



UNIVERSITAT DE VALÈNCIA  
**Departamento de Medicina**



**Universidade de Brasília – UnB**  
**Departamento de Saúde Coletiva**

Maria Edna Moura Vieira

**Educación Permanente en Salud el Camino  
Pedagógico para Reinención del Trabajo  
Docente**



VNIVERSITAT DE VALÈNCIA  
**Departamento de Medicina**



**Universidade de Brasília – UnB**  
**Departamento de Saúde Coletiva**

Maria Edna Moura Vieira

## **Educación Permanente en Salud el Camino Pedagógico para Reinención del Trabajo Docente**

Tesis doctoral presentada como requisito parcial para la obtención del Título de Doctor en Medicina, línea de investigación: Salud Pública, Higiene y Sanidad Ambiental, por el Departamento de Medicina de la Universidad de Valencia - España y en Salud Colectiva por el Programa de Postgrado en Salud Coletiva de la Universidad de Brasilia (UnB) - Brasil.

**Directores:** José Tomás Real Collado (España); Maria da Graça Lüderitz Hoefel (Brasil).

España/Brasil, mayo de 2022

*Lo dedico a los profesores y profesionales de la salud, compañeros en la lucha por un sistema educativo y de salud inclusivo, equitativo y a la altura de la dignidad de la persona humana. También a aquellos compañeros, amigos y familiares que partieron al plano espiritual por el Covid-19, pero principalmente, por un gobierno negacionista, corrupto e incompetente.*

## AGRADECIMIENTOS

Terminada esta etapa de formación, no puedo dejar de recordar a todas las personas que me ayudaron y guiaron en este camino, en especial a mis Directores de tesis y también a mis amigos, con quienes compartí las dudas y dificultades encontradas, a veces difíciles de superar. También fueron ellos, en esta red de relaciones interpersonales, los que me dieron la fuerza para continuar.

Los obstáculos, marcados por las exigencias de la vida profesional y, principalmente, personal, fueron muchos y quiero expresar mi agradecimiento a mi fantástico cuarteto (mis hijos), Pedro Henrique, João Paulo, Paulo Ricardo y Gabriel, que me apoyaron a lo largo del tiempo, a veces con recursos económicos y también emocionalmente. Sin ellos no sería posible continuar el camino de evolución que me propuse, de mi camino pedagógico inacabado, que me es fundamental como persona y como profesional. Espero haber logrado convertirme en un referente para ellos, no solo como madre, sino como ser humano comprometido con cumplir sueños y abrir nuevas posibilidades de vida con amor y empatía.

Agradezco a mis hermanas y hermanos por su complicidad, apoyo y paciencia en momentos de distanciamiento y pérdida; a mis amigos que escucharon mis dudas y me dieron una importante contribución y apoyo más que especial, a saber, Simone Alves-Hopf, Javier Barona y Denise Severo. También quiero agradecer a mis amigas Sâmia Araújo y Damiana Neto, que siempre estuvieron presentes en este camino común de doctorado.

De manera muy especial y afectuosa, expreso mi agradecimiento a mi querida amiga Profesora Doctora Graça Hoefel, de la Universidad de Brasilia, Departamento de Salud Colectiva - Brasil, por brindarme su apoyo y constante amistad, con sabiduría y preciosa orientación.

También me gustaría agradecer a mi director de tesis, el profesor doctor José Thomas Real Collado de la Universidad de Valencia, Departamento de Medicina - España, por su apoyo y confianza.

Por último, pero no menos importante, un sincero agradecimiento a mi amigo el Profesor doctor, Ángel San Martín Alons, también de Universidad de Valencia-ES, de la Facultad de Filosofía y Ciencias de La Educación, Didáctica y Organización Escolar, por darme la bienvenida y ser mi ángel guía en Valencia-ES.

*Admirable Chip Nuevo*

*Pánico en el sistema  
alguién me desconfiguró  
¿Dónde están mis ojos de robot?  
Yo no sabía, yo no me di cuenta  
Siempre pensé que estaba vivo  
Tornillo y fluido en lugar de articulación  
hasta creía que aquí batía un corazón  
Nada es orgánico, es todo programado  
y yo creyendo que tenía me libertad  
Pero allá vienen Ellos nuevamente  
Yo sé lo que van a hacer  
Reinstalar el sistema  
Piense, hable, compre, beba  
Lee, vote, y no te olvides  
Use, sea, escucha y diga  
Tenga, vivir, gaste, viva  
Piense, hable, compre, beba  
Lee, vote, y no te olvides  
Use, sea, escucha y diga  
No Señor, sí Señor  
No Señor, sí Señor...*

Pitty

*Oculto la conciencia de no ser,  
O estar en un ser que me trasciende,  
En una red de presencias y ausencias ...*

*José Saramago*

## RESUMEN

Con el surgimiento del SARS-CoV-2, el contexto educativo se ha vuelto más complejo, además de las pérdidas, el COVID-19 está dejando un legado abrumador en la educación, sumándose a los desafíos existentes, como la falta de infraestructura adecuada y alfabetización digital para profesionales de la educación. La forma de hacer y pensar la educación mediada por las tecnologías digitales surgió de repente. La nueva realidad se evidencia en la distancia de los cuerpos y de los procesos de enseñanza-aprendizaje, exigiendo profesores preparados y comprometidos con el acto de educar. El contexto aspira a generar una conciencia transformadora de la sociedad, en la que las personas se reconozcan como parte de los problemas, pero sobre todo, como parte de las soluciones. Es imperativo reconstruir dinámicas, procesos, metodologías participativas y formas de gestión democrática, que se reafirmen en la praxis. Objetivo: Analizar el modelo de Educación Permanente en salud adoptado por el Ministerio de Salud de Brasil (2004), y si ese modelo es adecuado para la formación de profesores de la Red de Educación Básica, para atender las nuevas necesidades. Método: El camino investigativo se caracterizó por ser una metodología cualitativa, participativa y exploratoria. Se desarrollaron 08 artículos: Primero, fue un relato de experiencia sobre la práctica docente. El segundo, buscó desarrollar procesos de formación en el contexto de la Educación Permanente en Salud (EPS), con profesores y estudiantes. El tercero y cuarto buscaron conocer las percepciones de los docentes de educación básica en España y Brasil, sobre el impacto del COVID-19 en la educación. En quinto lugar, se trata de una síntesis crítico-reflexiva, participativa y exploratoria, sobre dos trabajos de campo y una revisión integradora. El sexto se caracterizó por ser una revisión integradora, sobre el uso de metodologías activas, en tiempos de pandemia. Séptimo buscó sistematizar los conceptos de la Metodología Articulante (MA) con los principios de la EPS. La Octava buscó construir puentes de diálogo y vinculación, donde la humanización de las prácticas sea condición fundamental para una educación y salud corresponsable. Resultados: a) La nueva realidad educativa provocada por el COVID-19 se evidencia tanto por el entorno digital como por el distanciamiento de los cuerpos y procesos de enseñanza-aprendizaje, lo que exige, para la educación básica, una mirada plural y profesores preparados y comprometidos con el acto de educar; b) Los profesionales de la educación y la salud están viviendo momentos de gran sufrimiento y enfermedad mental, necesitando de atención integral, escucha

