

Revisões da literatura integrando ferramentas de IA

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Revisão exploratória: descobrir o terreno e os vossos intentos



Caminho difuso e de obstáculos

Muitos caminhos e opções

Constatar objetivos e prioridades

Revisão exploratória: descobrir o terreno e os vossos intentos

Aperceber-se das alternativas
para se escolher em
consciência

**Caminho difuso e de
obstáculos**

**Muitos caminhos e
opções**

**Constatar objetivos
e prioridades**



Revisão exploratória: descobrir o terreno e os vossos intentos

Tomar consciência das potenciais dificuldades.

Caminho difuso e de obstáculos

Muitos caminhos e opções

Constatar objetivos e prioridades



Revisão exploratória: descobrir o terreno e os vossos intentos



Caminho difuso e de obstáculos

Muitos caminhos e opções

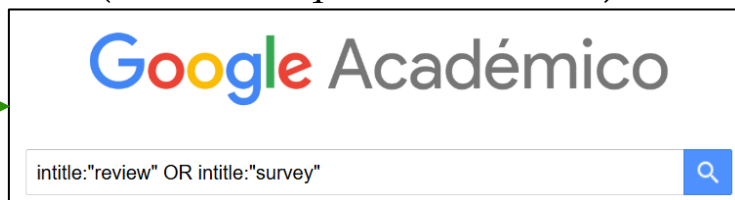
Descobrir, enfim, onde pretendeis investir o vosso esforço.

Constatar objetivos e prioridades

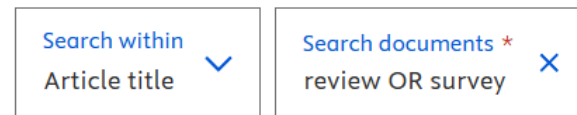
Terminologia e locais de busca

review
survey

Artigos panorâmicos, que analisaram uma área, tema, problema... permitindo ter uma noção geral e atual (à data em que foram feitos).



<https://scholar.google.com/>



<https://www.scopus.com/>

predadoras

Revistas e conferências que não se preocupam com a qualidade dos trabalhos, apenas visam obter dos autores e instituições o pagamento da sua publicação.

Morgado, Leonel (2018). Recomendações na escolha de revistas e conferências para iniciar revisões bibliográficas e publicação: bom senso e necessidade de fugir a editoras predadoras - <http://hdl.handle.net/10400.2/7333>

indexadas

Revistas e conferências que constam em listas geridas por entidades que exigem práticas de qualidade e seriedade. Mas o grau de exigência varia muito e também há entidades de indexação que são fraudulentas.



Como aceder aos artigos?

Em geral, o scholar.google.com faculta ligações diretas para os artigos e até para os PDF.



Para os que não estiverem em acesso aberto, gratuito, é necessário usar as bibliotecas online:



Para tal, introduzem-se as credenciais institucionais (*login* de estudante) diretamente nos sítios Web das editoras e/ou das bibliotecas, ou acede-se por VPN:



<https://portal.uab.pt/si/ligacao-vpn/>
<https://eduvpn.utad.pt/>



E se não estiverem disponíveis assim?

Procurar o nome exato (“entre aspas”) no Google geral; muitos estão disponíveis algures:



Outros encontram-se em repositórios não totalmente indexados pela Google:



<http://www.researchgate.net/>

academia.edu

<https://www.academia.edu/>

Ou no Robim dos Bosques do acesso livre e gratuito à ciência:



sci-hub

to open science

<https://sci-hub-links.com/where-is-sci-hub-now/>

Ou pedindo cópias a colegas de outras instituições, em grupos das redes sociais, como por ex. (há muitos outros, nas mais variadas redes):

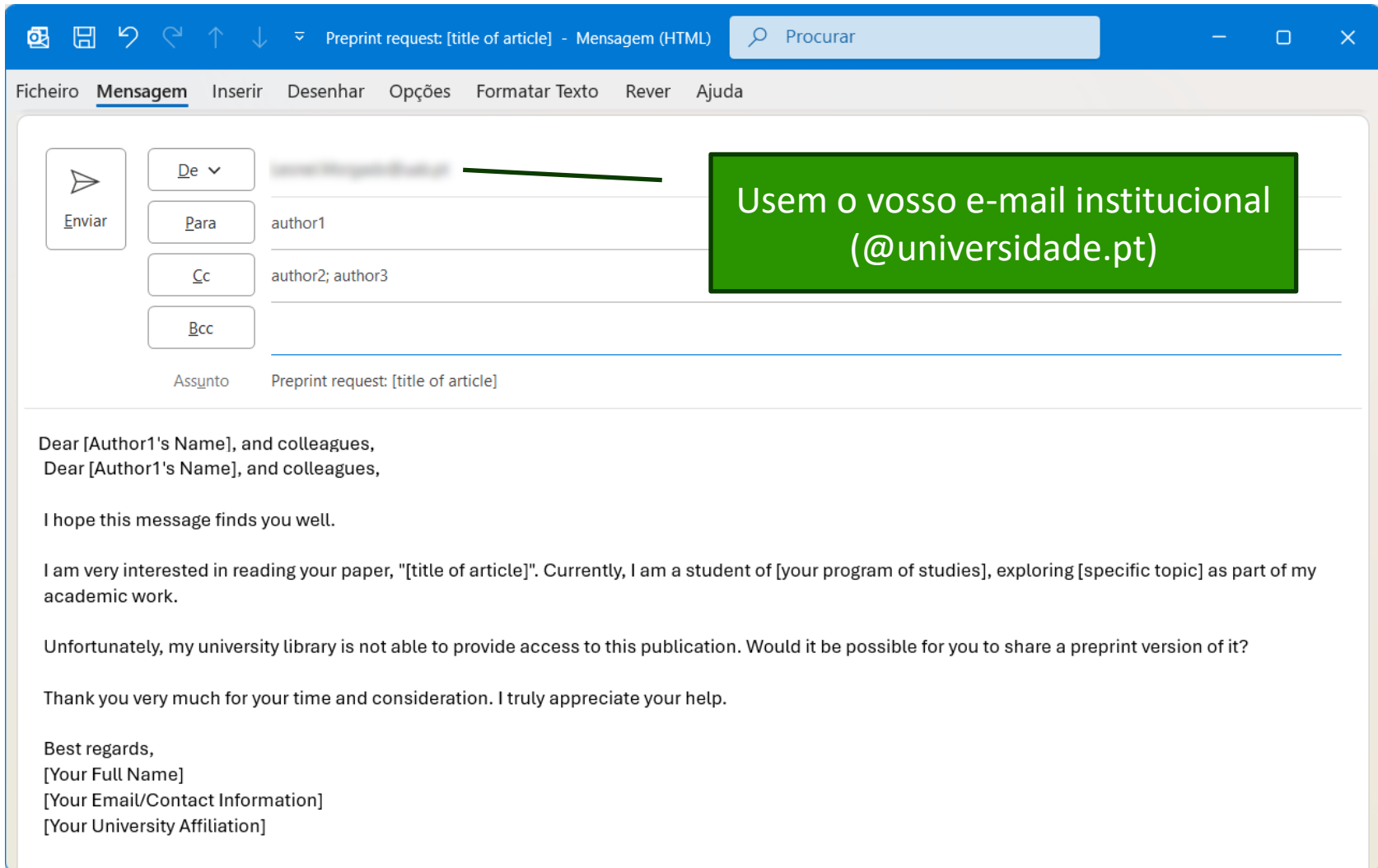


<https://www.facebook.com/groups/150621641784982/>

j'ai besoin d'un article scientifique

E se nem dessas formas?

Pode contactar os autores solicitando uma cópia *preprint* (pré-publicação), muitos terão todo o gosto em fornecer-lha:



Preprint request: [title of article] - Mensagem (HTML) Procurar

Ficheiro **Mensagem** Inserir Desenhar Opções Formatar Texto Rever Ajuda

Enviar

De [Redacted]

Para author1

Cc author2; author3

Bcc

Assunto Preprint request: [title of article]

Use o vosso e-mail institucional (@universidade.pt)

Dear [Author1's Name], and colleagues,
Dear [Author1's Name], and colleagues,

I hope this message finds you well.

