rstudio.com/bin/macosx/big-sur-arm64/contrib/4.3/ggraph_2.2.1.tgz'
Content type 'application/x-gzip' length 5086527 bytes (4.9 MB)
=====
downloaded 4.9 MB

The downloaded binary packages are in
  /var/folders/t6/jw27x1nd5wdb7nkr7vvh51r0000gn/T//Rtmp7mKTS7/downloaded_packages
trying URL 'https://cran.r-project.org/src/contrib/Archive/webshot2/webshot2_0.1.0.tar.gz'
Content type 'application/x-gzip' length 1739367 bytes (1.7 MB)
=====
downloaded 1.7 MB

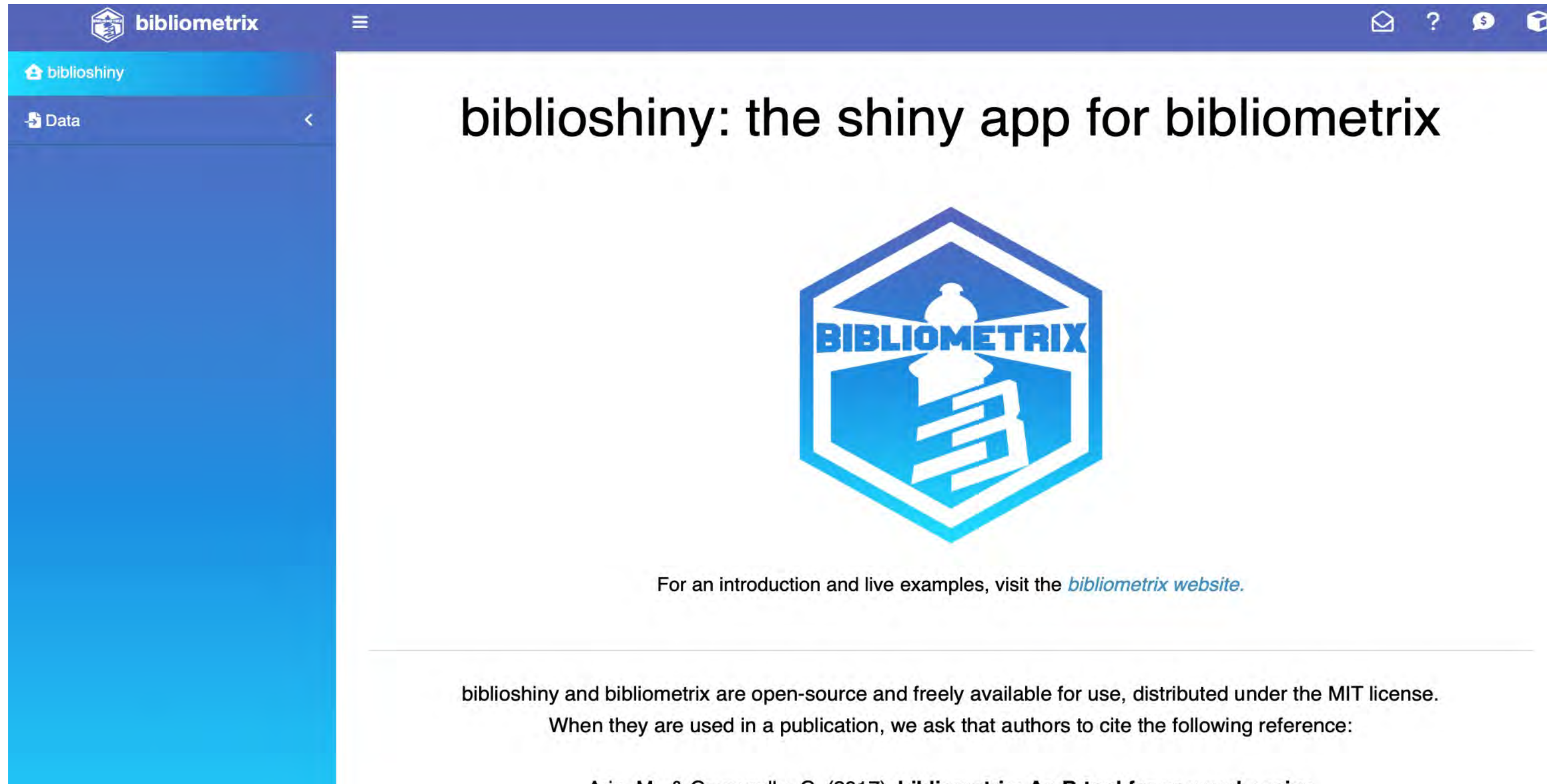
* installing *source* package 'webshot2' ...
** package 'webshot2' successfully unpacked and MD5 sums checked
** using staged installation
** R
** byte-compile and prepare package for lazy loading
** help
*** installing help indices
*** copying figures
** building package indices
** testing if installed package can be loaded from temporary location
** testing if installed package can be loaded from final location
** testing if installed package keeps a record of temporary installation path
* DONE (webshot2)
  
```

The Environment pane shows the installed packages:


| Name | Description | Version |
|-------------------------------------|------------------|--|
| System Library | | |
| <input type="checkbox"/> | abind | Combine Multidimensional Arrays 1.4-5 |
| <input type="checkbox"/> | anytime | Anything to 'POSIXct' or 'Date' Converter 0.3.9 |
| <input type="checkbox"/> | AsioHeaders | 'Asio' C++ Header Files 1.22.1-2 |
| <input type="checkbox"/> | askpass | Password Entry Utilities for R, Git, and SSH 1.2.0 |
| <input type="checkbox"/> | backports | Reimplementations of Functions Introduced Since R-3.0.0 1.4.1 |
| <input checked="" type="checkbox"/> | base | The R Base Package 4.3.3 |
| <input type="checkbox"/> | base64enc | Tools for base64 encoding 0.1-3 |
| <input type="checkbox"/> | BH | Boost C++ Header Files 1.84.0-0 |
| <input checked="" type="checkbox"/> | bibliometrix | Comprehensive Science Mapping Analysis 4.1.4 |
| <input type="checkbox"/> | bibliometrixData | Bibliometrix Example Datasets 0.3.0 |
| <input type="checkbox"/> | bit | Classes and Methods for Fast Memory-Efficient Boolean Selections 4.0.5 |
| <input type="checkbox"/> | bit64 | A S3 Class for Vectors of 64bit Integers 4.0.5 |
| <input type="checkbox"/> | bitops | Bitwise Operations 1.0-7 |
| <input type="checkbox"/> | bookdown | Authoring Books and Technical Documents with R Markdown 0.38 |
| <input type="checkbox"/> | boot | Bootstrap Functions (Originally by Angelo Canty for S) 1.3-29 |
| <input type="checkbox"/> | brio | Basic R Input Output 1.1.4 |
| <input type="checkbox"/> | broom | Convert Statistical Objects into Tidy Tibbles 1.0.5 |
| <input type="checkbox"/> | bslib | Custom 'Bootstrap' 'Sass' Themes for 'shiny' and 'rmarkdown' 0.6.1 |

Esto abre una instancia de biblioshiny en el navegador

Empezar a trabajar



biblioshiny: the shiny app for bibliometrix



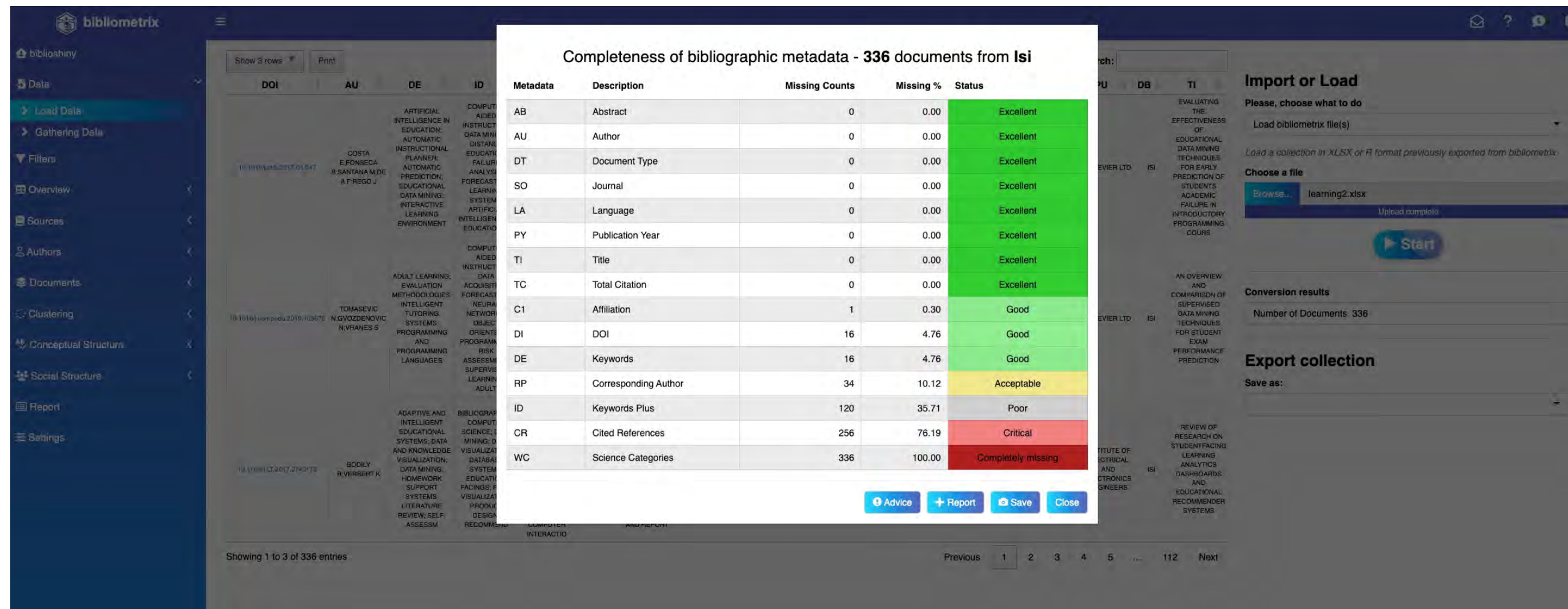
For an introduction and live examples, visit the [bibliometrix website](#).

biblioshiny and bibliometrix are open-source and freely available for use, distributed under the MIT license.
When they are used in a publication, we ask that authors to cite the following reference:

Aria M. & Cucurullo G. (2017). bibliometrix: An R tool for comprehensive

Importar los datos por ejemplo en xlsx

- Se importa el archivo en xlsx a través de la función import (si solo tienes una BD se puede cargar desde Load un solo archivo en Scopus o WoS y analizar)



The screenshot displays the 'Completeness of bibliographic metadata - 336 documents from Isi' report. The report is presented as a table with the following columns: Metadata, Description, Missing Counts, Missing %, and Status. The status categories are color-coded: Excellent (green), Good (light green), Acceptable (yellow), Poor (grey), Critical (red), and Completely missing (dark red).

| Metadata | Description | Missing Counts | Missing % | Status |
|----------|----------------------|----------------|-----------|--------------------|
| AB | Abstract | 0 | 0.00 | Excellent |
| AU | Author | 0 | 0.00 | Excellent |
| DT | Document Type | 0 | 0.00 | Excellent |
| SO | Journal | 0 | 0.00 | Excellent |
| LA | Language | 0 | 0.00 | Excellent |
| PY | Publication Year | 0 | 0.00 | Excellent |
| TI | Title | 0 | 0.00 | Excellent |
| TC | Total Citation | 0 | 0.00 | Excellent |
| C1 | Affiliation | 1 | 0.30 | Good |
| DI | DOI | 16 | 4.76 | Good |
| DE | Keywords | 16 | 4.76 | Good |
| RP | Corresponding Author | 34 | 10.12 | Acceptable |
| ID | Keywords Plus | 120 | 35.71 | Poor |
| CR | Cited References | 256 | 76.19 | Critical |
| WC | Science Categories | 336 | 100.00 | Completely missing |

At the bottom of the report, there are buttons for 'Advice', 'Report', 'Save', and 'Close'. The background shows the 'Import or Load' section of the bibliometrix interface, which includes options to load a file or a collection, and a 'Start' button.