calificada y procesos de formación permanente; c) Hace falta una práctica educativa, basada en la transdisciplinariedad, la interdisciplinariedad, liberadora, emancipadora, humanitaria y llena de amor y alegría; d) La EPS necesita avanzar en su modelo de gestión para el sector educativo, estableciendo puentes y diálogos corresponsables, en un proceso de gestión intersectorial y apoyo mutuo. Conclusión: La EPS surge como modelo orientador para trazar procesos de formación intersectorial y dialógica para un trabajo agradable, amoroso y alegre de profesores de la Red de Educación Básica. Para esto, es necesario incorporar nuevos principios/conceptos pedagógicos que atiendan al sector educativo (Amorosidad, Intersectorialidad, Inclusión, Interculturalidad, Internacionalización del Conocimiento, Humanización), para que avancemos en una práctica liberadora, amorosa y humanitaria.

**Palabras clave:** Complejidad. COVID-19. Educación. Educación Permanente en Salud. Salud.

## RESUMO

Com o surgimento do SARS-CoV-2, o contexto educacional se tornou mais complexo. Além das perdas, a Covid-19 está deixando uma herança avassaladora na educação, somando-se aos desafios já existentes, como a falta de infraestrutura adequada e de letramento digital para os profissionais da educação. A forma de fazer e pensar a educação mediada pelas tecnologias digitais tornou-se inevitável de forma repentina. A nova realidade é evidenciada pelo distanciamento dos corpos e dos processos de ensino-aprendizagem, exigindo professores preparados e comprometidos com o ato de educar. O contexto aspira a gerar uma consciência transformadora de sociedade, na qual as pessoas se reconheçam como parte dos problemas, mas, sobretudo, como parte das soluções. Torna-se imperativo a reconstrução de dinâmicas, processos, metodologias participativas e formas de gestão democrática, que se reafirmam na práxis. Objetivo: analisar o modelo de Educação Permanente em Saúde adotado pelo Ministério da Saúde do Brasil (2004) e avaliar se este modelo é adequado para a formação dos professores da Rede Básica de Ensino, de forma a atender às novas necessidades. Método: o percurso investigativo caracterizou-se como uma metodologia qualitativa, participativa e exploratória. Foram desenvolvidos oito artigos: Primeiro foi um relato de experiência sobre a prática docente.



Segundo buscou desenvolver processos de formação no contexto da Educação Permanente em Saúde (EPS), com professores e estudantes. Terceiro e quarto buscaram conhecer as percepções dos professores da educação básica da Espanha e do Brasil, sobre o impacto da Covid-19 na educação. Quinto trata-se de uma síntese crítica-reflexiva, participativa e exploratória, acerca de dois trabalhos de campo e um de revisão integrativa. Sexto se caracterizou como uma revisão integrativa, acerca do uso das metodologias ativas, em tempos de pandemia. Sétimo buscou sistematizar os conceitos da Metodologia Articuladora (MA) com os princípios da EPS. Oitavo buscou construir pontes de diálogos e conexões, onde a humanização das práticas constitui condição fundamental para uma educação e saúde corresponsáveis. Resultados: a) a nova realidade educacional provocada pela Covid-19 é evidenciada tanto pelo entorno digital como pelo distanciamento dos corpos e dos processos de ensino-aprendizagem, o que exige, para a educação básica, um olhar plural e professores preparados e comprometidos com o ato de educar; b) os profissionais da educação e saúde estão vivendo momentos de grande sofrimento e de adoecimento mental, precisando de atenção integral, de escuta qualificada, e de processos formativos permanente; c) há necessidade de uma prática educacional, balizada na transdisciplinaridade, interdisciplinaridade, libertadora, emancipatória, humanitária e recheada de amorosidade e alegria; d) a EPS precisa avançar seu modelo de gestão para o setor educacional, estabelecendo pontes e diálogos corresponsáveis, em um processo de gestão intersetorial e de apoio mútuo. Conclusão: a EPS surge como modelo norteador para se traçar processos de formação intersetorial e dialógica para um trabalho prazeroso, amoroso e alegre, de professores da Rede Básica de Ensino. Para isso, é necessário incorporar novos princípios/conceitos pedagógicos que atendam ao setor educacional (amorosidade, intersetorialidade, inclusão, interculturalidade, internacionalização do conhecimento, humanização), para somente assim, podermos avançarmos numa prática libertadora, amorosa e humanitária.

**Palavras chave:** Complexidade; Covid-19; Educação; Educação Permanente em Saúde; Saúde

## ABSTRACT

With the emergence of SARS-CoV-2, the educational context has become more complex, in addition to losses, COVID-19 is leaving an overwhelming legacy in education, adding