I am very interested in reading your paper, "[title of article]". Currently, I am a student of [your program of studies], exploring [specific topic] as part of my academic work.

Unfortunately, my university library is not able to provide access to this publication. Would it be possible for you to share a preprint version of it?

Thank you very much for your time and consideration. I truly appreciate your help.

Best regards,
[Your Full Name]
[Your Email/Contact Information]
[Your University Affiliation]

A ideia primeiro abre-se (revisão exploratória)...

Ainda conhecemos
poucas alternativas de
busca...

Ainda mal sabemos em
que consiste a área...



...depois afina-se (revisão focada).



Já sabemos onde
aplicar o esforço...



Já podemos ignorar
alguns aspetos...

É uma jornada até um tema focado.

1

Definição do âmbito

Conceito

Contexto

Perspetiva

2

Encontrar as evidências

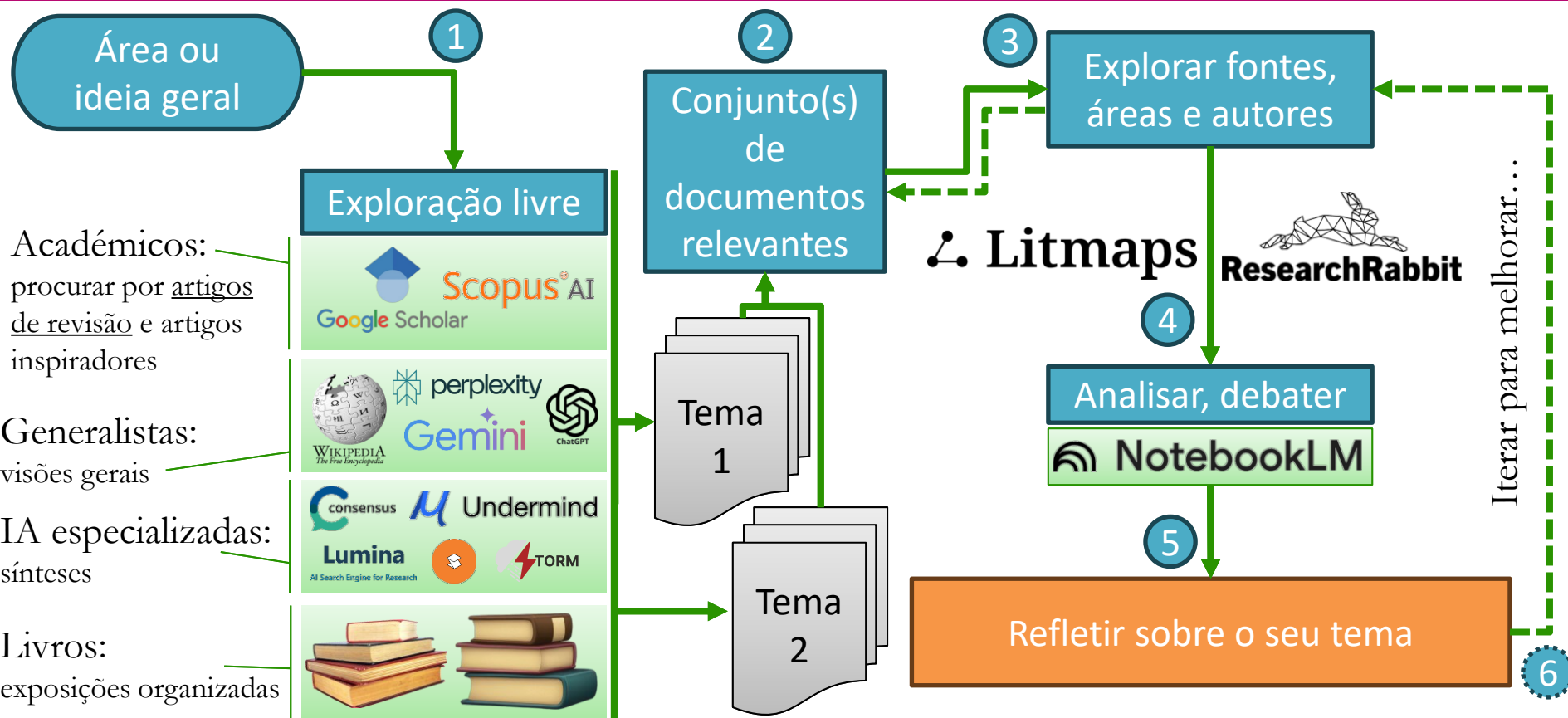
“Estado da arte”: conhecimento atual e suas lacunas

3
Se houver necessidade de atualização...

Revisão sistemática do tema focado



Primeira etapa: definição do âmbito



zotero

Referências organizadas

Obsidian

Notas organizadas

Conceito

Contexto

Perspetiva

Exemplo 1 – Buscas no Google Scholar

Google Académico (intitle:"review" | intitle:"survey") "immersive learning"

Cerca de 1 860 resultados (0,16 seg)

Artigos

Sempre

Desde 2024

Desde 2023

Desde 2020

Intervalo específico...

Ordenar por relevância

Ordenar por data

Qualquer idioma

Pesquisar páginas em Português

Qualquer tipo

Artigos de revisão

incluir patentes

incluir citações

Criar alerta

Exploring **immersive learning** experiences: A **survey**
MA Kuhail, A ElSary, S Farooq, A Alghamdi - Informatics, 2022 - mdpi.com
... The purpose of this work was to conduct a systematic **review** of the **immersive learning** experiences to understand their fields of applications, types of immersive technologies, the role of ...
☆ Guardar Citar Citado por 83 Artigos relacionados Todas as 5 versões Importar para BibTeX

Finding the gaps about uses of **immersive learning** environments: a **survey** of surveys
D Beck, L Morgado, P O'Shea - Journal of Universal ..., 2020 - repositorioaberto.uab.pt
... Our focus in this **survey** of surveys was to assemble a panorama of accounts of use of **immersive learning** environments, and from that panorama extract current research gaps. ...
☆ Guardar Citar Citado por 63 Artigos relacionados Todas as 3 versões Importar para BibTeX

Immersion learning frameworks: A systematic literature **review**
FA Fernandes, CSC Rodrigues... - IEEE Transactions ..., 2023 - ieeexplore.ieee.org
... of **immersion learning** were adopted in primary studies? 2) what are the types of frameworks and how do they support **immersion learning**? ... outcomes, the term **Immersion Learning** (IL) is ...
☆ Guardar Citar Citado por 16 Artigos relacionados Todas as 4 versões Importar para BibTeX

Investigating **immersion learning** technology intervention in architecture education: a systematic literature **review**
A Ummihusna, M Zairul - Journal of Applied Research in Higher ..., 2022 - emerald.com
... This study intends to **review** the existing studies on the application of **immersion learning** technology (ILT) in architecture education field. A systematic literature **review** (SLR) was ...
☆ Guardar Citar Citado por 50 Artigos relacionados Todas as 5 versões Importar para BibTeX

[PDF] Exploring **Immersion Learning** Experiences: A **Survey**. Informatics 2022, 9, 75
MA Kuhail, A ElSary, S Farooq, A Alghamdi - 2022 - zuscholars.zu.ac.ae
... **immersion learning** experiences applied in a classroom setting or offered to the public. This study presents a systematic **review** of ... , and compare our findings with related **review** studies. ...
☆ Guardar Citar Citado por 2 Artigos relacionados Importar para BibTeX

[HTML] **Immersion Learning**: A Systematic Literature **Review** on Transforming Engineering Education Through Virtual Reality
AR Muzata, G Singh, MS Stepanov, I Musonda - Virtual Worlds, 2024 - mdpi.com
... VR, enabling teachers to create **immersion learning** experiences in addition to conventional literature **review** with an in-depth analysis of the changing environment of **immersion learning**. ...
☆ Guardar Citar Artigos relacionados Importar para BibTeX

[HTML] Learning outcomes of immersion technologies in health care student education: systematic **review** of the literature
GV Ryan, S Callaghan, A Rafferty, MF Higgins... - Journal of medical ..., 2023 - jmir.org
... Therefore, the availability and development of VPs and **immersion learning** environments can play a key role in the future as an adjunct to developing clinical skills for students at all ...
☆ Guardar Citar Citado por 139 Artigos relacionados Todas as 10 versões Importar para BibTeX

Usar "intitle:" para impor termos nos títulos

Indicativos do tipo de trabalho: *review*, *survey*
Ou palavras-chave da área...