Se hace el análisis



bibliometrix

- biblioshiny
- Data
 - Load Data
 - Gathering Data
- Filters
- Overview
- Sources
- Authors
- Documents
- Clustering
- Conceptual Structure
- Social Structure
- Report
- Settings

Show 3 rows
Print
Search:

| DOI | AU | DE | ID | C1 | J1 | AB | RP | DI | SN | SO | LA | TC | PN | PU | DB | TI |
|-------------------------------|--|--|--|--|----------------------------|--|--|-------------------------------|----------|--|---------|-----|----|---|-----|---|
| 10.1016/j.chb.2017.01.047 | E.COSTA B.SANTANA M.D.E A.F.REGO J | ARTIFICIAL INTELLIGENCE IN EDUCATION; AUTOMATIC INSTRUCTIONAL PLANNER; AUTOMATIC PREDICTION; EDUCATIONAL DATA MINING; INTERACTIVE LEARNING ENVIRONMENT | COMPUTER AIDED INSTRUCTION; DATA MINING; DISTANCE EDUCATION; FAILURE ANALYSIS; FORECASTING; LEARNING SYSTEMS; ARTIFICIAL INTELLIGENCE IN EDUCATION; A | FEDERAL UNIVERSITY OF ALAGOAS (UFAL), BRAZIL; FEDERAL INSTITUTE OF ALAGOAS (IFAL), BRAZIL; FEDERAL UNIVERSITY OF CAMPINA GRANDE, BRAZIL; FEDERAL UNIVE | COMPUT HUM BEHAV | THE DATA ABOUT HIGH STUDENTS' FAILURE RATES IN INTRODUCTORY PROGRAMMING COURSES HAVE BEEN ALARMING MANY EDUCATORS, RAISING A NUMBER OF IMPORTANT QUEST | E.B.COSTA; FEDERAL UNIVERSITY OF ALAGOAS (UFAL), BRAZIL; EMAIL: EVANDRO@IC.UFAL.BR | 10.1016/j.chb.2017.01.047 | 07479832 | COMPUTERS IN HUMAN BEHAVIOR | ENGLISH | 271 | | ELSEVIER LTD | ISI | EVALUATING THE EFFECTIVENESS OF EDUCATIONAL DATA MINING TECHNIQUES FOR EARLY PREDICTION OF STUDENTS' ACADEMIC FAILURE IN INTRODUCTORY PROGRAMMING COURSES |