to existing challenges, such as the lack of adequate infrastructure and digital literacy for education professionals. The way of doing and thinking about education mediated by digital technologies emerged suddenly. The new reality is evidenced by the distancing of bodies and the teaching-learning processes, demanding prepared teachers who are committed to the act of educating. The context aspires to generate a transforming consciousness of society, in which people recognize themselves as part of the problems, but above all, as part of the solutions. It is imperative to rebuild dynamics, processes, participatory methodologies and forms of democratic management, which are reaffirmed in praxis. Objective: To analyze the model of Permanent Education in health adopted by the Ministry of Health of Brazil (2004), and if this model is adequate for the training of teachers of the Basic Education Network, in order to meet the new needs. Method: The investigative path was characterized as a qualitative, participatory and exploratory methodology. 08 articles were developed: First, it was an experience report on teaching practice. Second, it sought to develop training processes in the context of Permanent Education in Health (EPS), with teachers and students. Third and fourth sought to know the perceptions of basic education teachers in Spain and Brazil, on the impact of COVID-19 on education. Fifth, it is a critical-reflexive, participatory and exploratory synthesis, about two field works and an integrative review. Sixth was characterized as an integrative review, about the use of active methodologies, in times of pandemic. Seventh sought to systematize the concepts of the Articulating Methodology (AM) with the principles of EPS. Eighth sought to build bridges of dialogue and connections, where the humanization of practices is a fundamental condition for co-responsible education and health. Results: a) The new educational reality caused by COVID-19 is evidenced both by the digital environment and by the distancing of bodies and teaching-learning processes, which requires, for basic education, a plural look and prepared and committed teachers with the act of educating; b) Education and health professionals are experiencing moments of great suffering and mental illness, needing comprehensive care, qualified listening, and ongoing training processes; c) There is a need for an educational practice, based on transdisciplinarity, interdisciplinarity, liberating, emancipatory, humanitarian and filled with love and joy; d) The EPS needs to advance its management model for the education sector, establishing bridges and co-responsible dialogues, in a process of intersectoral management and mutual support. Conclusion: The EPS emerges as a guiding model to trace intersectoral and dialogic training processes for a pleasant, loving and joyful work of teachers of the Basic Education Network. For this, it is necessary to incorporate new

pedagogical principles/concepts that meet the educational sector (Amorosity, Intersectoriality, Inclusion, Interculturality, Internationalization of Knowledge, Humanization), so that we can advance in a liberating, loving and humanitarian practice.

**Key-Words:** Complexity. COVID-19. Education. Permanent Health Education. Health.

## LISTA DE FIGURAS

<b>Figura 1.</b> Relación conceptual entre comunicación transdisciplinar, Metodología Articuladora y Educación Permanente en Salud en la construcción del conocimiento.....	43
<b>Figura del artículo 2.</b> Figure 1. Scheme of the Data Collection and Elaboration of the Articulating Methodology.....	64
<b>Figura del artículo 5.</b> Figura 1. Esquema de Desarrollo de las Actividades de la Metodología Articuladora.....	120
<b>Figura del artículo 6.</b> Figure 1. Representation of the selection process of the Articulating Methodology paper using Prisma 2020 Flow Diagram. BVS= Biblioteca Virtual de Saúde .....	134
<b>Figura del artículo 6.</b> Figure 2. Available Papers to Integrative Review Analysis .....	136
<b>Figura del artículo 7.</b> Figure 1. Conceptual Relationship between Trans-Disciplinary Communication, Articulating Methodology and Permanent Health Education in the Construction of Knowledge .....	148
<b>Figura del artículo 7.</b> Figure 2. Representation of the selection process of the Articulating Methodology paper using Prisma 2020 Flow Diagram (Page et. al., 2020) .....	155
<b>Figura del artículo 7.</b> Table 1: Available Papers to Integrative Review Analysis.....	156
<b>Figura del artículo 8.</b> Figura 9. Table 1: Summary of Works and Content Analysis.....	170

## LISTAS DE ABREVIATURAS

AM: Articulating Methodology

BRA: Brasil

Covid-19: Coronavirus 19 Diseases

EC: Educación continua

EJA: Educación de Jóvenes y Adultos

EPS: Educación Permanente en Salud

MA: Metodología Articuladora

OMS: Organización Mundial de la Salud

OPAS: Organización Panamericana de la Salud

PHE: Permanent Health Education

PNEPS: Política Nacional de Educación Permanente en Salud

PPP: Proyecto Político-Pedagógico

SUS: Sistema Único de Salud

## ÍNDICE

1. INTRODUCCIÓN/JUSTIFICACIÓN .....	16
1.1. Docente en escena: la búsqueda del “ser más” .....	16
1.2. Encuentros conceptuales en diálogo con la Educación Permanente en Salud.....	20
1.2.1. Miradas diversas .....	20
1.3. La propuesta de Educación Permanente en Salud en diálogo con las ideas de Paulo Freire y Edgar Morin .....	27
2. OBJETIVO GENERAL .....	36
2.1 Objetivos específicos.....	36
3. MÉTODO .....	37
3.1. Artículo 1: “A prática docente em cena (relato de experiência)” .....	37
3.2 Artículo 2: “ <i>Articulating Methodology: Seeding Mental Health In The Educational Space In Pandemic Times</i> ” .....	37
3.3. Artículo 3: “ <i>El ‘desierto digital’: repercusiones de la Covid-19 en la educación en España y Brasil</i> ” .....	40
3.4. Artículo 4: “ <i>Digital Desert: Reality Of The Education In Pandemic Times</i> ” .....	41
3.5. Artículo 5: “ <i>Olhares e abordagens metodológicas em tempos de pandemia</i> ” .....	42
3.6. Artículo 6: “ <i>Articulating Methodology: A Potentiator Device On Permanent Health Education</i> ” .....	43
3.7. Artículo 7: “ <i>Articulating Methodology – Weaving A Trans-Disciplinary Knowledge</i> ” .....	44
3.8. Artículo 8: “ <i>Century Encounters: Freire &amp; Morin In Dialogue With Permanent Health Education</i> ” .....	46
4. RESULTADOS Y DISCUSIÓN .....	477
4.1. Artículo 1: “A prática docente em cena (relato de experiência)” .....	477
4.2. Artículo 2: “ <i>Articulating Methodology: Seeding Mental Health in the Educational Space in Pandemic Times</i> ” .....	611

4.3. Artículo 3: “ <i>El ‘Desierto Digital’: Repercusiones de la COVID-19 en la Educación en España y Brasil</i> ” .....	788
4.4. Artículo 4: “ <i>Digital Desert: Realty of the Education in Pandemic Times</i> ” .....	933
4.5. Artículo 5: “ <i>Olhares e abordagens metodológicas em tempos de pandemia</i> ” ...	1144
4.6 Artículo 6: “ <i>Articulating Methodology: A Potentiator Device on Permanent Health Education</i> ” .....	12929
4.7. Artículo 7: “ <i>Articulating Methodology – Weaving a Trans-Disciplinary Knowledge</i> ” .....	1456
4.8. Artículo 8: “ <i>Century Encounters: Freire &amp; Morin in Dialogue with Permanent Health Education</i> ” .....	16970
5. CONSIDERACIONES FINALES .....	186
REFERENCIAS .....	189
APÉNDICES .....	194
ANEXO 01.....	203

## 1. INTRODUCCIÓN/JUSTIFICACIÓN

El surgimiento de la pandemia del SARS-CoV-2, también conocido como Covid-19, representa el mayor desafío que enfrenta el siglo XXI en un contexto global. La pandemia ha puesto de relieve problemas históricamente no resueltos y desigualdades en todo el mundo.