Muitos? Filtrar por datas.

Teor geral? Excertos!

Área, tipo? Local de publicação!

Área da revista ou conferência...

Tem a máxima cobertura, mas inclui publicações científicas com baixa credibilidade.

Exemplo 2 – Buscas no Scopus

Scopus 20 | Empowering discovery since 2004

Welcome to a more intuitive and efficient search experience. See what is new

Search within: Article title, Abstract, Keywords | Search documents: "Immersion Learning"

Save search | Set search alert | Add search field

Documents | Preprints | Patents | Secondary documents | Research data

1,826 documents found

Refine search: Search within results

Filters: Year (Range/Individual), Author name, Subject area

Document type: Article (7), Conference paper (3), Book (1), Review (1)

Publication stage: Keyword, Affiliation, Funding sponsor, Country/territory, Source type (Journal: 8, Conference proceeding: 2, Book: 1, Book series: 1), Language, Open access

Document title	Authors
1. Impact of the use of Virtual Reality glasses on student's learning: an empirical study Impacto del uso de gafas de Realidad Virtual en el aprendizaje de los alumnos: un estudio empírico	Díaz García, V., Carrero Márquez, O., García Chamizo, F.
2. Transforming Education with Photogrammetry: Creating Realistic 3D Objects for Augmented Reality Applications	Ravichandran, K., Mohan, V.
3. Breaking the Bottleneck: Generative AI as the Solution for XR Content Creation in Education	Linares-Pellicer, J., Izquierdo-Domenech, J., Ferri-Molla, I., Aliaga-Torro, C.

Muitas opções de busca (não só "ou títulos ou tudo" como no Google Scholar).

Indicativos do tipo de trabalho: *review*, *survey*
Ou palavras-chave da área...

Filtrar por datas com mais noção.

Aceder logo ao resumo.

Filtrar por área efetiva e outros critérios.

Menor cobertura: só fontes indexadas... mas de maior credibilidade.

Exemplo 3 – Consulta de IA generalista

perplexity

+ Espaço / What is the state of the art in immersive learning?

Nova... Ctr1 I

Inicio

Descobrir

Espaços

Biblioteca

What is the state of the art in

What is the state of the art in immersive learning?

Fontes

- State-of-the-Art Immersive Technology Suite - Trafford College
trafford.tscg.ac
- Immersive Learning: The Next Frontier of Higher Education
campustechnology
- What is Immersive Learning? - Thinkific
thinkific

Mostrar todos

Perplexity

Immersive learning is at the forefront of educational innovation, leveraging cutting-edge technologies to create engaging, interactive, and experiential learning environments. The state of the art in immersive learning encompasses several key aspects:

Advanced Technologies

Immersive learning utilizes state-of-the-art technologies such as:

- Virtual Reality (VR): Fully immersive digital experiences that transport learners to simulated environments 3.
- Augmented Reality (AR): Overlays digital information onto the real world, enhancing learning experiences 3.
- Mixed Reality (MR): Combines elements of both VR and AR for a hybrid experience 3.
- Extended Reality (XR): An umbrella term encompassing VR, AR, and MR technologies 4.

These technologies are being integrated into classrooms and training programs to create more engaging and effective learning experiences 2 3.

Innovative Learning Spaces

Educational institutions are investing in advanced facilities to support immersive learning:

- Trafford and Stockport College's 'Innovate Suite': A state-of-the-art CAVE (Cave Automatic Virtual Environment) that immerses students in interactive 3D environments 1.
- Meta's initiative: Donating equipment and resources to 15 U.S. universities to make classrooms more immersive 2.

Industry Involvement

Major tech companies are actively contributing to the advancement of immersive learning:

- Apple: Developing AR tools like ARKit and Swift Playgrounds for interactive learning experiences 2.
- Google: Integrating generative AI with databases to enhance user experience in education 2.
- IBM: Utilizing AI and machine learning to personalize learning experiences 2.

Applications and Benefits

Immersive learning is being applied across various disciplines and offers numerous advantages:

- Enhanced engagement: Students feel like they're at the center of the action, activating multiple senses and increasing understanding 3.
- Hands-on education: Provides tactile learners with practical, experiential learning opportunities 3.
- Distraction-free environment: VR headsets have shown to increase test scores by 5-10% by minimizing external distractions 3.

Perguntar acompanhamento

Perguntar livremente

Ver com consciência crítica que fontes são usadas. Geralmente serão um misto de generalistas, académicas... ou omissas.

Ver que diferentes temas surgem. Já tínhamos pensado em todos? Que terminologia surge?

Usar cointeligência: discutir os resultados, debater alternativas, detalhes, critérios...

Sendo generalistas, tenderão a ir a lugares-comuns ou a posições mais consensuais face ao treino que receberam.

Tenderão a misturar fontes primárias com secundárias (textos generalistas) e a alucinar ou especular.

Exemplo 4 – Consulta de IA especializadas

The screenshot displays the Undermind research platform interface. At the top, there's a navigation bar with 'Home', 'Search', 'History', 'Pricing', and 'Logout'. The main content area is divided into several sections: 'Research topic', 'Discuss the results with an expert', 'References', and a 'Table of Contents' for the selected article. The article title is 'Effectiveness of immersive learning methodologies in ensuring skill transfer to job tasks for manufacturing workers'. Below the title, there are buttons for 'Share this report', 'Save to favorites', and search filters. The 'Discuss the results with an expert' section includes a text input for questions and buttons for actions like 'Create a table comparing the top results'. The 'References' section shows a list of papers with columns for 'Topic Match', 'CIT/Year', 'Year', and 'Paper'. The 'Table of Contents' on the right lists sections like 'summary', 'Historical Context', 'Technologies Used in Immersive Learning', 'Pedagogical Approaches', and 'Challenges and Limitations'. Three purple callout boxes are overlaid on the image, containing text in Portuguese.

Cada IA é diferenciada no que faz.

As referências são artigos científicos reais.

Abrem uma diversidade grande de perspectivas possíveis.

Os critérios que elas usam podem não ser os que vós assumis.

Podem não detetar usos incoerentes dos termos entre as fontes.

State of the art on immersive learning for manufacturing on effective application of skills to the workplace

summary

Immersive learning for manufacturing represents a transformative approach to workforce training, utilizing advanced technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR) to enhance the application of skills in real-world scenarios. As the manufacturing sector grapples with a significant skills gap—projected to contribute to a shortage of 2.1 million jobs by 2030—immersive learning has emerged as a critical solution to prepare a competent workforce equipped to meet modern challenges.^{[1][2]} By fostering engaging and interactive environments, these technologies not only facilitate hands-on practice but also bridge the divide between theoretical knowledge and practical application, significantly improving skill retention among trainees. **The notable advantages of immersive learning in manufacturing include the ability to simulate realistic scenarios, improve safety protocols, and promote a culture of continuous improvement.** This method enables employees to practice skills in a safe setting, reducing the risks associated with traditional training methods.^{[3][4]} Furthermore, immersive learning strategies often incorporate elements such as storytelling and gamification, which enhance learner engagement and motivation, leading to more effective training outcomes.^{[5][6]} **Despite its benefits, the implementation of immersive learning technologies is not**

concerns also present significant challenges as these technologies collect sensitive information during training sessions.^[10] **Overall, immersive learning stands as a promising avenue for**

increasingly recognized the limitations of conventional training—particularly in addressing the skills gap and preparing a workforce for modern challenges—immersive learning began to gain traction. A notable statistic highlights this need, with 63% of manufacturers expressing concern that young entrants into the workforce lack the necessary skills, and Deloitte projecting a potential shortage of 2.1 million jobs by 2030^{[2][3]}. The integration of immersive technologies such as augmented reality (AR), virtual reality (VR), and mixed reality (MR) into manufacturing training has transformed the landscape, allowing for lifelike scenarios that enhance skill acquisition and retention. These technologies facilitate hands-on simulations, enabling employees to engage with equipment operations and safety protocols in a safe, controlled environment^{[4][5]}. Furthermore, storytelling and scenario-based learning emerged as essential components of immersive training. By developing narratives within the training environment, organizations have found that they can significantly enhance the learning

Exemplo 5 – Consulta de livros

Nos livros...



books.google.com › books · Traduzir esta página
Immersive Education: Designing for Learning

Paula MacDowell, Jennifer Lock · 2023
This book focuses on designing and being a designer of immersive education.