| 10.1016/j.compedu.2019.103676 | TOMASEVIC N;GVOZDENOVIC N;VRANES S | ADULT LEARNING; EVALUATION METHODOLOGIES; INTELLIGENT TUTORING SYSTEMS; PROGRAMMING AND PROGRAMMING LANGUAGES | COMPUTER AIDED INSTRUCTION; DATA ACQUISITION; FORECASTING; NEURAL NETWORKS; OBJECT ORIENTED PROGRAMMING; RISK ASSESSMENT; SUPERVISED LEARNING; ADULT | THE MIHAJLO PUPIN INSTITUTE, UNIVERSITY OF BELGRADE, VOLGINA 15, BELGRADE, 11060, SERBIA | COMPUT EDUC | RECENT INCREASE IN THE AVAILABILITY OF LEARNING DATA HAS GIVEN EDUCATIONAL DATA MINING AN IMPORTANCE AND MOMENTUM. IN ORDER TO BETTER UNDERSTAND AND O | N. TOMASEVIC; INSTITUTE MIHAJLO PUPIN, BELGRADE, OLGINA 15, 11060, SERBIA; EMAIL: NIKOLA.TOMASEVIC@PUPIN.RS | 10.1016/j.compedu.2019.103676 | 03601315 | COMPUTERS AND EDUCATION | ENGLISH | 179 | | ELSEVIER LTD | ISI | AN OVERVIEW AND COMPARISON OF SUPERVISED DATA MINING TECHNIQUES FOR STUDENT EXAM PERFORMANCE PREDICTION |
| 10.1109/TLT.2017.2740172 | BODILY R;VERBERT K | ADAPTIVE AND INTELLIGENT EDUCATIONAL SYSTEMS; DATA AND KNOWLEDGE VISUALIZATION; DATA MINING; HOMEWORK SUPPORT SYSTEMS; LITERATURE REVIEW; SELF-ASSESSM | BIBLIOGRAPHIES; COMPUTER SCIENCE; DATA MINING; DATA VISUALIZATION; DATABASE SYSTEMS; EDUCATION; FACINGS; FLOW VISUALIZATION; PRODUCT DESIGN; RECOMMEND | INSTRUCTIONAL PSYCHOLOGY AND TECHNOLOGY DEPARTMENT, BRIGHAM YOUNG UNIVERSITY, 150 MCKB, PROVO, 84604, UT, UNITED STATES; HUMAN AND COMPUTER INTERACTIO | IEEE TRANS. LEARN. TECHNOL | THIS ARTICLE IS A COMPREHENSIVE LITERATURE REVIEW OF STUDENT-FACING LEARNING ANALYTICS REPORTING SYSTEMS THAT TRACK LEARNING ANALYTICS DATA AND REPORT | R. BODILY; INSTRUCTIONAL PSYCHOLOGY AND TECHNOLOGY DEPARTMENT, BRIGHAM YOUNG UNIVERSITY, 150 MCKB, PROVO, 84604, UNITED STATES; EMAIL: BODILYROBERT@GM | 10.1109/TLT.2017.2740172 | 19391382 | IEEE TRANSACTIONS ON LEARNING TECHNOLOGIES | ENGLISH | 175 | 4 | INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS | ISI | REVIEW OF RESEARCH ON STUDENT-FACING LEARNING ANALYTICS DASHBOARDS AND EDUCATIONAL RECOMMENDER SYSTEMS |