En el contexto educativo, la pandemia impactó profundamente en sus estructuras, reflejándose de manera espantosa en el desarrollo humano en los países. La educación en todos los niveles se ha vuelto más compleja; Además de muertes y secuelas, el Covid-19 deja un agobiante legado de pérdidas “casi irrecuperables” en educación, según UNICEF (2021).

Además, la suspensión de las clases presenciales, el acceso desigual a las tecnologías para el seguimiento de las clases en línea/a distancia y la falta de alfabetización digital de los profesionales y estudiantes de la educación aumentaron la exclusión educativa. Estos efectos de mediano y largo plazo en el aprendizaje son desafíos a enfrentar en los contextos actual y post pandemia.

Se suman a eso los interrogantes sobre el retorno presencial del curso escolar, que se da de manera diferente en cada país, factor directamente vinculado a las condiciones de salud, incluyendo mental y de seguridad, de los estudiantes y profesionales de la educación.

El escenario actual es desafiante y nos llama a un proyecto de construcción colectiva y común de la sociedad, que pasa por una reorganización afectiva y amorosa, de invención de una “nueva suavidad” (GUATTARI; ROLNIK, 1996), de políticas públicas articuladas y conectadas para la transformación fructífera en busca de una educación inclusiva, pública y de calidad para todos y para una sociedad más libre y feliz.

Frente a ese escenario, este estudio optó por analizar el modelo de Educación Permanente en Salud, adoptado por el Ministerio de Salud de Brasil en 2004, y evaluar si ese modelo es adecuado para los profesores de la Red de Educación Básica.

### 1.1. Profesor en escena: la búsqueda del “ser más”

*Basta-me um pequeno gesto,  
feito de longe e de leve,  
para que venhas comigo*



*e eu para sempre te leve...*

(MEIRELRES, 2001, p. 3)

El año 2017, para mí, estuvo lleno de preguntas, conexiones e inquietudes diarias sobre mi rol como madre, mujer, docente y activista social. Trabajaba, en uno de mis turnos, de noche, en la modalidad de jóvenes y adultos y, al mismo tiempo, me preparaba para hacer un doctorado en el extranjero.

La Educación de Jóvenes y Adultos (EJA) es una modalidad de enseñanza garantizada por la Constitución Federal brasileña de 1988. Penetra todos los niveles de la Educación Básica del país y está destinada a jóvenes, adultos y ancianos que no tuvieron acceso a la educación en la escuela convencional a la edad adecuada. Su objetivo es tratar o corregir problemas sociales, como la exclusión social.

La historia de EJA en Brasil está íntimamente correlacionado al pedagogo Paulo Freire, quien, en la década de 1960, desarrolló un proyecto de alfabetización, atendiendo, en 1963, a 380 trabajadores de Angicos-RN. Este proyecto tuvo repercusiones en todo el país, pero fue sofocado por el golpe militar de 1964.

Art. 208. El deber del Estado con respecto a la educación será cumplido garantizando: I - la educación fundamental, obligatoria y gratuita, incluida su oferta para todos aquellos que no tuvieron acceso a ella en la edad adecuada; [...] § 1. El acceso a la educación obligatoria y gratuita es un derecho público subjetivo (BRASIL, 1988).

Mi propuesta doctoral vino en la dirección de prácticas pedagógicas más humanizadas y de la salud mental del público escolar, sean estudiantes, docentes y/o directivos, influida por la Educación Permanente en Salud (EPS), en los escritos de Ceccim y Merhy (2009), y también por la pedagogía de Paulo Freire (1987). Con eso, todo lo que hacía en la clase era con mirada de EPS, tanto en los contenidos que manejaba como en los momentos de coordinación pedagógica. Traté de poner en práctica todo lo aprendido en el curso EPS en Movimiento en 2015, reinventándome en los procesos que producían movimientos y afirmando los poderes creativos de la vida (DELEUZE, 2002).

Empecé a experimentar dispositivos más participativos y contextualizados con la vida de cada uno, con la historia de cada uno, en un intento de recuperar para mí la magia de la práctica docente, totalmente perdida en 2013, cuando fui atacada como persona. como docente por un gerente (un no gerente), designado por un político sin un conocimiento profundo de la educación, desprovisto de cualquier pedagogía y sentimiento de humanidad.

Hasta el día de hoy, cuando miro hacia atrás, siento una ola de escalofríos. Fue y es muy doloroso para mí, este episodio dramático. Pero lo acojo como un aprendizaje de vida y, así, construyo un futuro con otra mirada y, mejor, en el camino que defendía Freire (1995, p. 47), “Mirar atrás no debe ser una forma nostálgica de querer volver atrás, sino una manera de entender mejor lo que es ser, para construir un futuro mejor.”

Estos experimentos también fueron la forma que encontré para protegerme de la frustración y el sentimiento de no lugar, de no pertenencia, que se producen debido a los procesos de gestión centralizadores y la tradición educativa de contenido, centrada en el profesor, desprovista de procesos dialógicos.

Además de esto, hubo estudiantes que me llamaron la atención; a pesar de la edad avanzada, no faltaron un día a la escuela. Aproveché la semana de la Conciencia Negra, que tiene lugar en noviembre en Brasil, para conocer más sobre el contexto de vida de estos estudiantes.

Fue entonces cuando doña Helena (nombre ficticio) apareció en mis inquietudes, en mi comodidad, haciéndome reflexionar sobre mi ejercicio docente, el estado de inercia profesional en el que me encontraba desde 2013. Esa anciana, negra, tímida, cabizbaja, manos temblorosas y ojos soñadores, no tenía idea de cuánto me enseñó. ¡Gratitud!

Hubo otros estudiantes que también me llamaron la atención, como el Sr. Antônio (nombre ficticio), un hábil mecánico, pero semianalfabeto. Al igual que doña Helena, nunca había pisado el Congreso Nacional y la Universidad de Brasilia (UnB), instituciones de representación política y académica, respectivamente, ubicadas en la capital de Brasil, a pesar de vivir en el Distrito Federal desde jóvenes.