Pré-visualizar Mais edições



books.google.com › books · Traduzir esta página
The Immersive Classroom: Create Customized Learning ...

Jaime Donally · 2022
With this book, readers gain insights into customizing tools through app hacking and app smashing, and discover how pushing the use of augmented reality (AR) and virtual reality (VR) tools beyond their intended purpose can maximize their ...

Pré-visualizar Mais edições



books.google.com › books · Traduzir esta página
Implementing Augmented Reality Into Immersive Virtual ...

Russell, Donna · 2020
While highlighting the benefits for virtual reality, its role in remote learning, the logistics of simulation, and branches of it such as gamification, this book is ideally intended for teachers, school administrators, teacher educators, ...

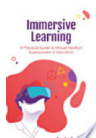
Pré-visualizar Mais edições



books.google.com › books · Traduzir esta página
Immersive Learning: Designing for Authentic Practice

Koreen Olbrish Pagano · 2013
Use immersive learning design to train others using new technology. Discover a framework for thinking in terms of immersive learning design. Outline the process of designing for immersion.

Pré-visualizar Mais edições



books.google.com › books · Traduzir esta página
Immersive Learning: A Practical Guide to Virtual Reality's ...

Craig Frehlich · 2020
Some say power is influence. If this is true, then virtual reality has "superpowers" because of its ability to make the unreal viscerally real, engaging and immersive.

Pré-visualizar Mais edições



books.google.com › books · Traduzir esta página
Creating Immersive Learning Experiences Through Virtual ...

Mazhar Hussain, Shaik, Nawaz Hakro, Ahmed · 2024
This book provides case studies, evidence-based knowledge and practical guidance regarding ethical concerns, theoretical foundations, practical applications, and pedagogical strategies.

Pré-visualizar

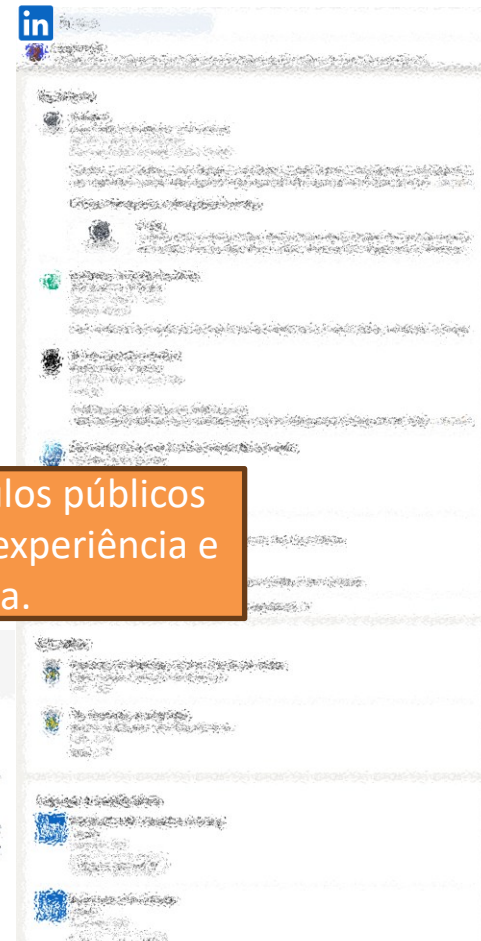
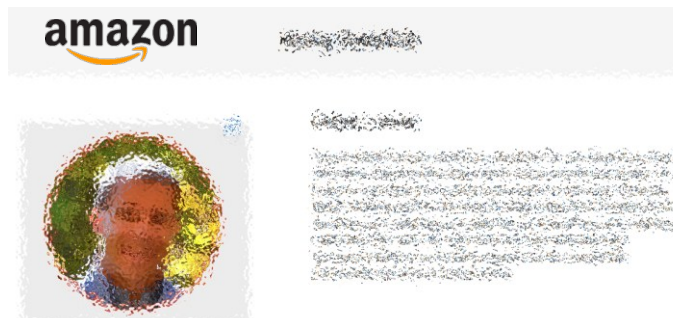
Preface

Introduction

1	VR and Conceptual Understanding	
2	The Importance of VR Lesson Guides	5
3	Cooperative Learning and VR	9
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	Appendix A	45
	VR Lesson Guides for Cooperative Learning and Communication	45
	Lesson Guide: Cooperation and Working as a Team	46
	Lesson Guide: Effective Decision-Making under Pressure	48
	Lesson Guide: Effective Two-Way Communication	50

...os autores estruturaram a informação sobre o tema.

...e podemos explorar os currículos públicos dos autores, para ver as bases, experiência e posicionamento que têm na área.



Análise de subconjuntos de artigos relevantes

The screenshot displays the ResearchRabbit interface with several key sections:

- Left Panel:** Shows a collection named "Knowledge Tree of IL" with three papers listed. A green arrow points from the "Add Papers" button to a callout box.
- Center Panel:** Displays "3 Selected Papers" and options to "Remove from" or "Add to Other Collection". It also features "EXPLORE PAPERS" (Similar Work: 523, Earlier Work, Later Work: 2), "EXPLORE PEOPLE" (These Authors: 22, Suggested Authors: 46), "EXPLORE OTHER CONTENT" (Linked Content), and "EXPORT PAPERS" (BibTeX, RIS, CSV).
- Right Panel:** Shows "Similar Work" with a list of papers and a "Connections between your collection and 50 papers" network graph. The graph is titled "Network" and "Timeline", with labels for "First Author" and "Last Author". A green arrow points from the "BibTeX" export option to a callout box.

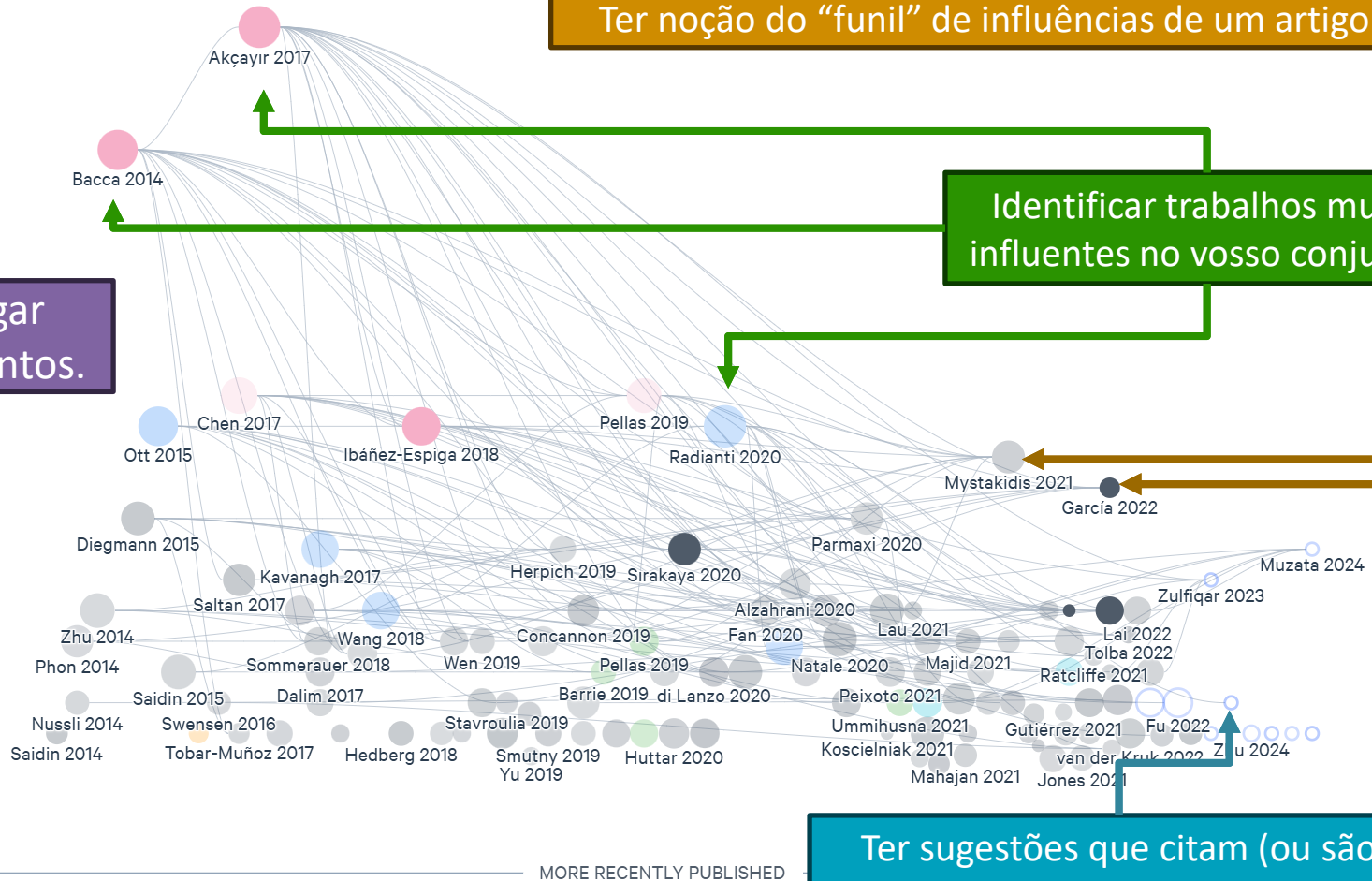
Two callout boxes provide additional context:

- Green Callout (top left):** "Importar ou exportar para o Zotero ou outras ferramentas." (Import or export to Zotero or other tools.)
- Orange Callout (top right):** "Ver especialmente as temáticas associadas e sugestões de artigos." (Check especially the associated themes and article suggestions.)
- Blue Callout (bottom right):** "Ver especialmente relações de coautoria, citação..." (Check especially relationships of co-authorship, citation...)

Análise de subconjuntos de artigos relevantes

 Litmaps

- VR
- 360 video
- Alternate Reality
- MR & XR
- AR



Ter noção do “funil” de influências de um artigo.

Identificar trabalhos muito influentes no vosso conjunto.

Catalogar subconjuntos.

Ter sugestões que citam (ou são citadas por) artigos deste conjunto.

MORE CONNECTED

MORE RECENTLY PUBLISHED

Refletir – Conceito, Contexto, Perspetiva

Deveis identificar o vosso intento

Concretizá-lo sob a forma de...

Conceito

Contexto

Perspetiva

intento



Refletir – Conceito, Contexto, Perspetiva



Conceito

É a área geral do problema. A sua ideia geral, a área de interesse, a temática que pretende explorar



Contexto

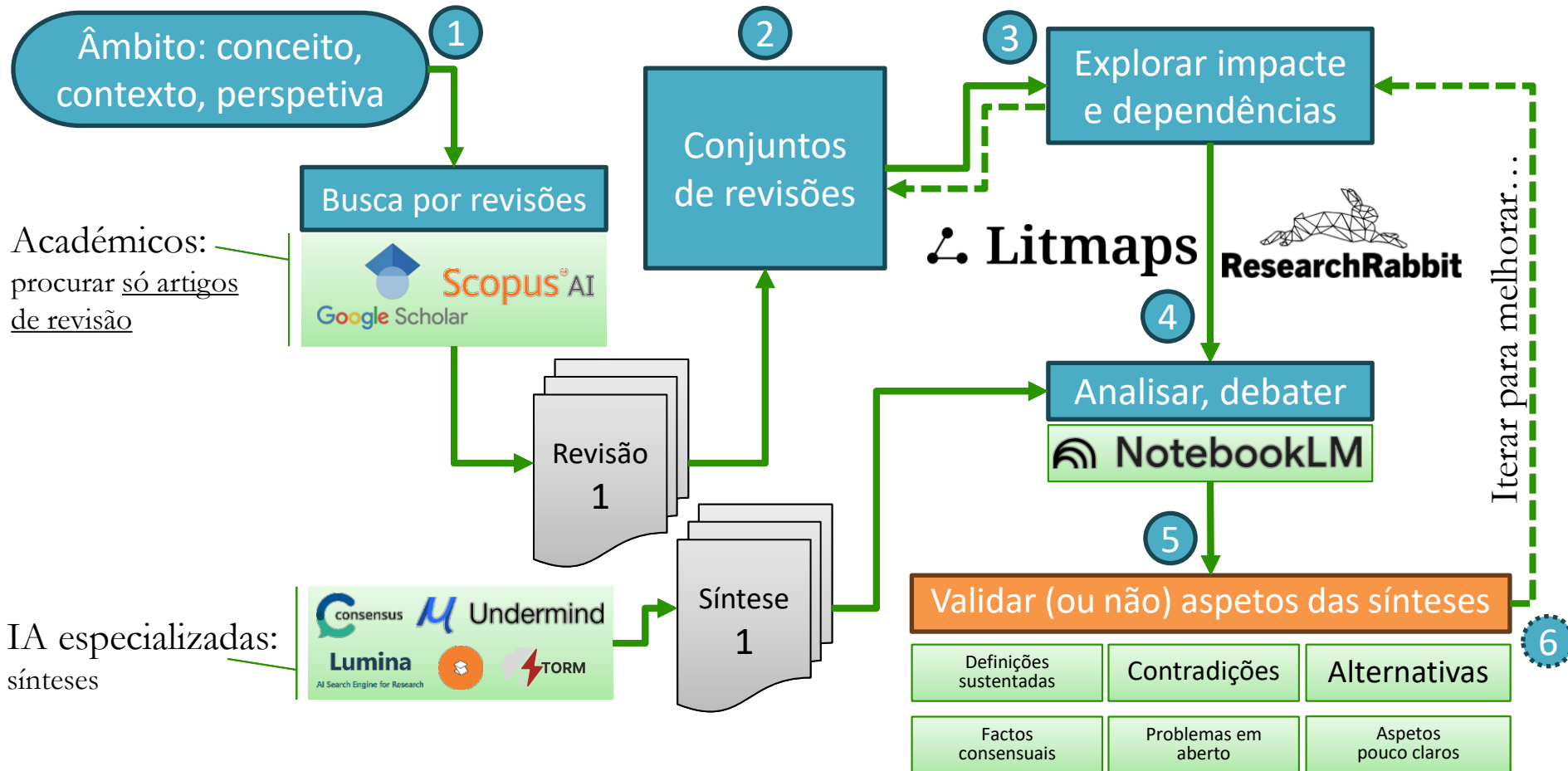
É a delimitação da área na qual pretende analisar o **conceito**. Onde é que o conceito surge, onde é aplicado, quem está envolvido, etc. – são formas de delimitar o conceito



Perspetiva

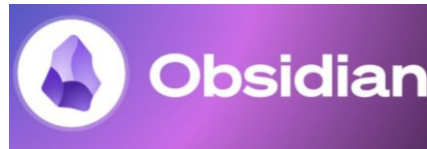
É a forma pela qual pretende abordar o **conceito** nesse **contexto**. Deve clarificar a intenção geral.

Segunda etapa: encontrar as evidências



zotero

Referências organizadas



Notas organizadas

“Estado da arte”: conhecimento atual e suas lacunas

Se for preciso, avançar para a terceira etapa:
revisão sistemática da literatura (...nos próximos episódios 😊)



Como ler e escolher, neste processo todo?



Escolher primeiro só por título e local de publicação!

("Talvez" significa que interessa nesta fase – só usamos este critério para excluir.)