Showing 1 to 3 of 336 entries

 Previous | 1 | 2 | 3 | 4 | 5 | ... | 112 | Next

Import or Load

Please, choose what to do

Load bibliometrix file(s)

Load a collection in XLSX or R format previously exported from bibliometrix

Choose a file

learning2.xlsx

Upload complete

Start

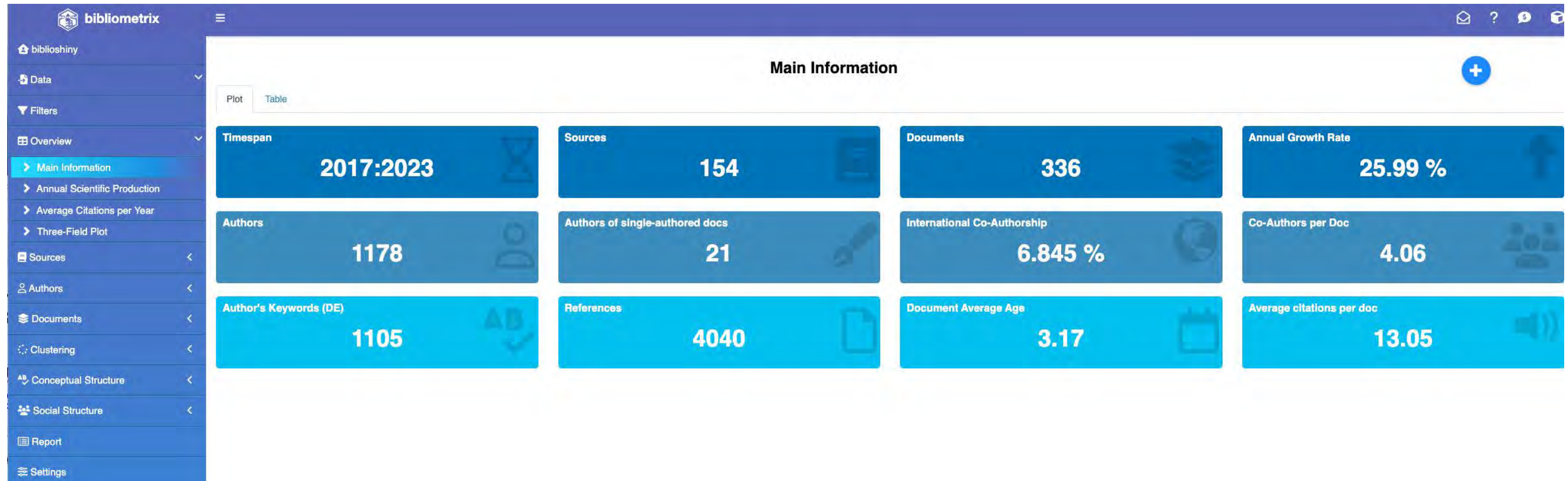
Conversion results

Number of Documents 336

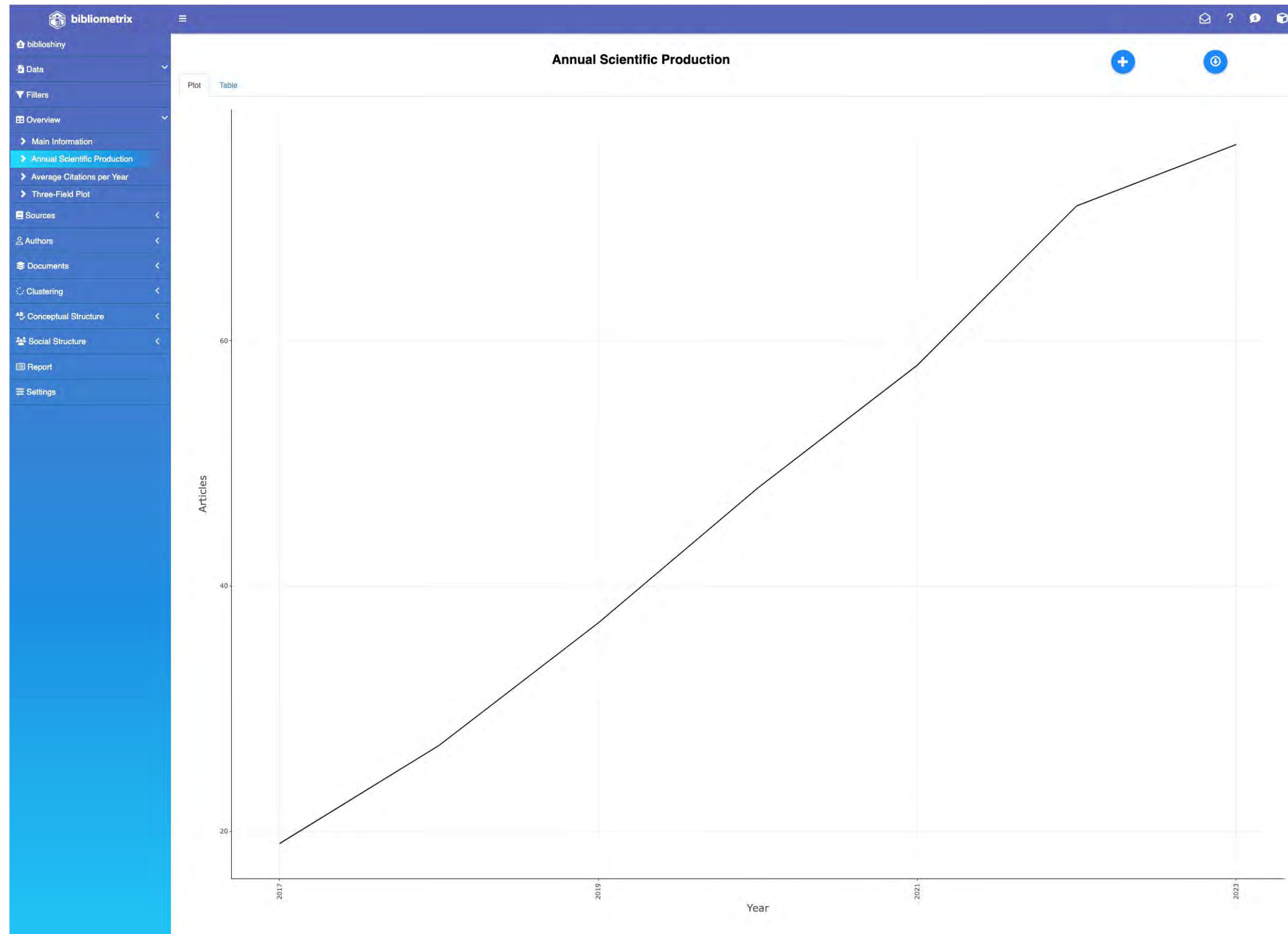
Export collection

Save as:

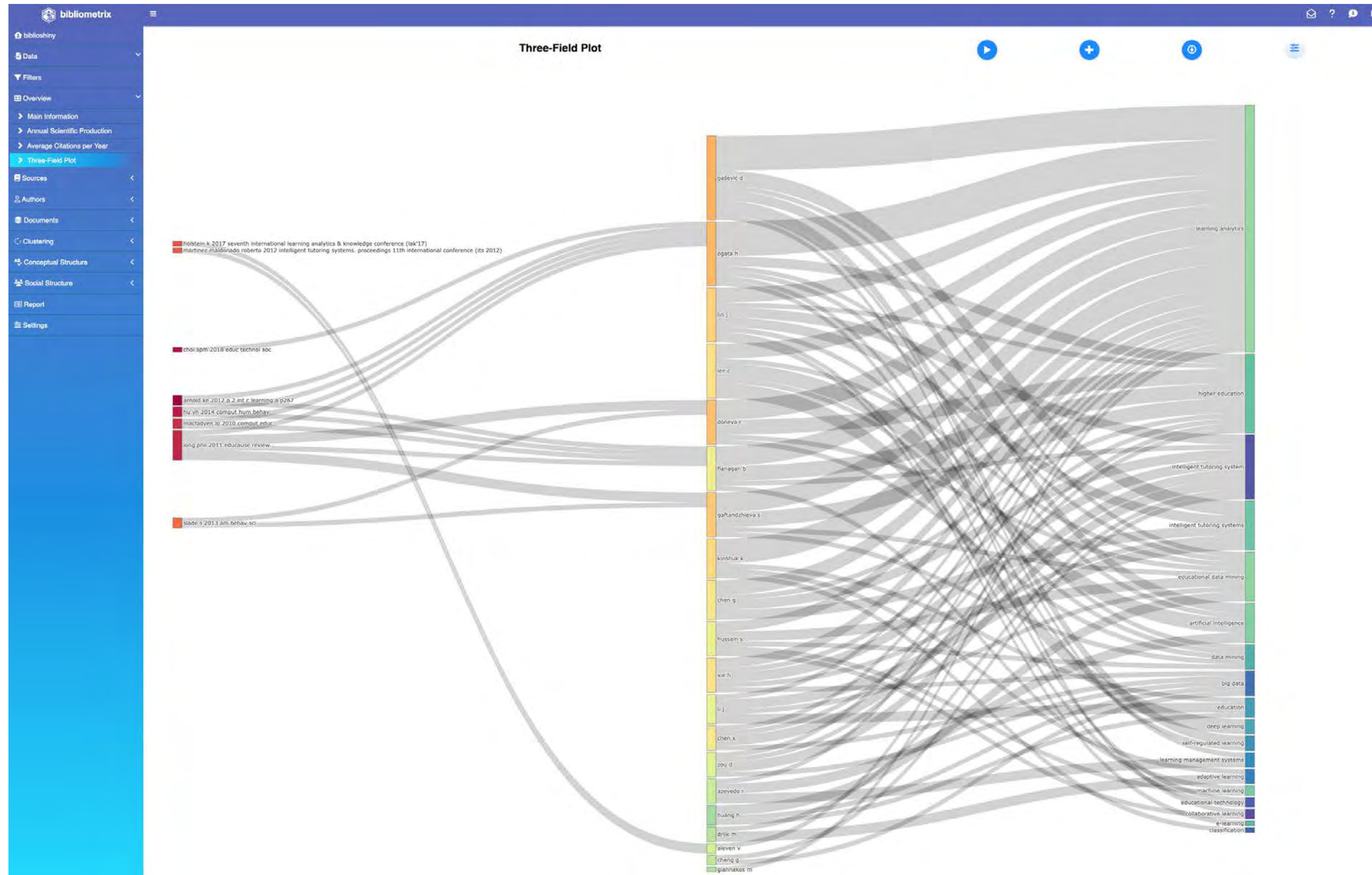
Se hace el análisis



Se hace el análisis

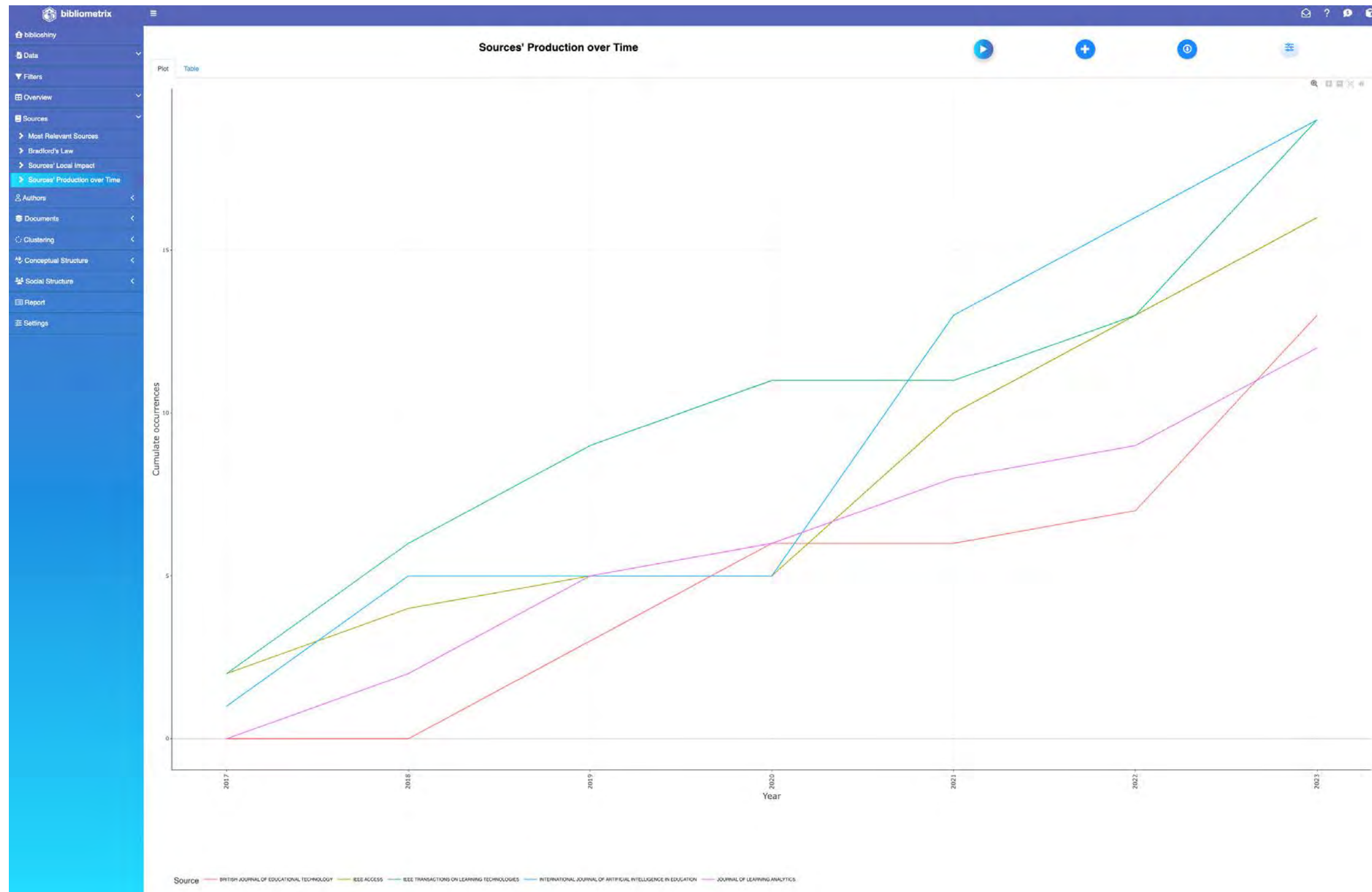


Se hace el análisis

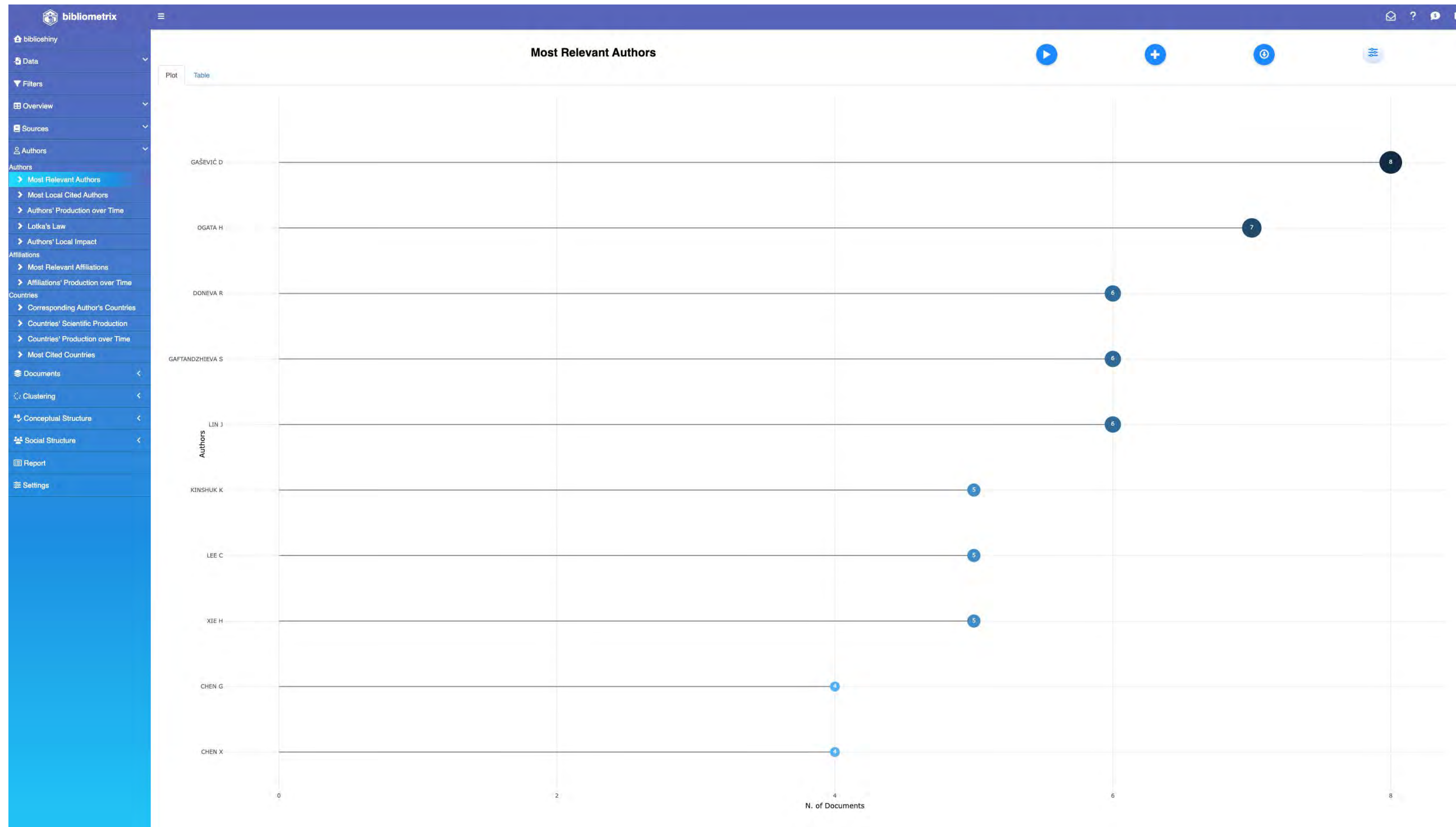


El estado de la cuestión en los trabajos académicos: Las revisiones sistemáticas de literatura

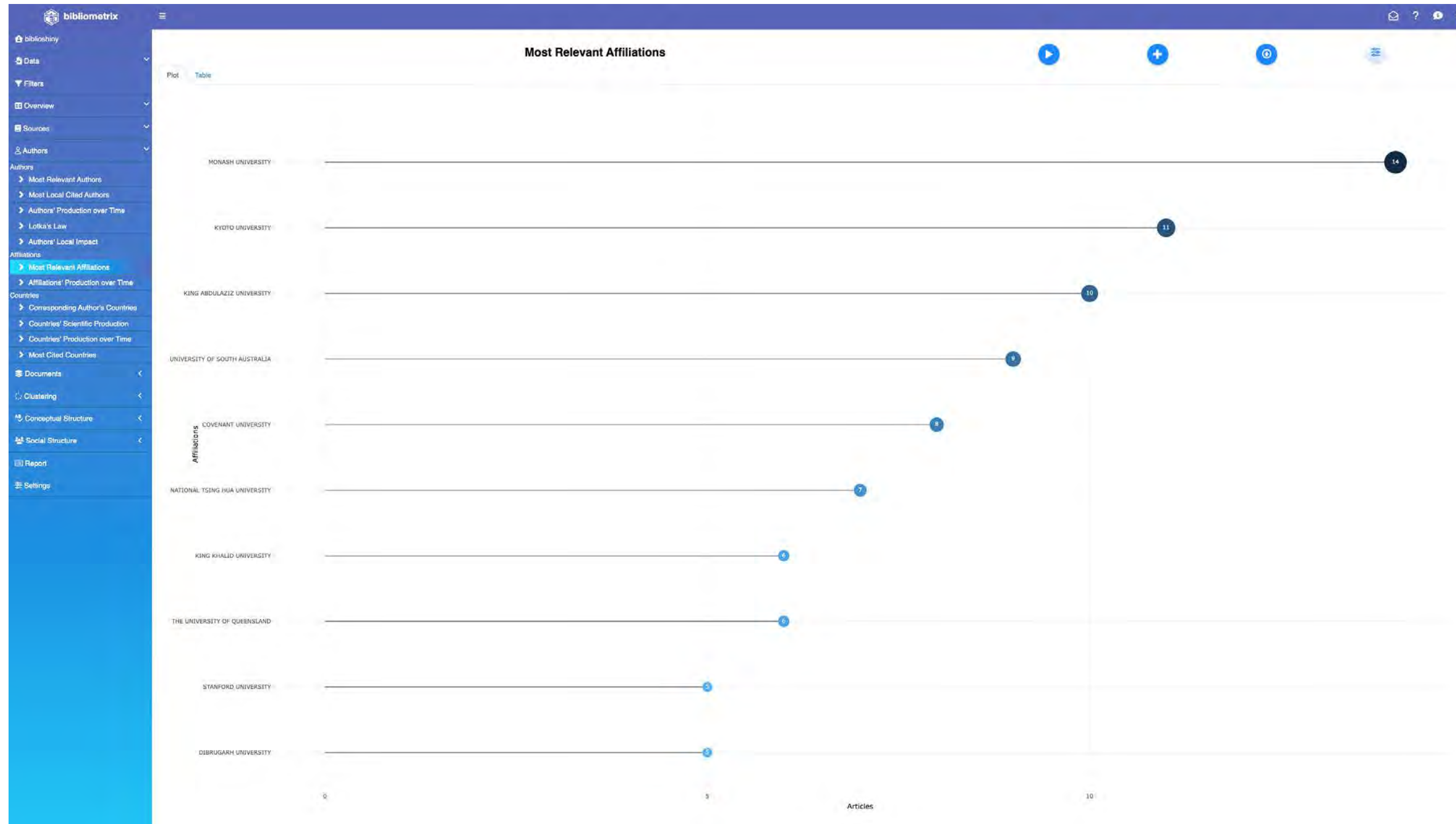
Se hace el análisis



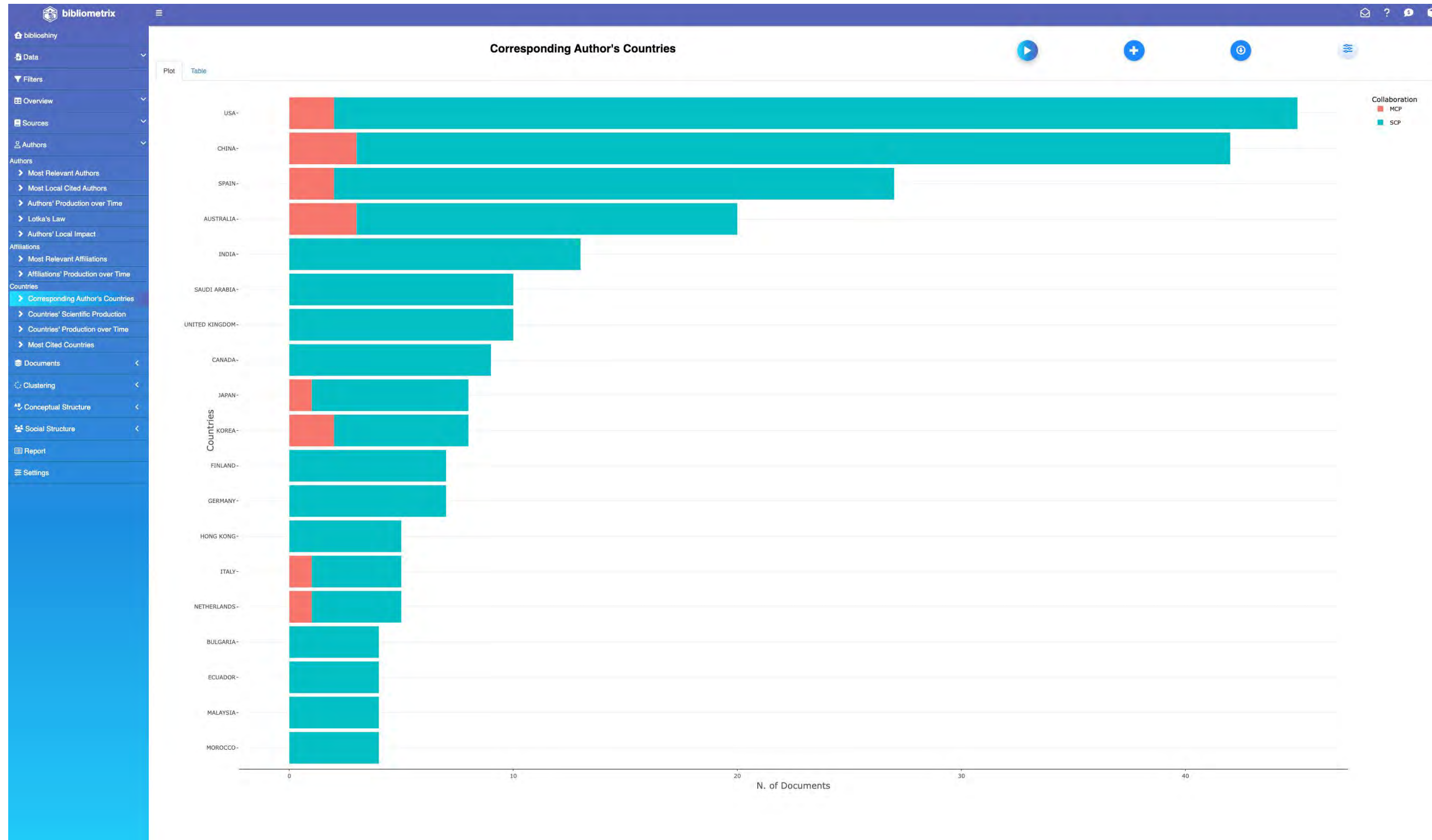
Se hace el análisis



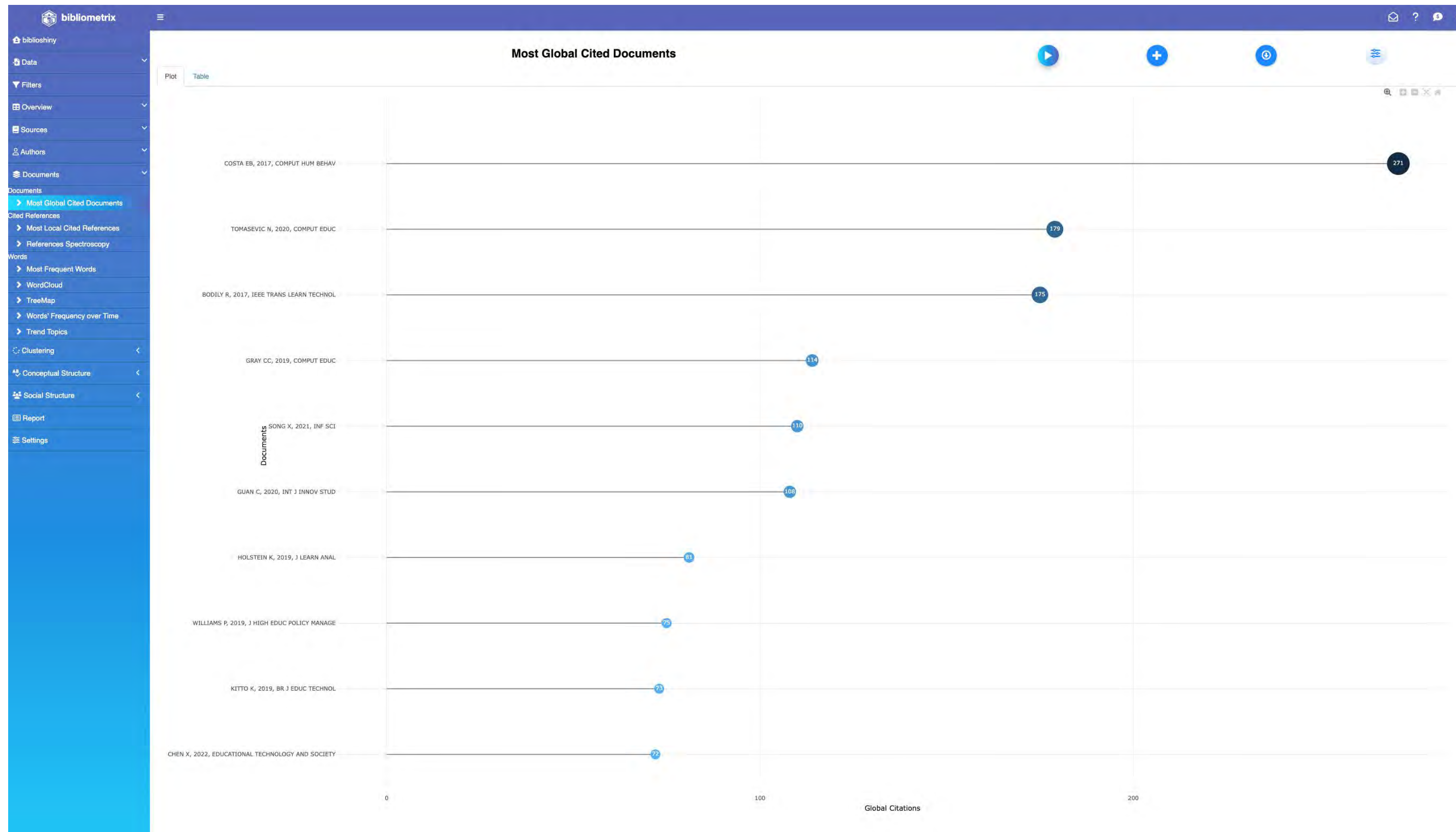
Se hace el análisis



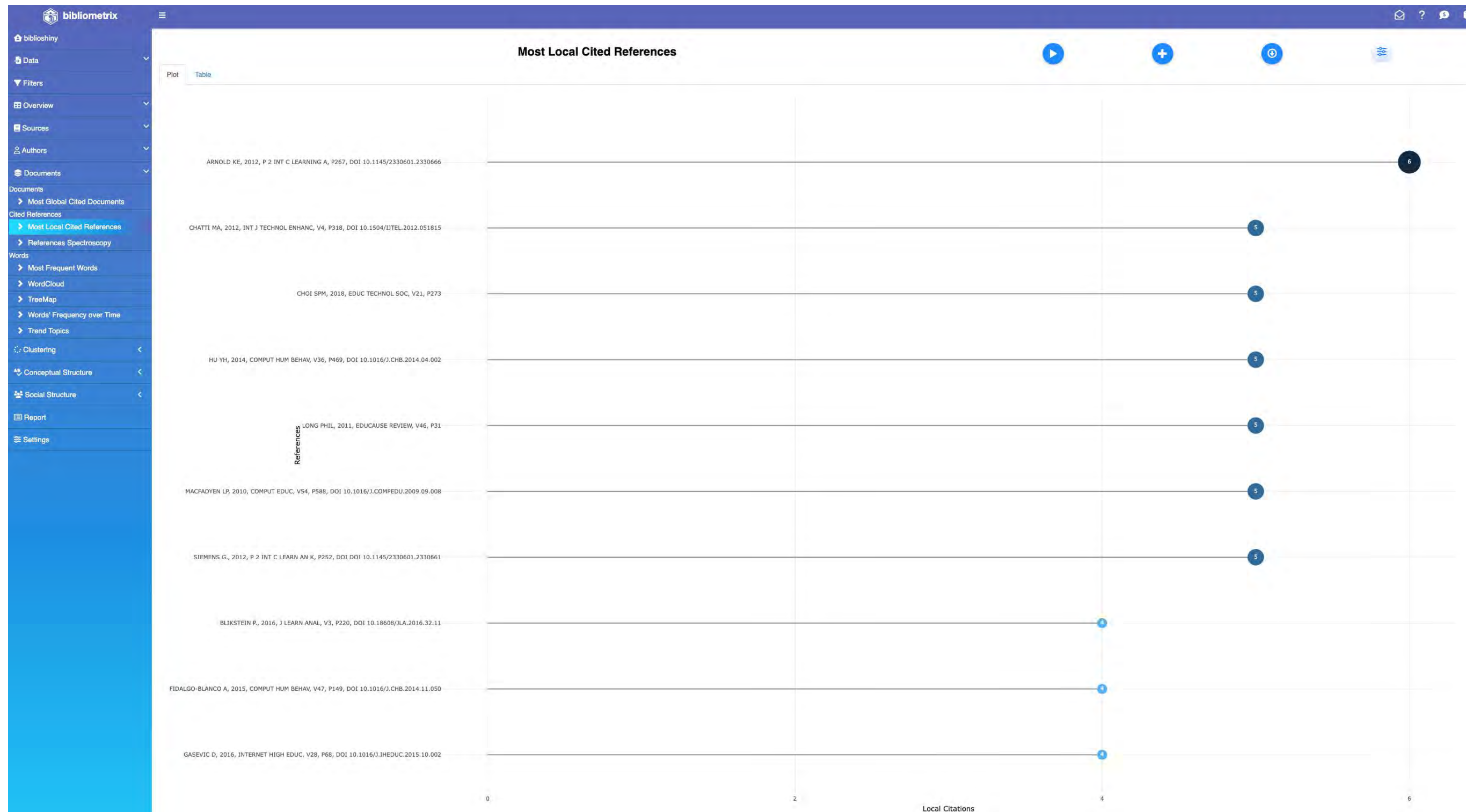
Se hace el análisis



Se hace el análisis



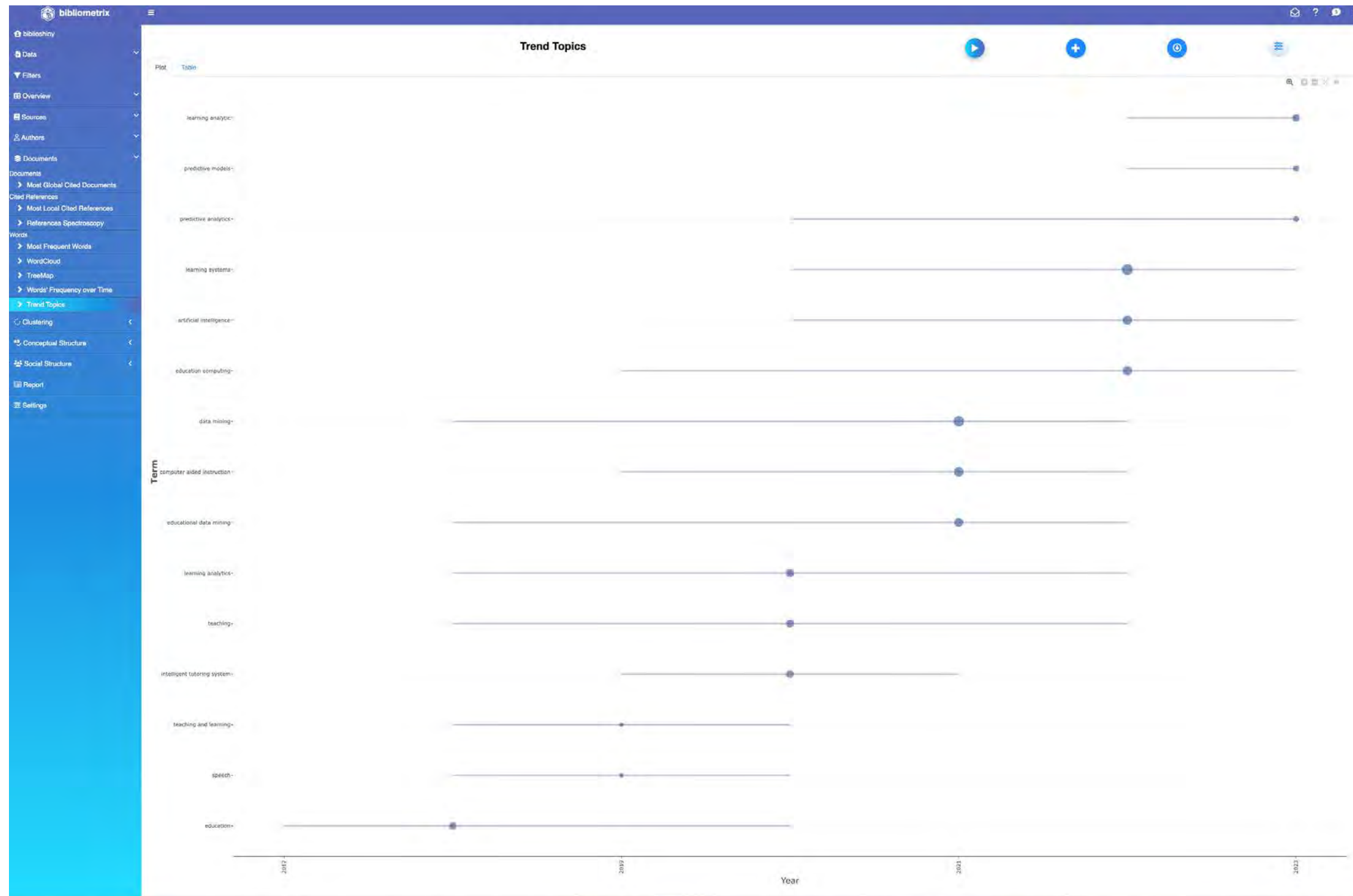
Se hace el análisis



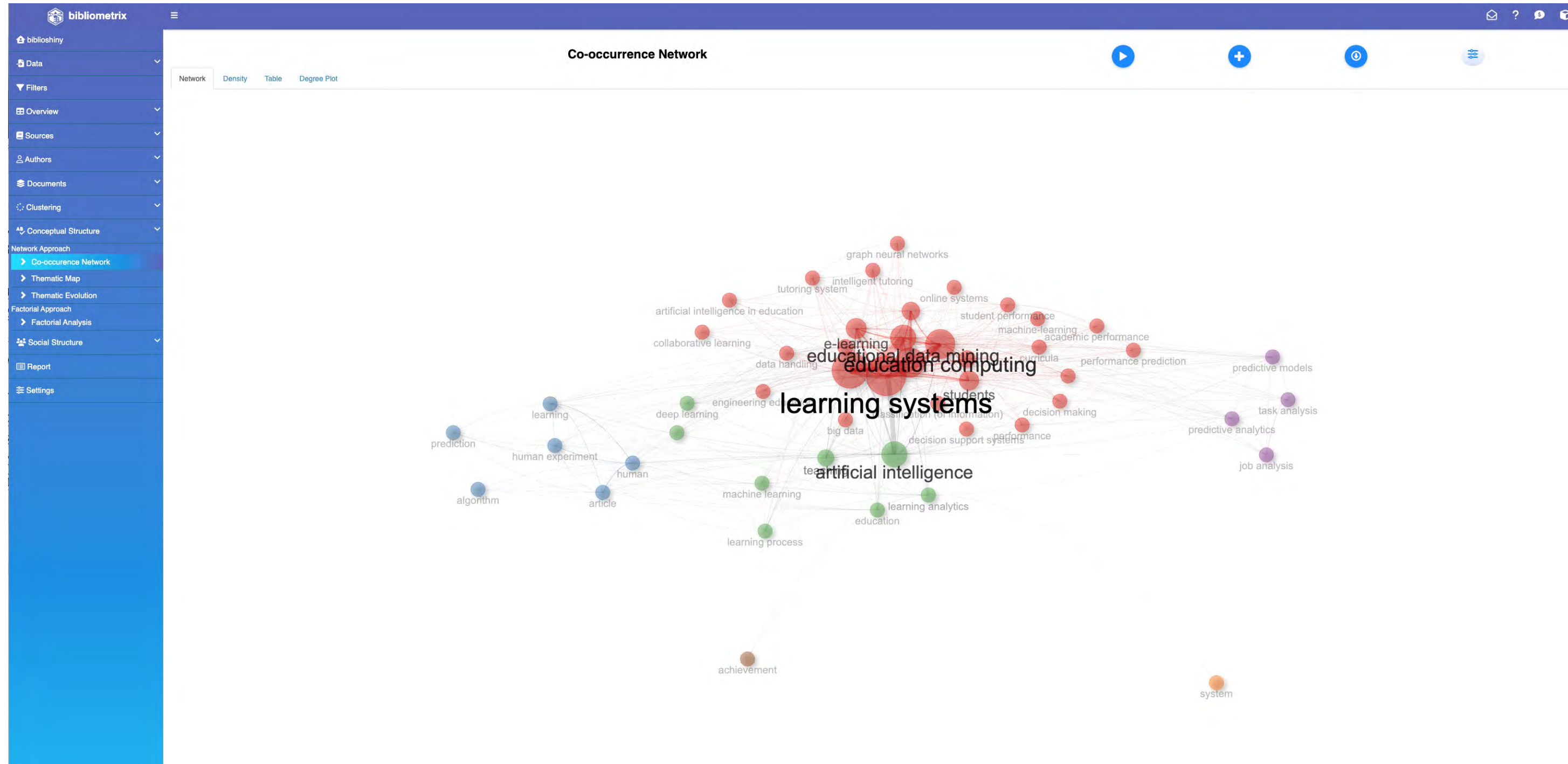
Se hace el análisis

The image illustrates the process of generating a word cloud in the biblometrix software. It shows two stages: the initial state with a small word cloud and the final state with a larger, more detailed word cloud. A blue circle highlights the play button icon in the top toolbar of the first screenshot, with an arrow pointing to the second screenshot, indicating the execution of the analysis.