Un día invité a los grupos a ir a la UnB, como la mayoría tampoco sabía, para asistir a una presentación sobre inmigración del grupo de investigación en el que participaba en la UnB. Cinco se ofrecieron como voluntarios; entre ellos, el señor Antônio y doña Helena. Los llevé en mi auto (nosotros profesores muchas veces usamos nuestros recursos para desarrollar alguna actividad que no está en el guión o incluso las que sí lo están).

La gestión de las escuelas públicas en Brasil, en su mayoría, no cuenta con los recursos necesarios para atender la demanda pedagógica y administrativa de los profesores, por ejemplo, para solicitar transporte, etc. Necesita una confirmación de un alto número de estudiantes, porque ellos pagan el transporte, tienen que llenar los asientos del autobús para que la dirección haga los arreglos necesarios para las actividades extras. Muchos no van porque no tienen ese dinero, ni para las entradas. Y eso, por supuesto,

desalienta mucho a los docentes a avanzar en el proceso pedagógico; para mí, esto es un hecho.

Por estas razones, creo que es obligación del Estado brindar condiciones financieras y logístico-administrativas en las escuelas para las actividades internas y externas, ya sea para ir a museos, espacios históricos de la ciudad/campo, parques, teatros, cines, espacios arquitectónicos, en además de incentivar los intercambios de experiencias y culturas entre ciudades, como forma de apropiación del saber y la cultura del territorio vivido.

Pero valió la pena llevar a estos cinco estudiantes a la UnB; Recuerdo las sonrisas, la alegría, la conversación suelta; hablamos de muchas cosas, de nuestras vidas, de los personajes de la historia y de la ciudad que no conocían. Comentaba que el educador Paulo Freire, brasileño, fue el responsable del método que consiste en la propuesta de alfabetización de jóvenes y adultos, de la que hoy son beneficiarios, y que es mundialmente conocido por sus propuestas pedagógicas. También hablamos de la construcción de Brasilia, capital de Brasil; Aprendí mucho ese día, mucho más de lo que ellos hicieron conmigo.

Cuando llegamos al sitio de la actividad, con ojo atento y viva curiosidad, se sentaron en la fila del medio, sugeridos por mí, porque, tímidamente, querían sentarse en el “llamado rincón”. La actividad estaba programada para terminar a las 9 pm, y como el autobús escolar salía a las 10:30 pm (la escuela ofreció un autobús escolar a casa), tendríamos que salir a más tardar a las 9 pm; Por eso, durante las actividades del seminario, les preguntaba si estaban bien, si lo disfrutaban y si querían irse, y siempre me respondían: “Lo estamos disfrutando, profesora, vamos a esperar hasta el final”.

Cuando terminó el seminario, insistieron en tomarse fotos con los organizadores del seminario y los expositores, les presenté al coordinador del grupo de investigación. Durante la siguiente semana me agradecieron bastante y hablaron mucho con sus compañeros de clase sobre la salida a la UnB y lo felices que estaban, que todos empezaron a preguntarme cuándo habría otro evento, ya que a otros les gustaría ir también.

Me sentí realizada como profesora. Creo que tomé prestada la lógica de la EPS, la de reinventarme, porque empecé a sentir, nuevamente, la magia de ser docente y el poder que tiene para desarrollar en nosotros un sentido de pertenencia. Me encontré totalmente motivada para seguir todos los caminos de mi rol de docente. Esa misma

semana, definí mi objeto de investigación para el proyecto de doctorado: Educación Permanente en Salud.

Allí me di cuenta de que las orientaciones y dimensiones de la EPS dialogaban con la práctica docente y, como profesora conocedora de la pedagogía del oprimido de Paulo Freire (1987), me vi involucrada con la práctica docente dialógica, desde el dedo gordo del pie hasta el último pelo, en una especie de cuerpo-teoría-acción.

¿Quién, mejor que los oprimidos, estará preparado para comprender el terrible significado de una sociedad opresora? ¿Quién sentirá los efectos de la opresión mejor que ellos? ¿Quién, más que ellos, para comprender la necesidad de la liberación? Liberación que no alcanzarán por casualidad, sino por la praxis de su búsqueda; por el conocimiento y el reconocimiento de la necesidad de luchar por ello. Una lucha que, para el fin que le dan los oprimidos, será un acto de amor, con el que opondrán el desamor contenido en la violencia de los opresores, aun cuando ésta se vista con la mencionada falsa generosidad (FREIRE, 1987, p.20).

Entonces, me dejé llevar al interior de Guimarães Rosa, porque capté el tono de mis afectaciones.

[...] el sertón es del tamaño del mundo. Sertón: está dentro de nosotros. [...] Vivir, ¿no es así? - ¿Es muy peligroso? Porque aún no lo sabemos. Porque aprender a vivir es lo que realmente es vivir. El sertón me produce, luego me traga, luego me escupe con el calor de su boca (ROSA, 1958, p. 30).

El camino en el sertón no termina; abre tantos caminos y encrucijadas, y las personas nunca están hechas. El sertón es del tamaño de las personas, la formación del ser humano es del tamaño de la vida. Es en este sentido que comencé a reflexionar más sobre el papel del educador. Tenía voluntad de que mis compañeros de la profesión, que ya perdieron la magia de la docencia, pudieran rescatarla como yo la estaba rescatando.

Oculto la conciencia de no ser,  
 O de ser en un estar que me  
 trasciende,  
 En una red de presencia  
 Y ausencias,  
 En una escapada para el punto de partida:  
 Un cercano que está tan lejos,  
 Uno lejos de aquí.  
 Un afán de estar y de temer  
 La semilla que se sorprende de ser,  
 Las piedras que repiten las cadencias  
 De la ola siempre nueva y repetida  
 Que en este espacio curvo viene de ti  
 (SARAMAGO 1981, p. 10)

## **1.2. Encuentros conceptuales en diálogo con la Educación Permanente en Salud**

### **1.2.1. Miradas diversas**

El año 2021 se ha convertido en un año único, lleno de desafíos para la humanidad y lleno de dualidades. Si, por un lado, fue el año de celebrar el centenario de Paulo Freire, educador, pensador y pedagogo de los afectos y la liberación, quien dejó un legado incalculable para la humanidad, y de Edgar Morin, antropólogo, sociólogo y filósofo, considerado un humanista planetario y arquitecto de la complejidad humana. Incansable, Morin comparte, hasta el día de hoy, su mundo vivido y experimentado y su pensamiento complejo de reconectar conocimientos. Por otro lado, la pandemia, provocada por el SARS-CoV-2, ha puesto en cuestión nuestra visión del mundo, ya que el mundo ha cambiado, ya no somos los mismos, y la necesidad de una salud y educación integral, humanitaria y transdisciplinario se ha expandido en todos los contextos.