The screenshot shows a search engine interface with the query "immersive learning" "master students". The results are filtered by "Académico" and show approximately 250 results. The first three results are highlighted with blue arrows pointing to explanatory boxes on the right. The first result is titled "INTERACTIVE TECHNOLOGIES IN ENHANCING ENGLISH LANGUAGE PROFICIENCY FOR STUDENTS OBTAINING MASTER'S DEGREE IN MANAGEMENT ...". The second is "EXPLORING NEW REALITIES: UNIVERSITY STUDENTS' VIEWS ON IMMERSIVE TECHNOLOGY IN EDUCATION". The third is "A holistic approach to academic competences: Creating an immersive learning experience". The fourth result is "Engaging students in COVID times with immersive learning and Self-driven Challenge Based Learning". The fifth result is "CREATING AN IMMERSIVE LEARNING ENVIRONMENT IN THE NETWORKING LAB: IMPROVING STUDENTS' LEARNING AND RESULTS THROUGH DESIGN ...".

O que pretendíamos, ao procurar isto?

Exemplos:

Título: se não queríamos sobre aprender língua inglesa, este ignora-se.

Título: se não queríamos sobre as perspetivas dos estudantes, este ignora-se.

Local: se não queremos uma perspetiva de engenharia, este ignora-se.

Etc. ●
●
●

Depois só pelo resumo!

("Talvez" significa que interessa nesta fase – só usamos este critério para excluir.)

Scopus 20 | Empowering discovery since 2004

Search within All fields

Search documents * "Immersive learning" "master students"

+ Add search field Reset Search

Documents Preprints Patents Secondary documents Research data

12 documents found

All Export Download Citation overview More Show all abstracts Sort by Date (newest)

Document title	Authors	Source	Year
1 Group virtual reality simulation in the adult nursing curriculum: Student and lecturer experiences	Godbold, R., Cairnduff, K.	British Journal of Nursing, 33(19), pp. 922–929	2024
2 Virtual Reality in Fluid Power Education: Impact on Students' Perceived Learning Experience and Engagement	Azzam, I., Elbreidi, K., Breidi, F., Molas, C.	Education Sciences, 14(7), 764	2024
3 Immersive Storytelling and Gamification Elements as a Tool for Foreign Language Epideictic Speech Development	Odinokaya, M., Krylova, E., Pyatnitsky, A., Simonyan, A.	Lecture Notes in Networks and Systems, 1204 LNNS, pp. 162–188	2024

O que pretendíamos, ao procurar isto?

Vendo só os resumos, pode-se rapidamente avaliar se o trabalho não é para o nosso foco.

The significance of practical experience and visualization in the fluid power discipline, highly tied to students' success, requires integrating immersive pedagogical tools for enhanced course delivery, offering real-life industry simulation. This study investigates the impact of using virtual reality (VR) technology as an instructional tool on the learning and engagement of 48 mechanical engineering technology (MET) students registered in the MET: 230 Fluid Power course at Purdue University. An interactive VR module on hydraulic grippers was developed utilizing the constructivist learning theory for MET: 230 labs, enabling MET students to explore light- and heavy-duty gripper designs and operation through assembly, disassembly, and testing in a virtual construction environment. A survey consisting of a Likert scale and short-answer questions was designed based on the study's objective to evaluate the students' engagement and perceived attitude toward the module. Statistical and natural language processing (NLP) analyses were conducted on the students' responses. The statistical analysis results revealed that 97% of the students expressed increased excitement, over 90% reported higher engagement, and 87% found the VR lab realistic and practical. The NLP analysis highlighted positive themes such as "engagement", "valuable experience", "hands-on learning", and "understanding", with over 80% of students endorsing these sentiments. These findings will contribute to future efforts aimed at improving fluid power learning through immersive digital reality technologies, while also exploring alternative approaches for individuals encountering challenges with such technologies.

Etc. ●
●
●

Ao ler os restantes, usar o método das três passagens de Keshav

How to Read a Paper

S. Keshav

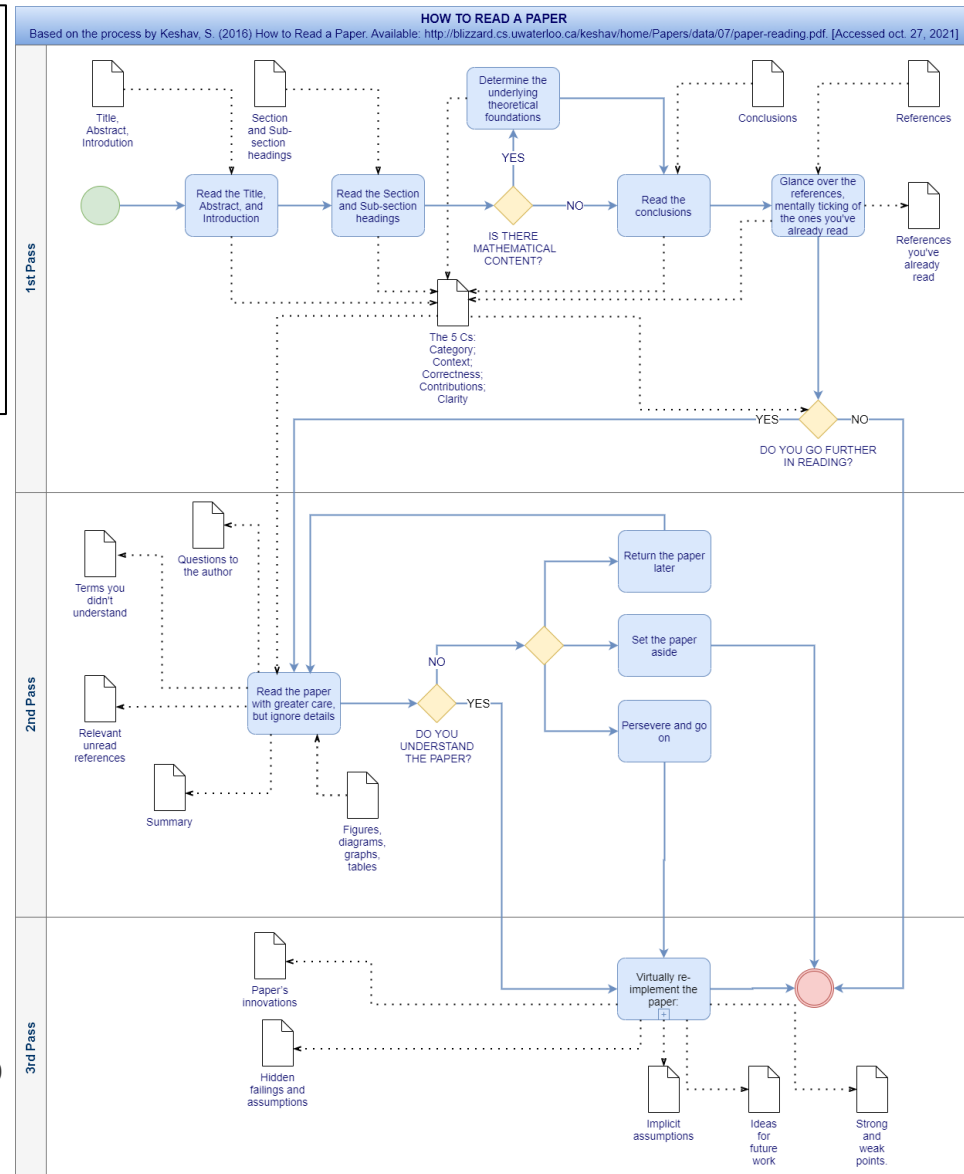
David R. Cheriton School of Computer Science, University of Waterloo
Waterloo, ON, Canada
keshav@uwaterloo.ca

Permite evitar dispersões e poupar tempo, porque em cada uma das três etapas se pode determinar:

- se o artigo é relevante para nós;
- como é que é relevante (para que o vamos ler).

Diagrama do processo de "How to Read a Paper" de S. Keshav (2016)

<http://hdl.handle.net/10400.2/11312>



Ao fazer as leituras, atenção a... (1)

Ferfolja, T.; Burnett, L. (2002).

Getting Started on Your Literature Review – A General Guide for Postgraduate Research Students.

<http://www.lc.unsw.edu.au/onlib/pdf/Litrev.pdf>

In 1984, Jenny Cushman, in her **perceptive** article, 'The Chinese community in Australian historiography' made a passionate plea for historians to move away from studies of Australian attitudes to "relocate the Chinese experience within the Chinese community itself". She further urged researchers to investigate the way Chinese customs, legal notions and kinship relations were adapted to the Australian physical and social environment. **It is tempting to credit** many of the succeeding changes to Cushman's appeal. However, the new approaches **must** be viewed within the context of the changing tide of historiography and the impact of 'multiculturalism'.