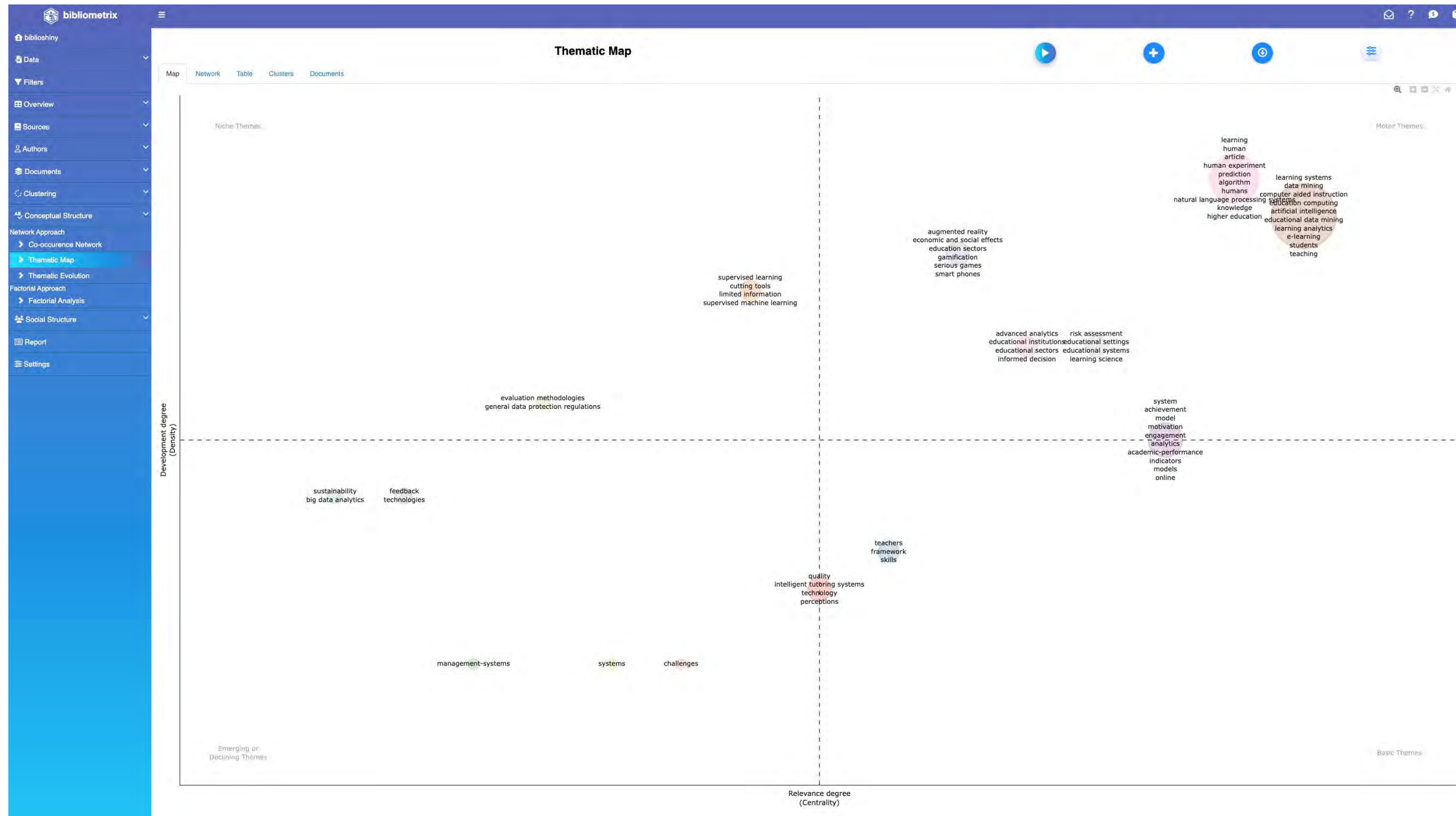
Se hace el análisis



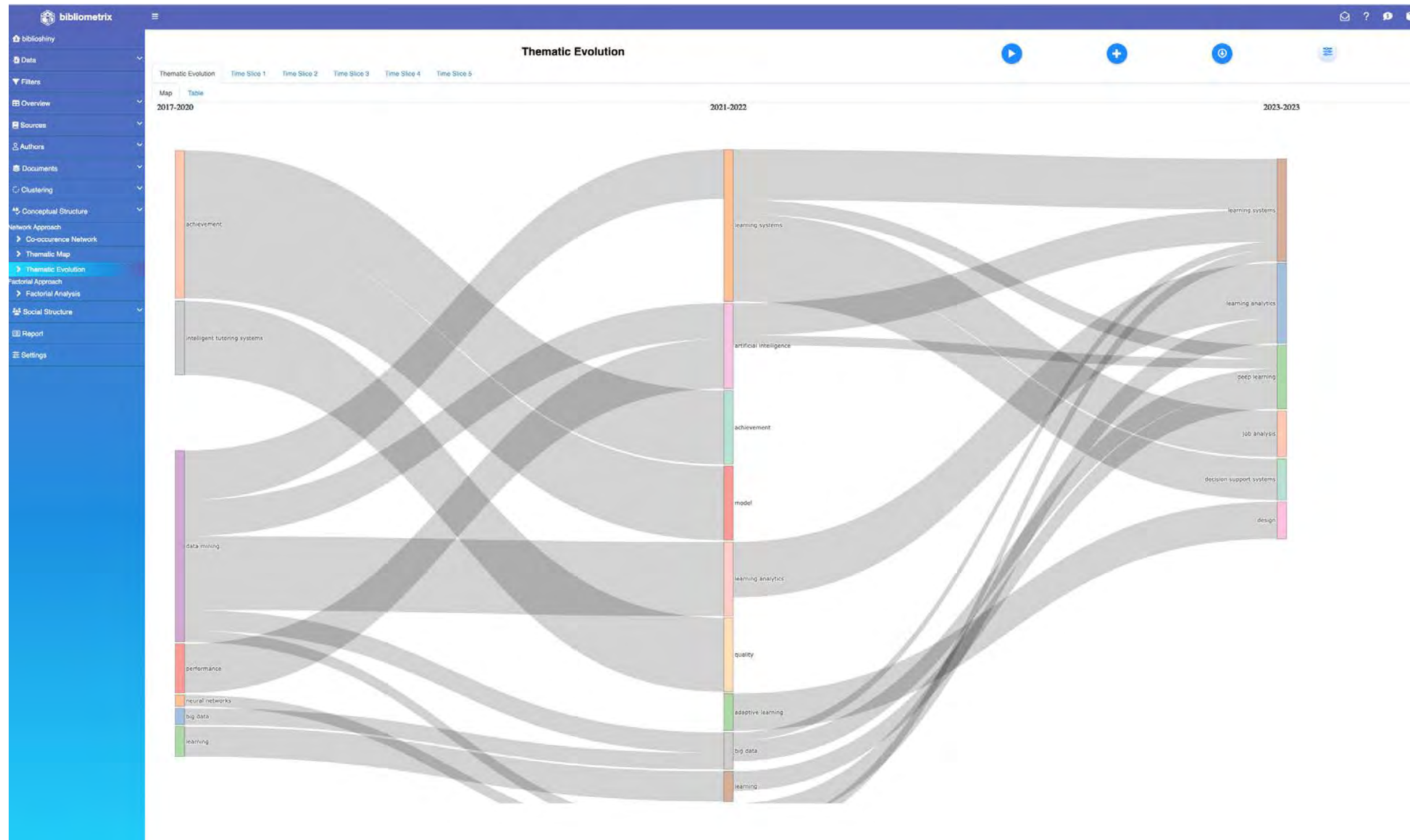
Se hace el análisis



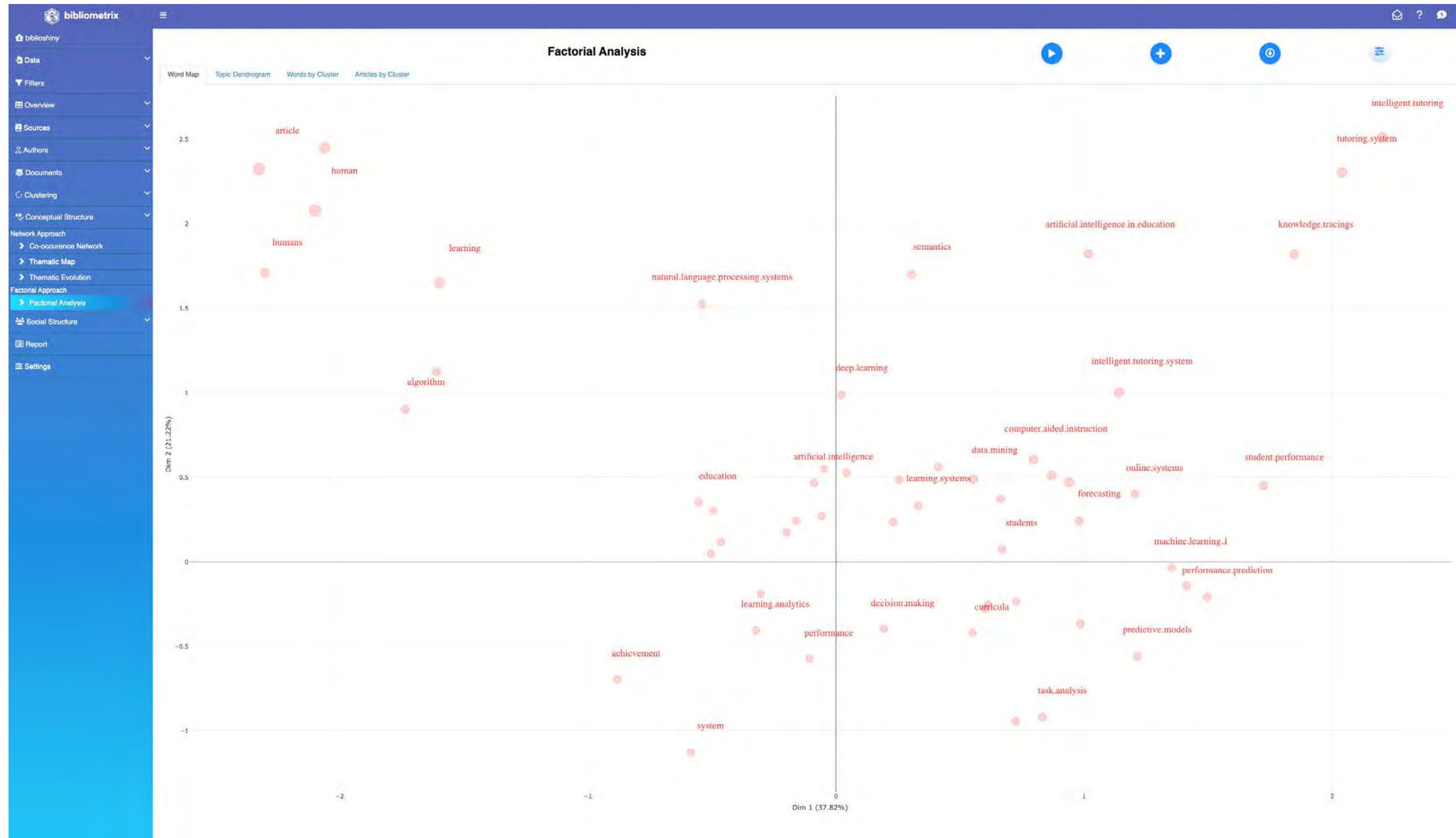
Se hace el análisis



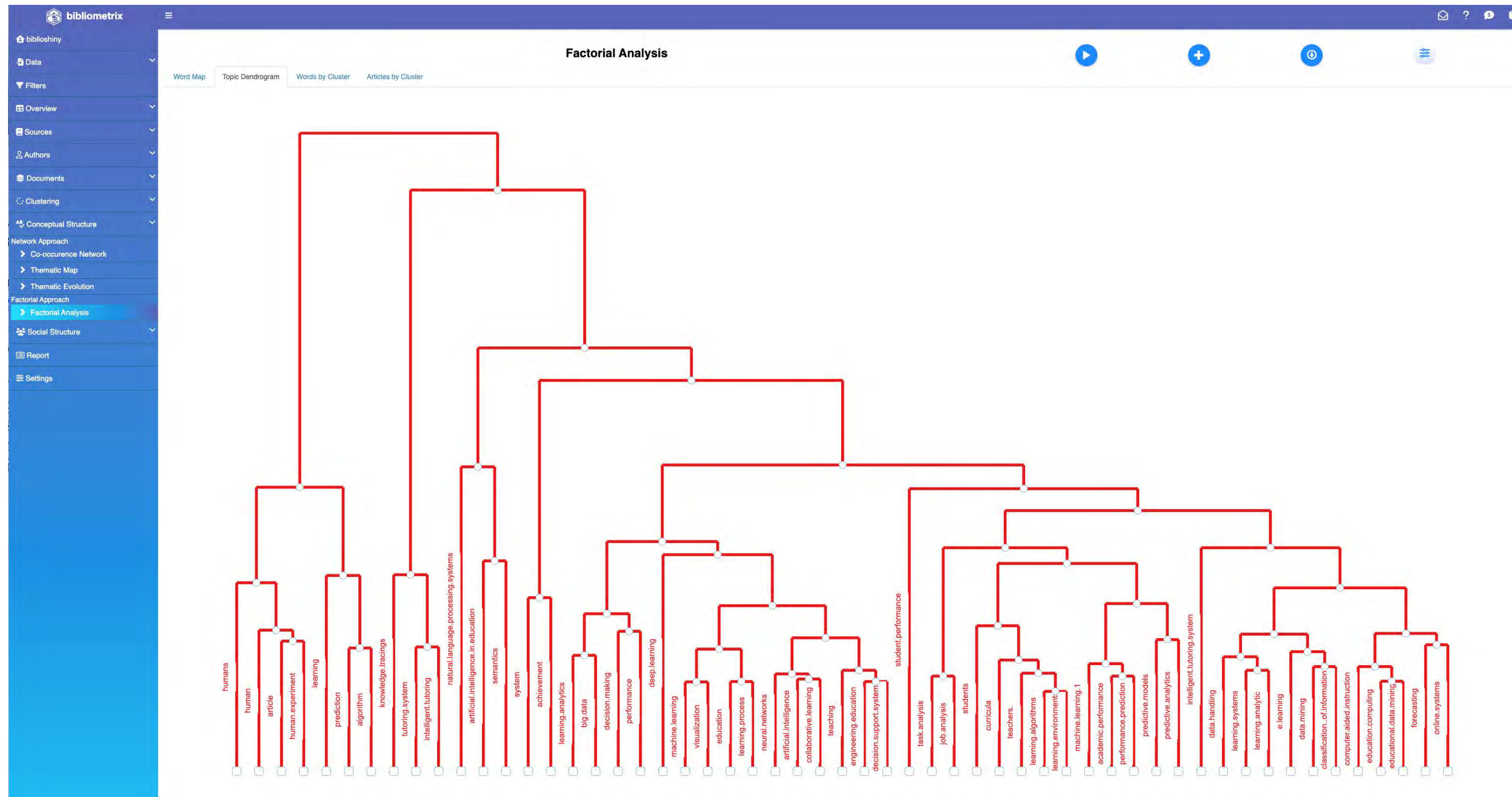
Se hace el análisis



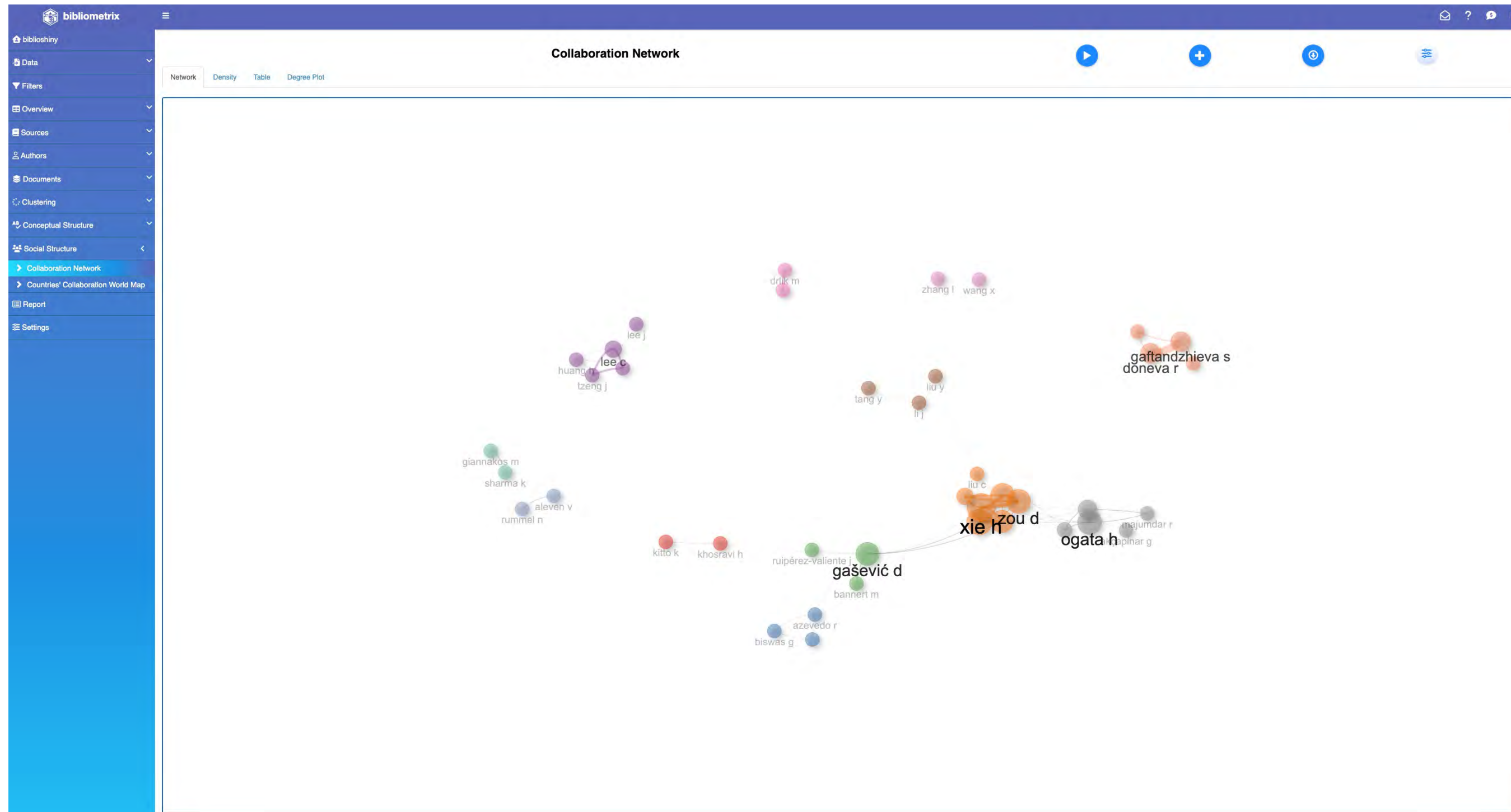
Se hace el análisis



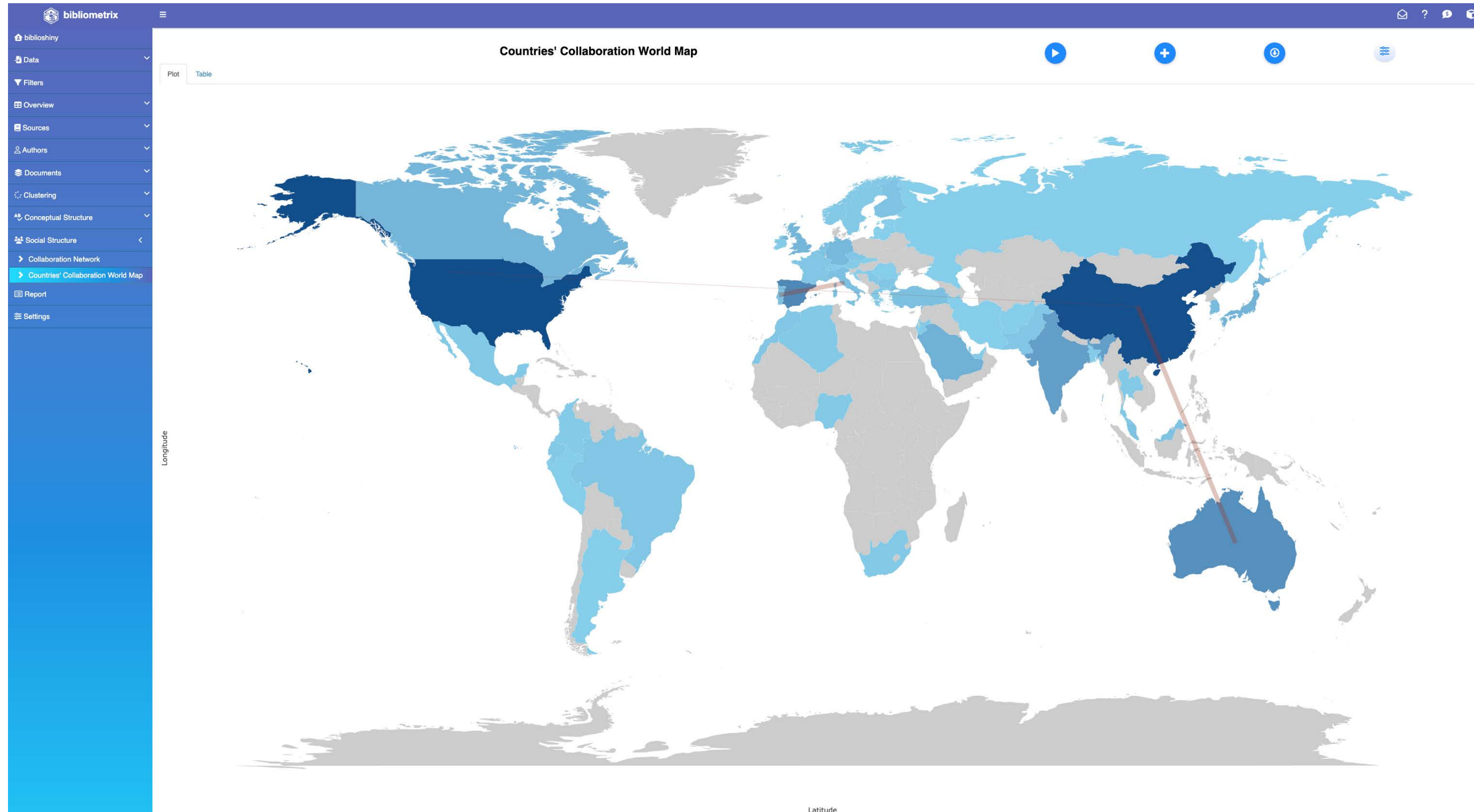
Se hace el análisis



Se hace el análisis



Se hace el análisis



10. Conclusiones

Conclusiones

- Las revisiones sistemáticas de la literatura ofrecen la posibilidad de estar informados sobre un área de interés
- Escribir una revisión de la literatura defectuosa es una de las muchas maneras de hacer fracasar una publicación [107]
- Si la revisión de la literatura es deficiente, el resto de la investigación también puede verse como imperfecta, porque “un investigador no puede realizar una investigación significativa sin conocer primero la literatura en el campo de estudio” [108]

Conclusiones

- La revisión del estado de la cuestión es una actividad básica tanto para los investigadores noveles como para los más consolidados
- La gestión del tiempo y de los recursos necesarios para realizar una buena cobertura del estado de la cuestión ha evolucionado desde los tiempos en los que las fuentes de referencias estaban en bibliotecas tradicionales o en los despachos de los investigadores y se desarrollaba un enfoque por oportunidad, al acceso masivo a fuentes primarias en bibliotecas digitales, donde el problema ya no es el acceso, sino la sobrecarga informativa que requiere aplicar métodos sistemáticos para poder discernir entre los trabajos que realmente aportan al estado de la cuestión de aquellos que introducen simplemente ruido [1]

Conclusiones

- A la hora de hacer una revisión sistemática de debe utilizar un protocolo sistemático que facilite el proceso y la trazabilidad
- Se debe apoyar en herramientas que permitan compartir el conjunto de datos inicial y las versiones filtradas hasta llegar al conjunto de registros seleccionado
 - Hojas de cálculo, sitios web, herramientas (por ejemplo, Parsifal <https://parsif.al/>)
- Hay una gran proliferación de herramientas que apoyan el proceso de revisión de los documentos, facilitan su gestión, permiten buscar otros artículos relacionados, ofrecen utilidades para el análisis y la síntesis... Integrar las herramientas en un flujo de trabajo será de gran ayuda para los estudios de revisión de literatura
- La proliferación de herramientas basadas en inteligencia artificial generativa [109, 110] está constituyendo un avance muy significativo para el desarrollo de los flujos de trabajo en la revisión de literatura

Conclusiones

- Puntos fuertes de una revisión sistemática
 - Este tipo de revisiones son consideradas como las revisiones más fuertes en muchas áreas de conocimiento
 - Muchas organizaciones financian procesos de revisión sistemática para desarrollar investigación
 - Una buena revisión sistemática tiene opciones para ser publicada en formato de artículo científico
 - Permiten crear estados de la cuestión robustos sobre los que sustentar una investigación o un trabajo académico (Trabajo Fin de Máster o Tesis Doctoral)

Conclusiones

- En trabajos fin de máster y en las tesis doctorales las revisiones sistemáticas de literatura representan la evidencia de que los investigadores son capaces de analizar e interpretar los trabajos académicos relacionados, y ya publicados, de forma crítica

Conclusiones

- Debilidades de una revisión sistemática
 - Sesgo de las fuentes primarias
 - Si la revisión toma demasiado tiempo, habrá que volver a hacer algunas partes del proceso después de un tiempo
 - Debe extenderse generalmente a otras bases de datos aparte de las principales, para que mejore la eficacia de la revisión sistemática
 - En muchas ocasiones una revisión sistemática de literatura que se envía como un artículo científico no se comprende por los revisores

Conclusiones

- Para publicar un trabajo de revisión sistemática como un artículo científico
 - Encontrar qué revistas/conferencias suelen publicarlas, así como los últimos artículos de revisión de publicados en estas fuentes
 - Preparar la versión del artículo sobre la base de los últimos artículos publicados anteriormente en la revista/conferencia seleccionada
 - Si tiene un trabajo de revisión muy grande, solo una parte debería ir en un artículo. La otra parte del contenido/resultados podría ser objeto de otro artículo o estar disponible en la memoria del trabajo académico
 - Aportar los enlaces a los conjuntos de datos disponibles en la nube



Referencias

Historial

- Este material está basado en ediciones de los siguientes seminarios [111-134]

Referencias

1. F. J. García-Peñalvo, "Developing robust state-of-the-art reports: Systematic Literature Reviews," *Education in the Knowledge Society*, vol. 23, art. e28600, 2022. doi: 10.14201/eks.28600.
2. V. Chavan y L. Penev, "The data paper: A mechanism to incentivize data publishing in biodiversity science," *BMC Bioinformatics*, vol. 12, no. 15, p. S2, 2011. doi: 10.1186/1471-2105-12-S15-S2.
3. G. V. Glass, "Primary, Secondary, and Meta-Analysis of Research," *Educational Researcher*, vol. 5, no. 10, pp. 3-8, 1976.
4. L. Codina. (2017, April 20th, 2017). *Revisiones bibliográficas y cómo llevarlas a cabo con garantías: systematic reviews y SALSA Framework*. Disponible en: <https://goo.gl/CG6vL5>