Los sistemas de salud, en un contexto global, han estado bajo mucha presión desde el 2020 con la pandemia del COVID-19, y si bien no son capaces de responder a todas las necesidades presentadas, han mostrado al mundo la importancia de la salud pública y universal. Además, es necesario pensar en el fortalecimiento de estos sistemas y una agenda post pandemia para atender la demanda reprimida de salud.

Desde el punto de vista de la de los trabajadores de salud, es un escenario agobiante. Su trabajo actúa como vector en la transmisión del virus en la sociedad, por lo que muchos profesionales tuvieron que aislarse para proteger a sus seres queridos: familiares, personas cercanas y la red de apoyo diario (ALMEIDA, 2020). Además de eso, los sistemas, en algunos países pasaron o están pasando a funcionar a su capacidad máxima o próximo de esto, haciendo con que el trabajo sea realizado en situación de escasez y sin condiciones de trabajo adecuadas, facilitando la contaminación entre los equipos y generando sufrimiento, pérdidas, frustraciones y enfermedades mentales.

En el escenario educativo, profesores y estudiantes tendrán que lidiar con experiencias vividas que pueden haber dejado varios impactos negativos, no solo en el aprendizaje, sino en el desarrollo socioemocional, provocados por el aislamiento social, las pérdidas y el distanciamiento de los cuerpos. En este sentido, además de las necesidades funcionales, profesores y estudiantes necesitan apoyo emocional, ya sea en clases presenciales, virtuales o híbridas.

El momento actual, según Morin (2021), “es un festival de incertidumbres desencadenado por la pandemia del SARS-CoV-2, es uno de los desafíos de la complejidad”. Para él, la complejidad es aquel que entrelaza, es un tejido junto, interconecta lo que estaba desconectado, con el intuito de unir lo que ya había sido fragmentado y separado por un paradigma convencional. Además de eso, consideramos que la pandemia se relaciona mucho con el “progreso” de la humanidad.

También hay que decir que, en el universo físico, biológico, sociológico y antropológico, existe un problema complejo de progreso. Complejidad significa que la idea de progreso, utilizada aquí, implica incertidumbre, implica su negación y degradación potencial y, al mismo tiempo, la lucha contra esta degradación. En otras palabras, se debe avanzar en la idea de progreso, que debe dejar de ser una noción lineal, simple, segura e irreversible para volverse compleja y problemática. La noción de progreso debe incluir la autocrítica y la reflexividad (MORIN, 2005, p. 87).

Freire (2001, p. 8) corrobora con Morin (2021) al reconocer el carácter histórico de las certezas. “La historicidad del saber, su naturaleza como proceso en permanente devenir. Significa reconocer el conocimiento como una producción social, que resulta de la acción y la reflexión, de la curiosidad en constante búsqueda”.

En este contexto, si algo nos está enseñando esta pandemia es que debemos mirar más de cerca la educación. Una mirada plural, integral, con dimensiones políticas, sociales, económicas, culturales, éticas y estéticas.

Así, no podemos olvidar que la educación en un contexto general se ve interpelada por el contexto social surgido desde sus inicios. Por ejemplo, España es un país colonizador cuya historia ha estado marcada por un dominio colonial violento; sin embargo, este período no está representado en la construcción de una conciencia histórica y ciudadana de los españoles, según Santiago y Blanch (2016). Brasil, otro ejemplo, es un país colonizado, desde el período colonial su historia está marcada por la esclavitud y la exclusión social. Está entrelazado por conflictos sociales, raciales, culturales, éticos, ambientales, políticos y religiosos, que, sin embargo, atenúan las diferencias y potencian las desigualdades.

Sumando este contexto a la actual crisis sanitaria provocada por el SARS-CoV-2, el escenario es incierto y retador y requiere, más que nunca, dinámicas contextualizadas, interdimensionales y transdisciplinarios que aborden aspectos ambientales, culturales, económicos, políticos y sociales, exigiendo así acciones que promuevan políticas públicas intersectoriales articuladas y conectadas para lograr una sociedad sostenible.

Desde esta perspectiva, mejorar la calidad de la educación se vuelve necesario y, para ello, implica la formación permanente de los profesores en la lógica de la EPS.

La formación permanente se basa en la práctica de analizar la práctica. Es pensando en su práctica, naturalmente con la presencia de personal altamente calificado, que es posible percibir insertada en la práctica una teoría aún no percibida, poco percibida o ya percibida pero poco asumida (FREIRE, 2001, p. 37).

Para Gomes y Merhy (2014. p. 7), algunos autores proponen la Educación Permanente en Salud como otra forma de desarrollar el proceso de aprendizaje, “para ayudar a los trabajadores a lidiar con las dimensiones afectivas que están relacionadas con su rutina profesional, en el que las diversas dimensiones del trabajo en salud son tomados como objeto para el proceso colectivo de reflexión”.

Para eso, es necesario una reflexión teórica y metodológica sobre el trabajo en el contexto del desarrollo humano y los derechos humanos, a fin de provocar un replanteamiento del papel de la formación de los trabajadores de la educación, desde la perspectiva del desarrollo individual y colectivo, a través de la reflexión, articulación y encuentros, construyendo un universo de procesos educativos en acción.

Los derechos humanos, entendidos como un conjunto de valores éticos y políticos que promueven y protegen la dignidad de la vida humana, de todas las personas sin distinción alguna de raza, nacionalidad, religión, género, orientación sexual, edad y condición física, social o cultural, tal como se establece en la Declaración Universal de los Derechos Humanos (1948), es esencial. En otras palabras, una vida respetada, con libertad, igualdad de derechos a los bienes sociales, con respeto a las diferencias, solidaridad, democracia y justicia socioambiental para favorecer el desarrollo humano en su integralidad.