Attitude marker: words or phrases that indicate a writer's assessment of or attitude to an issue

Emphatic expressions: Words or phrases which relate to the strength of the claim or to your degree of confidence in what is said.

Hedging expression: word or phrases which make statements about the degree of certainty, possibility or probability of a question

...
But to say this is to point to wider **implications** for history making in Australia. The Eurocentric histories of the past **cannot simply be** corrected by including the 'Chinese', especially if clear ethnic separations based on assumed single identities are maintained. **It is necessary** to go beyond Orientalist contrasts between us and them, Australian and Chinese, and to engage in a re-examination of sites of difference and dialogue. These sites will show the need to envisage multiple identities. They **may** also **sometimes point** to shared experiences of a shared world. Separate histories of ethnic peoples are not enough, especially if they serve to contain and exclude these peoples. Instead there is a need for a new synthesis in Australian history. The **crucial need for historians** is to personally engage with the contemporary politics of difference.

Relational marker (underlined): words or phrases that indicate, explicitly or implicitly, the writer's relationship to the audience or the scholarly community in which they are writing.

Text source: Ryan, J. (1997). Chinese Australian history. In W. Hudson & G. Bolton (eds) *Creating Australia: Changing Australian history*. Allen & Unwin, Sydney.(pp. 75, 77)

Ao fazer as leituras, atenção a...(2)

In 1984, Jenny Cushman, in her perceptive article, 'The Chinese community in Australian historiography' made a passionate plea for historians to move away from studies of Australian attitudes to "relocate the Chinese experience within the Chinese community itself". She further urged researchers to investigate the way Chinese customs, legal notions and kinship relations were adapted to the Australian physical and social environment. It is tempting to credit many of the succeeding changes to Cushman's appeal. However, the new approaches **must** be viewed within the context of the changing tide of historiography and the impact of 'multiculturalism'.

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Posicionamentos:
palavras ou frases
que indicam a
avaliação que o
escritor faz.

Ao fazer as leituras, atenção a...(3)

environment. **It is tempting to credit** many of the succeeding changes to Cushman's appeal. However, the new approaches **must** be viewed within the context of the changing tide of historiography and the impact of 'multiculturalism'.

Ênfases: palavras ou frases sobre a força da afirmação ou o grau de confiança que se tem nela.

But to say this is to point to wider **implications** for history making in Australia. The Eurocentric histories of the past **cannot simply be** corrected by including the 'Chinese', especially if clear ethnic separations based on assumed single identities are maintained. **It is necessary** to go beyond Orientalist contrasts between us and them, Australian and Chinese, and to engage in a re-examination of sites of difference and dialogue. These sites will show the need to envisage multiple identities. They **may** also **sometimes point** to shared experiences of a shared world. Separate histories of ethnic peoples are not enough, especially if they serve to contain and exclude these peoples. Instead there is a need for a new synthesis in Australian history. The **crucial** need for historians is to personally engage with the contemporary politics of difference.

Ao fazer as leituras, atenção a...(4)

Avaliações:
palavras ou frases que falam do grau de certeza, possibilidade ou probabilidade de algo.

.....

But to say this is to point to wider implications for history making in Australia. The Eurocentric histories of the past **cannot simply be** corrected by including the 'Chinese', especially if clear ethnic separations based on assumed single identities are maintained. **It is necessary** to go beyond Orientalist contrasts between us and them, Australian and Chinese, and to engage in a re-examination of sites of difference and dialogue. These sites will show the need to envisage multiple identities. They may also sometimes point to shared experiences of a shared

Ao fazer as leituras, atenção a... (5)

for a new synthesis in Australian history. The **crucial** need for historians is to personally engage with the contemporary politics of difference.

Associações: palavras ou frases que indicam a relação entre o escritor e o público a que se destina o texto.

Se o artigo vos interessar...

Apontar *IMEDIATAMENTE* a referência bibliográfica

Se não o fizerem, mais tarde pode ser difícil identificar o artigo novamente.

Se copiarem texto, coloquem-no *IMEDIATAMENTE* entre aspas

Se não o fizerem, é grande a probabilidade de se esquecerem que esse texto foi copiado e isso é plágio.

zotero

Referências organizadas



Obsidian

Notas organizadas

**São vossos
amigos
nisto! 😊**

As notas são para vós e para o vosso tema!

(Não são para “mostrar que li” nem para “talvez dê jeito” nem porque “soa bem”).

10th International Conference of the Immersive Learning Research Network
Practitioner Proceedings ILRN2024

DOI: <https://doi.org/10.56198/5M1RHFUMB>



Tutorial—Authoring a Personal GPT for Your Research and Practice: How We Created the QUAL-E Immersive Learning Thematic Analysis Helper

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Abstract. Thematic analysis in qualitative research is a time-consuming and systematic task, typically done using teams. Team members must ground their activities on common understandings of the major concepts underlying the thematic analysis, and define criteria for its development. However, conceptual misunderstandings, equivocations, and lack of adherence to criteria are challenges to the quality and speed of this process. Given the distributed and uncertain nature of this process, we wondered if the tasks in thematic analysis could be supported by readily available artificial intelligence chatbots. Our early efforts point to potential benefits: not just saving time in the coding process but better adherence to criteria and grounding, by increasing triangulation between humans and artificial intelligence. This tutorial will provide a description and demonstration of the process we followed, as two academic researchers, to develop a custom ChatGPT to assist with qualitative coding in the thematic data analysis process of immersive learning accounts in a survey of the academic literature: *QUAL-E Immersive Learning Thematic Analysis Helper*. In the hands-on time, participants will try out QUAL-E and develop their ideas for their own qualitative coding ChatGPT. Participants that have the paid ChatGPT Plus subscription can create a draft of their assistants. The organizers will provide course materials and slide deck that participants will be able to utilize to continue development of their custom GPT. The paid subscription to ChatGPT Plus is not required to participate in this workshop, just for trying out personal GPTs during it.

Keywords: ChatGPT, GPT, Qualitative Analysis, Thematic Analysis.

1 Introduction and Background

A critical aspect of qualitative research is conducting thematic analysis. This involves a time-consuming process involving selection, extraction and assigning of meaning to relevant text excerpts. A crucial step of this process is the coding of the materials under analysis. This is the process where researchers (e.g. coders) apply their grounding and criteria to the materials, either as a whole or segmented, to generate codes, which basically are descriptive labels that surmise the main piece of information in the materials [1]. Given that people will experience subtle differences or equivocal interpretations in their grounding, and varying levels of adherence to coding criteria, the quality of the process is improved through extended involvement of multiple coders: triangulation. Triangulation is the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena [2]. It also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources. Thus, coding can be a weak point in the thematic analysis process because of insufficient number of coders, insufficiently trained coders, or simply due to differences in understanding and application of grounding concepts and coding criteria.