5. J. A. Guirao-Goris, A. Olmedo Salas y E. Ferrer Ferrandis, "El artículo de revisión," *Revista Iberoamericana de Enfermería Comunitaria*, vol. 1, no. 1, 2008.
6. M. T. Icart Isern y J. Canela Soler, "El artículo de revisión," *Enfermería Clínica*, vol. 4, no. 4, pp. 180-184, 1994.
7. B. Gastel y R. Day, *How to Write and Publish a Scientific Paper*, 8th ed. Santa Barbara, CA, USA: Greenwood, 2016.
8. M. Soto y G. Rada, "Formulación de preguntas en medicina basada en la evidencia," *Revista Médica de Chile*, vol. 131, no. 10, pp. 1202-1207, 2003. doi: 10.4067/S0034-98872003001000016
9. H. Martín Rodero, "La búsqueda bibliográfica, pilar fundamental de la medicina basada en la evidencia: evaluación multivariante de las enfermedades nutricionales y metabólicas," PhD, Departamento de Salud Pública, Historia de la Ciencia y Ginecología, Universidad Miguel Hernández, Alicante, España, 2014. Disponible en: <https://goo.gl/PpjQop>
10. M. J. Grant y A. Booth, "A typology of reviews: an analysis of 14 review types and associated methodologies," *Health Information and Libraries Journal*, vol. 26, no. 2, pp. 91-108, 2009. doi: 10.1111/j.1471-1842.2009.00848.x.
11. S. Kulviwat, C. Guo y N. Engchanil, "Determinants of online information search: a critical review and assessment," *Internet Research*, vol. 14, no. 3, pp. 245-253, 2004. doi: 10.1108/10662240410542670.
12. C. Kelleher y R. Pausch, "Lowering the barriers to programming: A taxonomy of programming environments and languages for novice programmers," *ACM Computing Surveys*, vol. 37, no. 2, pp. 83-137, 2005. doi: 10.1145/1089733.1089734.
13. F. J. García-Peñalvo, D. Reimann, M. Tuul, A. Rees y I. Jormanainen, "An overview of the most relevant literature on coding and computational thinking with emphasis on the relevant issues for teachers," TACCLE3 Consortium, Belgium, 2016. doi: 10.5281/zenodo.165123.
14. F. J. García-Peñalvo y A. M. Seoane-Pardo, "Una revisión actualizada del concepto de eLearning. Décimo Aniversario," *Education in the Knowledge Society*, vol. 16, no. 1, pp. 119-144, 2015. doi: 10.14201/eks201516119144.
15. A. Hall y G. Walton, "Information overload within the health care system: a literature review," *Health Information & Libraries Journal*, vol. 21, no. 2, pp. 102-108, 2004. doi: 10.1111/j.1471-1842.2004.00506.x.
16. L. I. González-Pérez, M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Discovery Tools for Open Access Repositories: A Literature Mapping," en *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. ICPS: ACM International Conference Proceeding Series, pp. 299-305, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012532.
17. L. I. González-Pérez, M. S. Ramírez-Montoya, F. J. García-Peñalvo y J. E. Quintas Cruz, "Usability evaluation focused on user experience of repositories related to energy sustainability: A Literature Mapping," en *Fifth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'17) (Cádiz, Spain, October 18-20, 2017)* J. M. Doderó, M. S. Ibarra Sáiz y I. Ruiz Rube, Eds. ICPS: ACM International Conference Proceeding Series, New York, NY, USA: ACM, 2017. doi: 10.1145/3144826.3145385.

Referencias

18. K. Petersen, R. Feldt, S. Mujtaba y M. Mattsson, "Systematic mapping studies in software engineering," en *Proceedings of the 12th international conference on Evaluation and Assessment in Software Engineering (EASE'08)*, G. Visaggio, M. T. Baldassarre, S. Linkman y M. Turner, Eds. pp. 68-77, Swinton, UK: British Computer Society, 2008.
19. A. García-Holgado, S. Marcos-Pablos, R. Therón y F. J. García-Peñalvo, "Technological ecosystems in the health sector: A mapping study of European research projects," *Journal of Medical Systems*, vol. 43, art. 100, 2019. doi: 10.1007/s10916-019-1241-5.
20. M. Á. Conde, F. J. Rodríguez Sedano, C. Fernández-Llamas, J. Gonçalves, J. Lima y F. J. García-Peñalvo, "RoboSTEAM Project Systematic Mapping: Challenge Based Learning and Robotics," en *2020 IEEE Global Engineering Education Conference (EDUCON), (27-30 April 2020, Porto, Portugal)* pp. 214-221, USA: IEEE, 2020. doi: 10.1109/EDUCON45650.2020.9125103.
21. M. L. Saxton, "Reference service evaluation and meta-analysis: Findings and methodological issues," *Library Quarterly*, vol. 67, no. 3, pp. 267-289, 1997. doi: 10.1086/629952.
22. B. Means, Y. Toyama, R. Murphy y M. Baki, "The effectiveness of online and blended learning: A meta-analysis of the empirical literature," *Teachers College Record*, vol. 115, no. 3, pp. 1-47, 2013.
23. T. A. M. Kooij, R. Kanfer, M. Betts y C. W. Rudolph, "Future time perspective: A systematic review and meta-analysis," *Journal of Applied Psychology*, vol. 103, no. 8, pp. 867-893, 2018. doi: 10.1037/apl0000306.
24. Y. Sung, K. Chang y T. Liu, "The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis," *Computers & Education*, vol. 94, pp. 252-275, 2016. doi: 10.1016/j.compedu.2015.11.008.
25. J. Shepherd *et al.*, "Young people and healthy eating: a systematic review of research on barriers and facilitators," *Health Education Research*, vol. 21, no. 2, pp. 239-257, 2006. doi: 10.1093/her/cyh060.
26. M. N. K. Boulos, L. Hetherington y S. Wheeler, "Second Life: an overview of the potential of 3-D virtual worlds in medical and health education," *Health Information & Libraries Journal*, vol. 24, no. 4, pp. 233-245, 2007. doi: 10.1111/j.1471-1842.2007.00733.x.