Desde esta perspectiva, el desarrollo humano es un proceso de ampliación del abanico de opciones personales, influenciado por el contexto político, económico y sociocultural vivido y está íntimamente relacionado con el trabajo. La relación positiva entre desarrollo humano y trabajo es recíproca. La salud, la educación y el desarrollo están entrelazados, ya que no hay proceso de desarrollo sin la debida atención a la salud y el conocimiento.

Asimismo, el desarrollo de los trabajadores no está desvinculado de la actualización del propio trabajo, es decir, trabajo y trabajadores constituyen una díada inseparable (MERHY, 2015). En el sector educativo, por ejemplo, los procesos requieren de una amplia comunicación, armonía y correspondencia con las necesidades sociales,

integralidad, inclusión, internacionalización del conocimiento y proyectos político-pedagógicos, especialmente en el actual contexto de crisis sanitaria.

En la misma dirección, Karl Marx (2013) afirma que es a través del trabajo que la humanidad, transformando la naturaleza, se produce, se desarrolla y se transforma. Demostró que el ser humano se constituye en la unidad de su base biológica como producto social, resultado del trabajo humano.

La diferencia de otros animales, el ser humano no está preparado al nacer, necesita apropiarse de objetos humanos producidos social y procedimentalmente. Por tanto, es a través del trabajo que el ser humano produce, modificando la naturaleza, despertando su potencial y desarrollando nuevas posibilidades de vida, en un ciclo continuo de aprendizaje, conocimiento, invención y reinención, afecto y desafecto, encuentros y desencuentros, en el trabajo y en tiempo histórico.

En cada momento histórico, el ser humano crea nuevas formas de actuar, en la naturaleza y en la vida, produce nuevos conocimientos y desarrolla nuevas posibilidades existenciales. Por lo tanto, es necesario que los conocimientos y saberes adquiridos sean transmitidos y replicados de generación en generación, con el fin de potenciar la humanidad en cada uno. La pedagogía freireana colabora con este contexto al defender que los seres humanos están históricamente contruidos, son seres en constante metamorfosis, inacabados e inconclusos, y es ésta, por tanto, la potencia que nos lleva a la humanización, a la búsqueda del “ser más” (FREIRE , 1992; 1987).

La transmisión histórica del conocimiento producido de generación en generación se ha vuelto fundamental para el desarrollo del ser humano; esto ha venido ocurriendo de varias formas a lo largo de la historia, una de ellas es a través del equipamiento escolar, cuya principal tarea está asignada al profesor. Saviani (2010) también contribuye a esta visión:

El trabajo educativo es el acto de producir, directa e intencionalmente, en cada individuo, la humanidad que histórica y colectivamente es producida por todos los hombres. Así, el objeto de la educación concierne, por un lado, a la identificación de los elementos culturales que necesitan ser asimilados por los individuos de la especie humana para que se conviertan en humanos y, por otro lado, y concomitante, al descubrimiento de los más adecuados. caminos para lograr este objetivo (SAVIANI, 2010, p. 13).

Desde esta perspectiva, el profesor asumió la enorme importancia de transmitir, reinterpretar y recrear, con las nuevas generaciones, los conocimientos ya producidos por el género humano, indispensables para el desarrollo de la sociedad, en general, y la condición de la humanidad, en cada uno.



Su desempeño y el tratamiento del conocimiento son de fundamental importancia para el diseño de nuevos rumbos en la práctica pedagógica. El aprendizaje del profesor en su cotidiano como ser histórico y socialmente contextualizado puede ayudar en la definición de un nuevo orden pedagógico, más emancipador y amoroso, y en la intervención de la realidad respecto a su práctica.

Además, si tenemos en cuenta el contexto de los profesionales de la educación, dada la vulnerabilidad sociocultural de su público objetivo (estudiantes) y agravada aún más por el Covid-19, parece que la estructura organizativa de las escuelas, derivada de las políticas de los sistemas educativos actuales y sus modos de funcionamiento, no ofrecen posibilidades suficientes para la reconstrucción de dinámicas, procesos, metodologías participativas y formas de gestión democrática que se reafirman en la práctica del grupo escolar.

En esa dirección, la discusión sobre los procesos de formación de docentes ha cobrado fuerza en las últimas décadas y, con el fin de mantener a los equipos en un constante proceso educativo, mejorar las prácticas educativas y, en consecuencia, optimizar el servicio a la comunidad escolar, se adoptó la Educación Continua (EC) como mecanismo de formación de los profesionales de la educación.

La Organización Panamericana de la Salud (OPS, 1979) define la educación continua como un proceso de enseñanza permanente y constante, acompañada de una formación básica, cuyo principal objetivo es actualizar y mejorar las capacidades de las personas o grupos para los cambios técnicos y científicos de acuerdo con las necesidades sociales propuestas.

Para Pereda (1982), la CE es un proceso que el profesional debe realizar de forma permanente y sistemática, con el fin de obtener nuevos conocimientos, evaluar la validez de los conocimientos adquiridos previamente y compensar sus deficiencias para que el desempeño de su trabajo alcance la máxima eficiencia para la sociedad. Desde esta perspectiva, la EC también se ha convertido en el mecanismo de formación para varios otros sectores, incluido el de la salud.

En la salud, la EC es el proceso que incluye experiencias posteriores al aprendizaje inicial, con el objetivo de capacitar, mejorar la profesión y el ejercicio profesional, con mayor seguridad y productividad, a través de la adquisición de nuevos conceptos y reformulación de las prácticas existentes. “La educación continua adecuada debe reflejar las necesidades de salud de la comunidad y conducir a una mejora planificada en la salud de la comunidad” (OMS, 1982, p. 30).

Sin embargo, la CE, tal como está siendo puesta a disposición, no está logrando interpelar a los docentes a una postura de cambio y problematización de sus propias prácticas. La formación docente se concentra en cursos de preparación inicial, generalmente basados en modelos de racionalidad técnica y, cuando existen, los programas de educación continua suelen estar centrados en cursos teóricos y de corta duración (DINIZ-PEREIRA, 1999; DINIZ-PEREIRA; ZEICHNER, 2002).

Además, según Alvarado-Prada et al. (2010, p. 374), la CE durante mucho tiempo fue entendida “como una forma de adquirir certificados para avanzar en la carrera y/o obtener beneficios salariales, o por la necesidad de conocimientos específicos que suele darse en cursos cortos que aportan sólo a la satisfacción de una demanda social”. Pimenta (2001, p. 15-16) dialoga con lo anterior cuando afirma que “las políticas educativas implementadas van más en el sentido de requerimiento notarial o diplomacia (pagada por el profesor) que en la perspectiva de una educación centrada en la emancipación humana”.