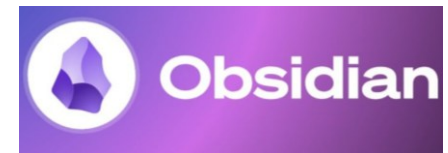
We sought to experiment with using an artificial intelligence variety, called Large Language Models (LLMs), to address these shortcomings through a publicly-available chatbot interface, ChatGPT. From its inception, artificial intelligence has made significant breakthroughs beyond answering standard search engine queries toward

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Ao tirar notas, evitem equívocos futuros, evitem perder o vosso esforço de HOJE:

- **Em que sentido são usados os conceitos?** (“Usam ‘imersão’ desta maneira, não daqueloutra...”, “Seguem a teoria de...”)
- **Qual a ideia ou contributo que vos interessou?** (“Explicam bem isto...” / “Relatam que aconteceu uma coisa assim” / “Mediram isto e deu...”)
- **Que aspetos de contexto são relevantes?** (Pessoas, tecnologia, métodos, locais...)

zotero

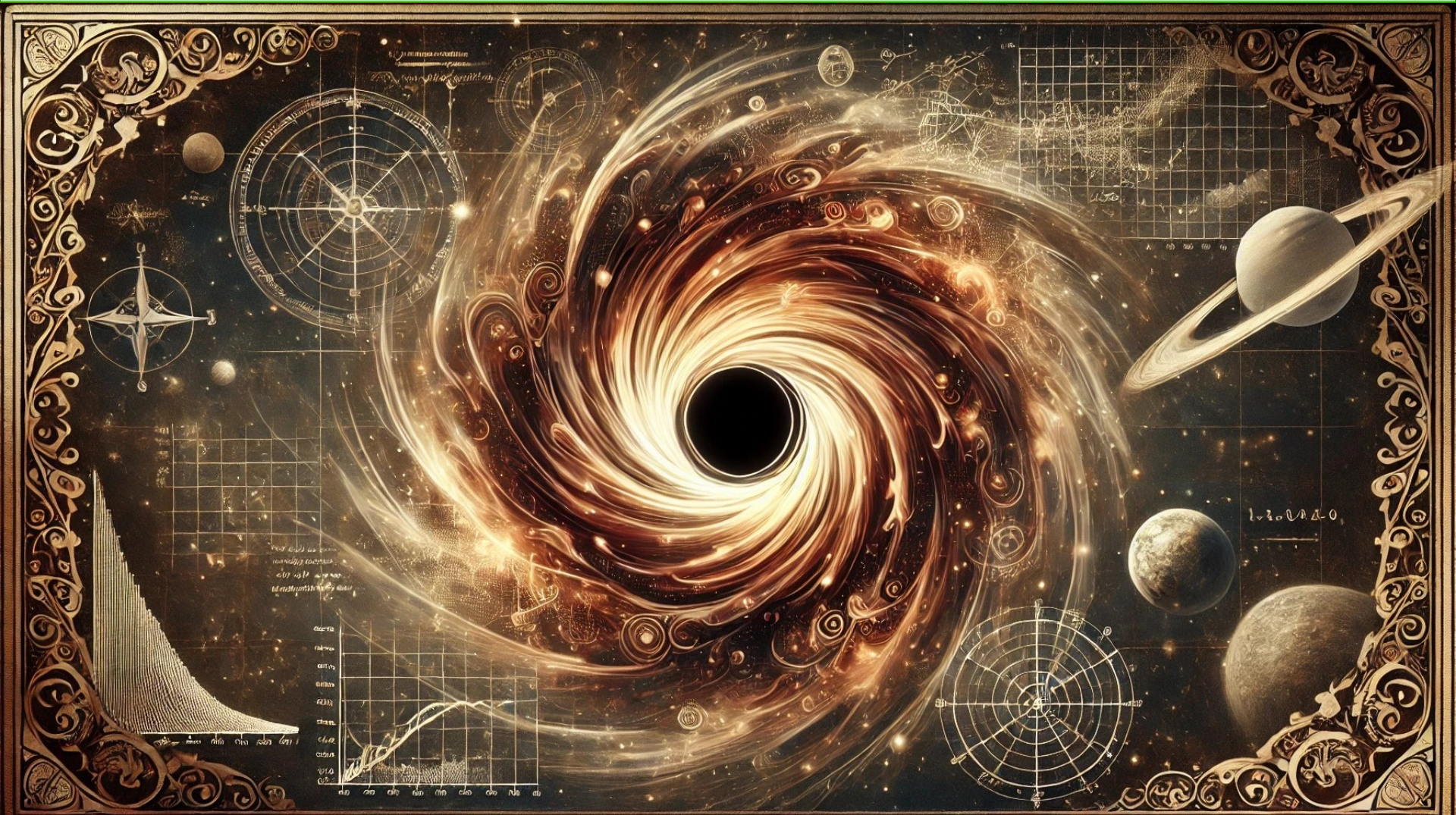


Referências organizadas

Notas organizadas

Quando paramos?

Qual é o nosso “horizonte de eventos”?



Quando paramos?

Completude (os contributos repetem-se... as notas interligam-se... as referências começam a remeter para as mesmas fontes...)

...e o sentimento de ter uma panorâmica rica das visões.

<i>Immersion perspective</i>	<i>No. papers^a</i>	<i>Main ref. on immersion^b</i>	<i>No. papers^a</i>
Technological fidelity	7	Slater (2003) or Slater & Wilbur (1997) or Azuma (1997)	3
Unspecific	4	None	6
Engagement	2	Csikszentmihalyi (1992) and/or Kolb (1984)	1
Interaction	1	Barab (2007)	1
Narrative	1	Whitton (2011)	1

Exemplo de:
<http://hdl.handle.net/10400.2/9799>

^a Sum of immersion perspective is not n=12 because three papers employ two perspectives.

Quando paramos?

Quase de certeza, há sempre mais alguma coisa!

Paramos ponderando para o nosso esforço atual e futuro, qual o **risco** e o **benefício**.

Vão ser empregues muitas horas, a seguir, a fazer trabalho no terreno. Queremos fazê-lo com conhecimento de causa, sem o desperdiçar:

- sem “reinventar a roda”;
- sem só conseguir dizer “parece-me bom, acreditem”;
- sem cair em análises improvisadas.

Aconselhem-se com os orientadores, para vos ajudar nesta decisão.

E informação noutras fontes?

Repositórios de código, boletins empresariais, blogues, redes sociais...



HOME > TECHNOLOGY TOP 25 TECHNOLOGY NEWSLETTERS ON SUBSTACK

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PUBLISHED 7 DAYS AGO 172 LIKES

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RECENT AND TOP POSTS



Understanding Database Types

The success of a software application often hinges on the choice of the right databases. As developers, we're faced with a vast array of database options. It is crucial for us to understand the differences between these options and how to...

POPULAR POST 1002 LIKES 12 COMMENTS

A screenshot of a social media feed, likely from a platform like Bluesky. It shows four posts from various users. The first post is from "Retrocomputing" about Charles Babbage. The second is from "derekpetrucelli.bsky.social" asking about Bluesky games. The third is from "alexmak" about a Duodock. The fourth is from "Candie Cane Dyer" about Game Boy. Each post includes a profile picture, name, handle, time, text, and engagement icons (reply, retweet, like).

A white paper titled "IIoT - IIoT IN THE MANUFACTURING SECTOR BASED ON THE EXAMPLE OF COMARCH Technologies". The document features a large image of a factory floor with robotic arms and a worker. The text discusses the benefits of IIoT in manufacturing, including improved efficiency, reduced downtime, and better quality control. It also includes a table comparing the benefits for manufacturing processes versus business benefits.

Benefits for manufacturing processes	Business Benefits
Streamlining of manufacturing processes	High return on investment (ROI)
Manufacturing intelligent, high-quality products	Consistent fulfillment of business goals
Comprehensive monitoring of manufacturing processes	Customer-centric approaches to the personalization of manufacturing
Reduced production and transport time	Application of new business models and introduction of new services
Selection and control of storage and fulfillment	New source of revenue
Integration with existing systems	Reduction in operating costs
Real-time analysis of production data	Flexibility to rely on data in smart business decisions

E informação noutras fontes?

Repositórios de código, boletins empresariais, blogues, redes

São elementos do terreno, não do conhecimento científico!

São analisados DEPOIS de termos a noção das nossas “lentes teóricas”.

Para termos uma base para aferir o seu rigor, novidade...

Benefits for manufacturing processes	Business Benefits
Streamlining of manufacturing processes	High return on investment (ROI)
Manufacturing excellence, high-quality products	Consistent fulfillment of business goals
Comprehensive monitoring of manufacturing processes	Customer-centric approaches to personalization of manufacturing
Reduced production and transport time	Application of new business models and introduction of new services
Selection and utilization of IIoT gear and human labor	New source of revenue
Integration with existing systems	Reduction in operating costs
Real-time analysis of production data	Flexibility to rely on data in meeting business objectives



Understanding Database Types

The success of a software application often hinges on the choice of the right databases. As developers, we're faced with a vast array of database options. It is crucial for us to understand the differences between these options and how to...

POPULAR POST 1002 LIKES 12 COMMENTS

Boas viagens a explorar, a procurar conhecimento e a avançar audaciosamente pelo universo da investigação!