27. F. Duggan y L. Banwell, "Constructing a model of effective information dissemination in a crisis," *Information Research*, vol. 9, no. 3, 2004.
28. S. L. Bryant y A. Gray, "Demonstrating the positive impact of information support on patient care in primary care: a rapid literature review," *Health Information & Libraries Journal*, vol. 23, no. 2, pp. 118-125, 2006. doi: 10.1111/j.1471-1842.2006.00652.x.
29. S. Marcos-Pablos y F. J. García-Peñalvo, "Emotional Intelligence in Robotics: A Scoping Review," en *New Trends in Disruptive Technologies, Tech Ethics and Artificial Intelligence*, J. F. de Paz Santana, D. H. de la Iglesia y A. J. López Rivero, Eds. *Advances in Intelligent Systems and Computing* no. 1410, pp. 66-75, Cham, Switzerland: Springer International Publishing, 2022. doi: 10.1007/978-3-030-87687-6_7.
30. P. A. Bath, "Data mining in health and medical information," *Annual Review of Information Science and Technology*, vol. 38, no. 1, pp. 331-369, 2004. doi: 10.1002/aris.1440380108.
31. B. Kitchenham y S. Charters, "Guidelines for performing Systematic Literature Reviews in Software Engineering. Version 2.3," School of Computer Science and Mathematics, Keele University Technical Report, EBSE-2007-01, 2007. Disponible en: <https://goo.gl/L1VHcw>
32. J. Cruz-Benito, F. J. García-Peñalvo y R. Therón, "Analyzing the software architectures supporting HCI/HMI processes through a systematic review of the literature," *Telematics and Informatics*, vol. 38, pp. 118-132, 2019. doi: 10.1016/j.tele.2018.09.006.
33. K. Manikas y K. M. Hansen, "Software ecosystems – A systematic literature review," *Journal of Systems and Software*, vol. 86, no. 5, pp. 1294-1306, 2013. doi: 10.1016/j.jss.2012.12.026.
34. R. Pazmiño-Maji, M. Á. Conde y F. J. García-Peñalvo, "Learning analytics in Ecuador: a systematic review supported by statistical implicative analysis," *Universal Access in the Information Society*, vol. 20, pp. 495-512, 2021. doi: 10.1007/s10209-020-00773-0.

Referencias

35. S. Marcos-Pablos y F. J. García-Peñalvo, "Technological Ecosystems in Care and Assistance: A Systematic Literature Review," *Sensors*, vol. 19, no. 3, art. 708, 2019. doi: 10.3390/s19030708.
36. M. Collado-Sánchez, A. M. Pinto-Llorente y F. J. García-Peñalvo, "Pensamiento computacional en el profesorado de primaria: una revisión sistemática," *Campus Virtuales*, vol. 12, no. 2, pp. 147-162, 2023. doi: 10.54988/cv.2023.2.1418.
37. P. Humanante-Ramos, F. J. García-Peñalvo y M. Á. Conde-González, "Entornos personales de aprendizaje móvil: Una revisión sistemática de la literatura," *RIED. Revista Iberoamericana de Educación a Distancia*, vol. 20, no. 2, pp. 73-92, 2017. doi: 10.5944/ried.20.2.17692.
38. A. Vázquez-Ingelmo, F. J. García-Peñalvo y R. Therón, "Information Dashboards and Tailoring Capabilities - A Systematic Literature Review," *IEEE Access*, vol. 7, pp. 109673-109688, 2019. doi: 10.1109/ACCESS.2019.2933472.
39. L. J. Carroll, J. D. Cassidy, P. M. Peloso, C. Garritty y L. Giles-Smith, "WHO Collaborating Centre Task Force on Mild Traumatic Brain Injury. Systematic search and review procedures: results of the WHO Collaborating Centre Task Force on Mild Traumatic Brain Injury," *Journal of Rehabilitation Medicine*, vol. 43, pp. 11-14, 2004. doi: 10.1080/16501960410023660. PMID: 15083867.
40. R. Cornet y N. de Keizer, "Forty years of SNOMED: a literature review," *BMC Medical Informatics and Decision Making*, vol. 8, no. 1, art. S2, 2008. doi: 10.1186/1472-6947-8-S1-S2.
41. J. K. Seida, M. B. Ospina, M. Karkhaneh, L. Hartling, V. Smith y B. Clark, "Systematic reviews of psychosocial interventions for autism: an umbrella review," *Developmental Medicine & Child Neurology*, vol. 51, no. 2, pp. 95-104, 2009. doi: 10.1111/j.1469-8749.2008.03211.x.
42. A. García-Holgado y F. J. García-Peñalvo, "Mapping the systematic literature studies about software ecosystems," en *Proceedings TEEM'18. Sixth International Conference on Technological Ecosystems for Enhancing Multiculturality (Salamanca, Spain, October 24th-26th, 2018)*, F. J. García-Peñalvo, Ed. pp. 910-918, New York, NY, USA: ACM, 2018. doi: 10.1145/3284179.3284330.
43. L. M. Letelier, J. J. Manríquez y G. Rada, "Revisiónes sistemáticas y metaanálisis: ¿son la mejor evidencia?," *Revista Médica de Chile*, vol. 133, no. 2, pp. 246-249, 2005. doi: 10.4067/S0034-98872005000200015.
44. A. Fink, *Conducting literature research reviews: from paper to the Internet*. Thousand Oaks, CA: Sage, 1998.
45. A. Sáenz, "Leer e interpretar una revisión sistemática," *Boletín de la Sociedad de Pediatría de Asturias, Cantabria, Castilla y León*, vol. 41, no. 177, pp. 215-221, 2001.
46. J. Gisbert y X. Bonfill, "¿Cómo realizar, evaluar y utilizar revisiones sistemáticas y metaanálisis?," *Gastroenterología y Hepatología*, vol. 27, no. 3, pp. 129-149, 2004. doi: 10.1016/S0210-5705(03)79110-9.
47. K. L. James, N. P. Randall y N. R. Haddaway, "A methodology for systematic mapping in environmental sciences," *Environmental Evidence*, vol. 5, no. 1, p. 7, 2016. doi: 10.1186/s13750-016-0059-6.
48. F. Campbell *et al.*, "Mapping reviews, scoping reviews, and evidence and gap maps (EGMs): the same but different— the "Big Picture" review family," *Systematic Reviews*, vol. 12, no. 1, p. 45, 2023. doi: 10.1186/s13643-023-02178-5.
49. CASCADE Project, "Mapping in literature reviews," University of Exeter, UK, 2012. Disponible en: <https://goo.gl/cJCbMp>
50. Z. Munn *et al.*, "What are scoping reviews? Providing a formal definition of scoping reviews as a type of evidence synthesis," *JBIM Evidence Synthesis*, vol. 20, no. 4, pp. 950-952, 2022. doi: 10.11124/JBIES-21-00483.
51. L. Codina, "Revisiónes de la literatura con aproximación sistemática. Las scoping review y su rol en los trabajos académicos," presentado en AMMCI, México, 2022. Disponible: <http://bit.ly/3HXhUzS>
52. H. Arksey y L. O'Malley, "Scoping studies: towards a methodological framework," *International Journal of Social Research Methodology*, vol. 8, no. 1, pp. 19-32, 2005. doi: 10.1080/1364557032000119616.
53. A. Sutton, M. Clowes, L. Preston y A. Booth, "Meeting the review family: exploring review types and associated information retrieval requirements," *Health Information & Libraries Journal*, vol. 36, no. 3, pp. 202-222, 2019. doi: 10.1111/hir.12276.
54. A. Liberati *et al.*, "The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration," *PLOS Medicine*, vol. 6, no. 7, art. e1000100, 2009. doi: 10.1371/journal.pmed.1000100.

Referencias

55. D. Moher, A. Liberati, J. Tetzlaff y D. G. Altman, "Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement," *International Journal of Surgery*, vol. 8, art. e1000097, pp. 336-341, 2010. doi: 10.1016/j.ijso.2010.02.007.
56. L. Shamseer *et al.*, "Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation," *BMJ: British Medical Journal*, vol. 349, p. g7647, 2015. doi: 10.1136/bmj.g7647.
57. M. J. Page *et al.*, "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, vol. 372, art. n71, 2021. doi: 10.1136/bmj.n71.
58. M. J. Page *et al.*, "PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews," *BMJ*, vol. 372, art. n160, 2021. doi: 10.1136/bmj.n160.
59. W. Mengist, T. Soromessa y G. Legese, "Method for conducting systematic literature review and meta-analysis for environmental science research," *MethodsX*, vol. 7, 2020. doi: 10.1016/j.mex.2019.100777.
60. C. L., "Revisión bibliográfica sistematizada en Ciencias Humanas y Sociales. 1: Fundamentos," en *Methodos. Anuario de Métodos de Investigación en Comunicación Social*, L. C., J. Díaz-Noci y L. Codina, Eds. no. 1, pp. 50-60, Barcelona, España: Universitat Pompeu Fabra, 2020. doi: 10.31009/methodos.2020.i01.05.
61. M. Genero, J. A. Cruz-Lemus y M. Piattini, *Métodos de Investigación en Ingeniería del Software*. Madrid, España: RA-MA, 2014.
62. M. Petticrew y H. Roberts, *Systematic reviews in the social sciences: A practical guide*. New York, NY: John Wiley & Sons, 2005.
63. J. Cruz-Benito, R. Therón y F. J. García-Peñalvo, "Software Architectures Supporting Human-Computer Interaction Analysis: A Literature Review," en *Learning and Collaboration Technologies. Third International Conference, LCT 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17-22, 2016, Proceedings*, P. Zaphiris y I. Ioannou, Eds. Lecture Notes in Computer Science, no. 9753, pp. 125-136, Switzerland: Springer International Publishing, 2016. doi: 10.1007/978-3-319-39483-1_12.
64. J. P. T. Higgins *et al.*, *Cochrane Handbook for Systematic Reviews of Interventions. Version 6.2*. Cochrane Training, 2021. Disponible en: <https://bit.ly/2RgWEgh>
65. A. Hidalgo Landa, I. Szabo, L. Le Brun, I. Owen y G. Fletcher, "Evidence Based Scoping Reviews," *The Electronic Journal Information Systems Evaluation*, vol. 14, no. 1, pp. 46-52, 2011.
66. A. Booth, A. Sutton y D. Papaioannou, *Systematic Approaches to a Successful Literature Review*, 2nd ed. London, UK: Sage, 2016.
67. W. S. Richardson, M. C. Wilson, J. Nishikawa y R. S. Hayward, "The well-built clinical question: a key to evidence-based decisions," *ACP Journal Club*, vol. 123, no. 3, art. A12, 1995. doi: 10.7326/ACPJC-1995-123-3-A12.
68. A. Cooke, S. D. y A. Booth, "Beyond PICO: the SPIDER tool for qualitative evidence synthesis," *Qualitative Health Research*, vol. 22, no. 10, pp. 1435-1443, 2012. doi: 10.1177/1049732312452938.
69. A. Booth, "Clear and present questions: formulating questions for evidence based practice," *Library Hi Tech*, vol. 24, no. 3, pp. 355-368, 2006. doi: 10.1108/07378830610692127.
70. D. Denyer y D. Tranfield, "Producing a systematic review," en *The Sage Handbook of Organizational Research Methods*, D. A. Buchanan y A. Bryman, Eds. pp. 671-689, London, UK: Sage, 2009.
71. T. Ferreras-Fernández, H. Martín-Rodero, F. J. García-Peñalvo y J. A. Merlo-Vega, "The Systematic Review of Literature in LIS: An approach," en *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016)*, F. J. García-Peñalvo, Ed. pp. 291-298, New York, NY, USA: ACM, 2016. doi: 10.1145/3012430.3012531.
72. M. Dixon-Woods *et al.*, "How can systematic reviews incorporate qualitative research? A critical perspective," *Qualitative Research*, vol. 6, no. 1, pp. 27-44, 2006. doi: 10.1177/1468794106058867.
73. A. García-Holgado, S. Marcos-Pablos y F. J. García-Peñalvo, "Guidelines for performing Systematic Research Projects Reviews," *International Journal of Interactive Multimedia and Artificial Intelligence*, vol. 6, no. 2, pp. 136-144, 2020. doi: 10.9781/ijimai.2020.05.005.
74. C. L., "Revisión bibliográfica sistematizada en Ciencias Humanas y Sociales. 2: Búsqueda y Evaluación," en *Methodos. Anuario de Métodos de Investigación en Comunicación Social*, L. C., J. Díaz-Noci y L. Codina, Eds. no. 1, pp. 61-72, Barcelona, España: Universitat Pompeu Fabra, 2020. doi: 10.31009/methodos.2020.i01.06

Referencias

75. S. Marcos-Pablos y F. J. García-Peñalvo, "Decision support tools for SLR search string construction," en *Proceedings TEEM'18. Sixth International Conference on Technological Ecosystems for Enhancing Multiculturality (Salamanca, Spain, October 24th-26th, 2018)*, F. J. García-Peñalvo, Ed. pp. 660-667, New York, NY, USA: ACM, 2018. doi: 10.1145/3284179.3284292.
76. S. Marcos-Pablos y F. J. García-Peñalvo, "Information retrieval methodology for aiding scientific database search," *Soft Computing*, vol. 24, no. 8, pp. 5551-5560, 2020. doi: 10.1007/s00500-018-3568-0.
77. E. Aromataris y D. Riitano, "Constructing a search strategy and searching for evidence. A guide to the literature search for a systematic review.," *American Journal of Nursing*, vol. 115, no. 5, pp. 49-56, 2014. doi: 10.1097/01.NAJ.0000446779.99522.f6.
78. C. Hart, *Doing a Literature Search: A Comprehensive Guide for the Social Sciences*. London: Sage, 2002.
79. L. Codina. (2021). El proceso de búsqueda en revisiones de la literatura: cómo asegurar su consistencia lógica y su adecuación pragmática. En: *Lluís Codina*. Disponible en: <http://bit.ly/3J39ciE>
80. A. Vázquez-Ingelmo, F. J. García-Peñalvo y R. Therón, "Tailored information dashboards: A systematic mapping of the literature," en *Proceedings of the XX International Conference on Human Computer Interaction (Donostia, Gipuzkoa, Spain – June 25 - 28, 2019)* p. Article Number 26, New York, NY, USA: ACM, 2019. doi: 10.1145/3335595.3335628.
81. S. F. Phelps y N. Campbell, "Systematic Reviews in Theory and Practice for Library and Information Studies," *Library and Information Research*, vol. 36, no. 112, pp. 6-15, 2012.
82. S. Keshav, "How to read a paper," *ACM SIGCOMM Computer Communication Review*, vol. 37, no. 3, pp. 83-84, 2007. doi: 10.1145/1273445.1273458.
83. T. van der Zant, M. Kouw y L. Schomaker, "Generative artificial intelligence," en *Philosophy and Theory of Artificial Intelligence*, V. C. Müller, Ed. Studies in Applied Philosophy, Epistemology and Rational Ethics, no. 5, pp. 107-120, Berlin: Springer-Verlag, 2013. doi: 10.1007/978-3-642-31674-6_8.
84. F. J. García-Peñalvo, "Avoiding the Dark Side of Digital Transformation in Teaching. An Institutional Reference Framework for eLearning in Higher Education," *Sustainability*, vol. 13, no. 4, art. 2023, 2021. doi: 10.3390/su13042023.
85. F. J. García-Peñalvo, J. Cruz-Benito, D. Griffiths y A. P. Achilleos, "Virtual placements management process supported by technology: Proposal and firsts results of the Semester of Code," *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje (IEEE RITA)*, vol. 11, no. 1, pp. 47-54, 2016. doi: 10.1109/RITA.2016.2518461.
86. L. Briz Ponce, "Análisis de la efectividad en las Aplicaciones m-health en dispositivos móviles dentro del ámbito de la formación médica," PhD, Programa de Doctorado en Formación en la Sociedad del Conocimiento, Universidad de Salamanca, Salamanca, 2016. Disponible en: <https://goo.gl/4UMpEY>
87. T. Ferreras-Fernández, "Visibilidad e impacto de la literatura gris científica en repositorios institucionales de acceso abierto. Estudio de caso bibliométrico del repositorio Gredos de la Universidad de Salamanca," PhD, Programa de Doctorado en Formación en la Sociedad del Conocimiento, Universidad de Salamanca, Salamanca, España, 2016. Disponible en: <https://goo.gl/rrNeEJ>
88. L. P. S. Dias, J. L. V. Barbosa y H. D. Vianna, "Gamification and serious games in depression care: A systematic mapping study," *Telematics and Informatics*, vol. 35, pp. 213-224, 2018. doi: 10.1016/j.tele.2017.11.002.
89. C. L., "Revisiones bibliográficas sistematizadas en Ciencias Humanas y Sociales. 3: Análisis y Síntesis de la información cualitativa," en *Methodos. Anuario de Métodos de Investigación en Comunicación Social*, L. C., J. Díaz-Noci y L. Codina, Eds. no. 1, pp. 73-87, Barcelona, España: Universitat Pompeu Fabra, 2020. doi: 10.31009/metodos.2020.i01.07.
90. D. Peral-García, J. Cruz-Benito y F. J. García-Peñalvo, "Systematic Literature Review: Quantum Machine Learning and its applications," *arXiv*, art. arXiv:2201.04093v1, 2022. doi: 10.48550/arXiv.2201.04093.
91. A. J. Berlanga y F. J. García-Peñalvo, "Learning Technology Specifications: Semantic Objects for Adaptive Learning Environments," *International Journal of Learning Technology*, vol. 1, no. 4, pp. 458-472, 2005. doi: 10.1504/IJLT.2005.007155.
92. M. J. Casany *et al.*, "Moodbile: A Framework to Integrate m-Learning Applications with the LMS," *Journal of Research and Practice in Information Technology (JRPIT)*, vol. 44, no. 2, pp. 129-149, 2012.
93. F. J. García-Peñalvo y J. García Carrasco, "Educational hypermedia resources facilitator," *Computers & Education*, vol. 44, no. 3, pp. 301-325, 2005. doi: 10.1016/j.compedu.2004.02.004.

Referencias

94. R. J. Light y D. B. Pillemer, *Summing Up: The Science of Reviewing Research*. Cambridge, MA, USA: Harvard University Press, 1984.
95. E. Barnett-Page y J. Thomas, "Methods for the synthesis of qualitative research: a critical review," *BMC Medical Research Methodology*, vol. 9, no. 1, art. 59, 2009. doi: 10.1186/1471-2288-9-59.
96. I. F. del Amo, J. A. Erkoyuncu, R. Roy, R. Palmarini y D. Onoufriou, "A systematic review of Augmented Reality content-related techniques for knowledge transfer in maintenance applications," *Computers in Industry*, vol. 103, pp. 47-71, 2018. doi: 10.1016/j.compind.2018.08.007.
97. P. R. Humanante Ramos, "Entornos Personales de Aprendizaje Móvil (mPLE) en la Educación Superior," PhD, Programa de Doctorado en Formación en la Sociedad del Conocimiento, Universidad de Salamanca, Salamanca, 2016. Disponible en: <https://goo.gl/sc2FUV>
98. A. García-Holgado, "Análisis de integración de soluciones basadas en software como servicio para la implantación de ecosistemas tecnológicos educativos," PhD, Programa de Doctorado en Formación en la Sociedad del Conocimiento, Universidad de Salamanca, Salamanca, 2018. Disponible en: <https://goo.gl/LToHcq>
99. R. Whitemore y K. Knaf, "The integrative review: updated methodology," *Journal of Advanced Nursing*, vol. 52, no. 5, pp. 546-553, 2005. doi: 10.1111/j.1365-2648.2005.03621.x.
100. M. S. Ramírez-Montoya y F. J. García-Peñalvo, "Co-creation and open innovation: Systematic literature review," *Comunicar*, vol. 26, no. 54, pp. 9-18, 2018. doi: 10.3916/C54-2018-01.
101. M. Á. Conde, F. J. Rodríguez-Sedano, C. Fernández-Llamas, J. Gonçalves, J. Lima y F. J. García-Peñalvo, "Fostering STEAM through Challenge Based Learning, Robotics and Physical Devices: A systematic mapping literature review," *Computer Application in Engineering Education*, vol. 29, pp. 46-65, 2021. doi: 10.1002/cae.22354.
102. J. Garrard, *Health Sciences Literature Review Made Easy. The Matrix Method*, 6th ed. Burlington, MA, USA: Jones & Bartlett Learning, 2022.
103. L. Codina. (2022). Análisis y síntesis del conocimiento con una matriz de revisión de la literatura. En: *Lluís Codina*. Disponible en: <http://bit.ly/3HwsQNY>
104. M. S. Ramírez-Montoya y J. R. Valenzuela González Eds., "Innovación educativa: Tendencias globales de investigación e implicaciones prácticas." Barcelona, España: Octaedro, 2019.
105. M. Aria y C. Cuccurullo, "Biblioshiny. Bibliometrix for no coders," K-Synth Srl 2024. Disponible en: <https://d66z.short.gy/Ashzv3>
106. M. Aria y C. Cuccurullo, "bibliometrix: An R-tool for comprehensive science mapping analysis," *Journal of Informetrics*, vol. 11, no. 4, pp. 959-975, 2017. doi: 10.1016/j.joi.2017.08.007.
107. J. J. Randolph, "A Guide to Writing the Dissertation Literature Review. Practical Assessment," *Research & Evaluation*, vol. 14, no. 13, pp. 1-13, 2009.
108. D. Boote y P. Beile, "Scholars before Researchers: On the Centrality of the Dissertation Literature Review in Research Preparation," *Educational Researcher*, vol. 34, no. 6, pp. 3-15, 2005. doi: 10.3102/0013189X034006003.
109. F. J. García-Peñalvo, "The perception of Artificial Intelligence in educational contexts after the launch of ChatGPT: Disruption or Panic?," *Education in the Knowledge Society*, vol. 24, art. e31279, 2023. doi: 10.14201/eks.31279.
110. F. J. García-Peñalvo y A. Vázquez-Ingelmo, "What do we mean by GenAI? A systematic mapping of the evolution, trends, and techniques involved in Generative AI," *International Journal of Interactive Multimedia and Artificial Intelligence*, vol. 8, no. 4, pp. 7-16, 2023. doi: 10.9781/ijimai.2023.07.006.
111. J. Cruz Benito. (2016). *Systematic Literature Review & Mapping*. Disponible en: <https://bit.ly/3db1Fj8>
112. F. J. García-Peñalvo, "Diseminación y divulgación científica," presentado en Tecnológico de Monterrey, Monterrey, México, 2016. Disponible: <https://goo.gl/C5VAQD>. doi: 10.13140/RG.2.1.4131.4329
113. F. J. García-Peñalvo, "Taller Diseminación en Innovación Educativa," presentado en I Congreso Internacional de Tendencias en Innovación Educativa, CITIE 2016, Arequipa, Perú 2016. Disponible: <https://goo.gl/4rPiZn>
114. F. J. García-Peñalvo, "Mapeos sistemáticos de literatura, revisiones sistemáticas de literatura y benchmarking de programas formativos," presentado en Seminario en el Tecnológico de Monterrey, Monterrey (México), 27 y 28 de noviembre, 2017. Disponible: <https://goo.gl/K8Uca1>. doi: 10.5281/zenodo.1067680

Referencias

115. F. J. García-Peñalvo, "Mapping sistemáticos de literatura. Caso práctico de definición usando Parsifal," presentado en Seminario en el Tecnológico de Monterrey, Monterrey (México), 4 de diciembre, 2017. Disponible: <https://goo.gl/QDCpkd>. doi: 10.5281/zenodo.1069690.
116. F. J. García-Peñalvo, "Revisión sistemática de literatura en los Trabajos de Final de Máster y en las Tesis Doctorales," presentado en Seminarios del Programa de Doctorado en Formación en la Sociedad del Conocimiento (16 de marzo de 2017), Salamanca, España, 2017. Disponible: <https://goo.gl/RNn9tP>. doi: 10.5281/zenodo.399302
117. F. J. García-Peñalvo, "Revisión sistemática de literatura para artículos," presentado en Seminario Tecnológico de Monterrey, Monterrey, México, 25 de enero, 2017. Disponible: <https://goo.gl/7nVEmB>. doi: 10.13140/RG.2.2.15223.42403
118. F. J. García-Peñalvo, "Taller de revisión sistemática de literatura," presentado en Taller en el Centro Regional de Formación Docente e Investigación Educativa del Estado de Sonora (CRFDIES) Hermosillo, Sonora, México, 30 de enero, 2017. Disponible: <https://goo.gl/kizkfZ>. doi: 10.13140/RG.2.2.34015.87206
119. F. J. García-Peñalvo, "Revisiones y mapeos sistemáticos de literatura," Recursos docentes de la asignatura Procesos y Métodos de Modelado para la Ingeniería Web y Web Semántica. Máster Universitario en Sistemas Inteligentes. Curso 2018-2019, F. J. García-Peñalvo, Ed., Salamanca, España: Universidad de Salamanca, 2019. [Online]. Disponible en: <https://goo.gl/yt7wKt>. doi: 10.5281/zenodo.2586725
120. F. J. García-Peñalvo, "Método para la revisión sistemática de literatura," Recursos docentes de la asignatura Procesos y Métodos de Modelado para la Ingeniería Web y Web Semántica. Máster Universitario en Sistemas Inteligentes. Curso 2019-2020, F. J. García-Peñalvo, Ed., Salamanca, España: Universidad de Salamanca, 2020. [Online]. Disponible en: <https://bit.ly/38a3Uxl>. doi: 10.5281/zenodo.3692796
121. F. J. García-Peñalvo, "SLR, mappings y meta-análisis," Recursos docentes de la asignatura Procesos y Métodos de Modelado para la Ingeniería Web y Web Semántica. Máster Universitario en Sistemas Inteligentes. Curso 2020-2021, F. J. García-Peñalvo, Ed., Salamanca, España: Universidad de Salamanca, 2021. [Online]. Disponible en: <https://bit.ly/32tc7wm>. doi: 10.5281/zenodo.4700155.
122. F. J. García-Peñalvo, "Las revisiones sistemáticas de la literatura," Doctorado en Gestión Estratégica. Consorcio de Universidades, Perú, 24 de abril de 2021. Salamanca, España: Grupo GRIAL, 2021. [Online]. Disponible en: <https://bit.ly/3ayEYDV>. doi: 10.5281/zenodo.4716246.
123. F. J. García-Peñalvo y A. García-Holgado, "Técnicas para llevar a cabo mapeos y revisiones sistemáticas de la literatura," presentado en Seminarios del Programa de Doctorado Formación en la Sociedad del Conocimiento (3-6 de mayo de 2021), Salamanca, España, 2021. Disponible: <https://zenodo.org/record/4732089>. doi: 10.5281/zenodo.4732089
124. F. J. García-Peñalvo, "Cómo hacer una Systematic Literature Review (SLR)," Plan de Formación del Profesorado de la Universidad Internacional de Valencia (17 y 21 de mayo de 2021), Salamanca, España, 2021. Disponible: <https://zenodo.org/record/4745223>. doi: 10.5281/zenodo.4745223
125. F. J. García-Peñalvo, "Revisiones sistemáticas y meta-análisis en Ciencias Sociales y Humanidades," Sociedad Científica de Bibliometría y Cienciometría, 25 de mayo – 15 de junio de 2021. Salamanca, España: Grupo GRIAL, 2021. [Online]. Disponible en: <https://bit.ly/2Ru5mZk>. doi: 10.5281/zenodo.4777633.

Referencias

126. F. J. García-Peñalvo, "Los métodos de revisión sistemática de literatura," Recursos docentes de la asignatura Procesos y Métodos de Modelado para la Ingeniería Web y Web Semántica. Máster Universitario en Sistemas Inteligentes. Curso 2021-2022, F. J. García-Peñalvo, Ed., Salamanca, España: Universidad de Salamanca, 2022. [Online]. Disponible en: <https://bit.ly/3vy0MdZ>. doi: 10.5281/zenodo.6320299
127. F. J. García-Peñalvo, "La sistematización del proceso de revisión del estado de la cuestión," Plan de Formación del Profesorado de la Universidad Internacional de Valencia (31 de marzo y 4 de abril de 2022), Salamanca, España, 2022. Disponible: <https://bit.ly/3LddrHL>. doi: 10.5281/zenodo.6384489
128. F. J. García-Peñalvo y A. García-Holgado, "La revisión sistemática de literatura en las tesis doctorales," presentado en Seminarios del Programa de Doctorado Formación en la Sociedad del Conocimiento (10 de mayo de 2022), Salamanca, España, 2022. Disponible: <https://bit.ly/3w9WoAr>. doi: 10.5281/zenodo.6522136
129. F. J. García-Peñalvo, "Metodología para la revisión sistemática de literatura," presentado en la Facultad Psicología de la Pontificia Universidad Católica del Perú (7 de octubre de 2022), Salamanca, España, 2022. Disponible: <https://bit.ly/3Cbg7mF>. doi: 10.5281/zenodo.7144360
130. F. J. García-Peñalvo, "Importancia de las revisiones sistemáticas de literatura," presentado en la Jornada Científica Internacional Estado de la Ciencia y de la Tecnología – 2022, Universidad Nacional Pedro Ruiz Gallo, Perú (13 de octubre de 2022), Salamanca, España, 2022. Disponible: <https://bit.ly/3fMkJrB>. doi: 10.5281/zenodo.7185161
131. F. J. García-Peñalvo, "¿Cómo realizar una revisión sistemática de literatura?," presentado en la ETSI de la Universidad Politécnica de Madrid (12 de diciembre de 2022), Salamanca, España, 2022. Disponible: <http://bit.ly/3uaA09w>. doi: 10.5281/zenodo.7381345
132. F. J. García-Peñalvo, "Revisiones sistemáticas de literatura: métodos y herramientas," Recursos docentes de la asignatura Procesos y Métodos de Modelado para la Ingeniería Web y Web Semántica. Máster Universitario en Sistemas Inteligentes. Curso 2022-2023, F. J. García-Peñalvo, Ed., Salamanca, España: Universidad de Salamanca, 2023. [Online]. Disponible: <https://bit.ly/3YJ95P7>. doi: 10.5281/zenodo.7725299
133. F. J. García-Peñalvo, "El rol de las revisiones sistemáticas de literatura en las tesis doctorales: Procesos y herramientas," presentado en Seminarios del Programa de Doctorado Formación en la Sociedad del Conocimiento (19 de abril de 2023), Salamanca, España, 2023. Disponible: <https://bit.ly/41btE8Y>. doi: 10.5281/zenodo.7831074
134. F. J. García-Peñalvo, "Systematic Literature Reviews como método de investigación," Plan de Formación del Profesorado de la Universidad Internacional de Valencia (20 y 25 de abril de 2023), Salamanca, España, 2023. Disponible: <https://bit.ly/41bvCWL>. doi: 10.5281/zenodo.7830939

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