El contexto presentado nos hace vislumbrar un nuevo escenario para la educación, en respuesta a las necesidades actuales que impone el Covid-19. Un ejemplo es la necesidad de instrumentalizar a los docentes para desarrollar una razón sensible, que, para Maffesoli (1998, p. 72), “sería del orden de la afectividad”, o “palanca metodológica que pueda [...] la reflexión epistemológica, y son plenamente operativos para explicar los múltiples fenómenos sociales que, sin ellos, serían totalmente incomprensibles”. Además, se vuelve imperativa la difusión de habilidades pedagógicas dialógicas, amorosas, a través de procesos formativos instrumentados por la CE y orientados por el cuadrilátero de la EPS y por el proyecto político-pedagógico de la escuela, hacia un proyecto común de sociedad.

Por lo tanto, existe la necesidad de pensar en procesos de formación de profesores, orgánicamente estructurados, que integren otros principios/conceptos pedagógicos (amorosidad, complejidad, interculturalidad, intersectorialidad, transdisciplinario, internacionalización del saber, humanización, inclusión) a los ya existentes, tales como las propuestas por la EPS (formación, gestión, atención, participación), potenciando así las acciones en servicio, tanto en el sector educativo como en el sector salud.

En ese sentido, nuestro camino investigativo nos llevó a transitar caminos permeados por conceptos/principios encaminados a una práctica pedagógica liberadora, amorosa y humanitaria, en diálogo con Paulo Freire, Edgar Morin, entre otros. Así, pretendemos construir puentes de diálogo y vinculación, en los que la humanización de las prácticas sea condición fundamental para una educación y salud corresponsable,

repercutiendo en las relaciones sociales que produzcan sociabilidad humana y guiada, también, por los principios y dimensiones de la EPS.

### **1.3. La propuesta de Educación Permanente en Salud en diálogo con las ideas de Paulo Freire y Edgar Morin**

La EPS fue instituida en Brasil en 2004 como política pública, la Política Nacional de Educación Permanente en Salud (PNEPS), por el Ministerio de Salud, para atender a las demandas del Sistema Único de Salud (SUS).

La PNEPS representa un hecho para la educación y el trabajo en salud en Brasil. El concepto de EPS está definido en la PNEPS (BRASIL, 2004, 2007, 2020) como aprendizaje en el trabajo, en el que el aprendizaje y la enseñanza se incorporan al cotidiano de las organizaciones y al proceso de trabajo. De esta forma, propone que los procesos de formación de los trabajadores de la salud se basen en la problematización de la propia práctica.

La EPS, como política pública elaborada y consensuada por un grupo de actores, sucede todo el tiempo en el mundo del trabajo, tanto en la gestión como en los procesos de intercambio y aprendizaje. Desde esta perspectiva, Morin y Freire dialogan con la EPS al considerar el contexto de la complejidad humana en el mundo del trabajo, en el que se produce un intercambio de saberes, no solo técnicos y científicos, sino también de las dimensiones éticas de la vida.

El conocimiento científico es la búsqueda del hombre para comprender las leyes de la naturaleza. Trae consigo un universo de teorías, ideas, paradigmas, que nos conduce, por un lado, a las condiciones bioantropológicas del conocimiento (porque no hay mente sin cerebro), por otro lado, a las condiciones culturales, sociales, teorías de arraigo histórico (MORIN, 2005, p. 21).

Para Freire (2000, p. 51), la relación del hombre consciente en el mundo está conectada con “pensar, hablar, sentir, percibir, dando destino a las manos liberadas del soporte casi exclusivo del cuerpo”. Así, extendiendo esta relación al trabajo, entendemos que ella está todo el tiempo en un proceso de afectación y reinención.

En ese sentido, entendemos que la EPS pretende discutir el trabajo y, a partir de este trabajo, transformar el espacio institucional en un espacio de problematización, reflexión, diálogo y construcción de consensos, intercambios y coproducción. La EPS se basa en el concepto de educación crítica, aprendizaje significativo y en la valoración del trabajo como fuente de conocimiento.

Es importante señalar que la EPS es más que un concepto pedagógico o metodológico. Tiene como estructura fundante la praxis y propone un proceso político de “desacomodo y cuestionamiento” (CECCIM; FERLA, 2009, p. 11). Este desconcierto y este cuestionamiento, diríamos, favorecería la ampliación del diálogo en las relaciones de trabajo y en la acción educativa incorporando intercambios afectivos y de sensibilidad, facilitando ir más allá del diálogo basado únicamente en saberes y argumentos lógicamente organizados y planificados, hacia un diálogo de encuentros y conexiones, en la utopía del “ser más” (FREIRE, 2014) para una práctica profesional amorosa y placentera, en una “nueva suavidad” (GUATTARI; ROLNIK, 1996, p. 341).

Además, la EPS está intrínsecamente permeada por diversos modelos de educación, como la Educación Continua, o como un desdoblamiento de la Educación Popular, como lo señala Ceccim (2005, p.162), “para muchos educadores, la EPS configura un desdoblamiento de la Educación Popular”. o de Educación de Jóvenes y Adultos”.

La Educación Permanente en Salud puede corresponder a la Educación en Servicio, cuando sitúa la pertinencia de los contenidos, instrumentos y recursos para la formación técnica sometidos a un proyecto de cambios institucionales o cambios en la orientación política de las acciones previstas en un momento y lugar determinado. Puede corresponder a la Educación Continua, cuando se trata de la construcción objetiva de marcos institucionales y la investidura de carreras por servicio en un tiempo y lugar determinados. También puede corresponder a la Educación Formal de Profesionales, cuando es ampliamente porosa a las multiplicidades de la realidad de las experiencias profesionales y se ubica en una alianza de proyectos integrados entre el sector/mundo del trabajo y el sector/mundo de la educación (CECCIM , 2005 pág. 162).

EJA y Educación Popular se complementan. En la concepción de Freire (2014), el concepto de educación de adultos transita hacia la Educación Popular, cada vez más integral, en la que educadores y grupos populares reflejan su cotidiano y sus procesos de militancia; sería la práctica educativa reconociéndose como práctica política.

Para avanzar de la teoría a la práctica, Ceccim y Feuerwerker (2004) proponen, como forma de operacionalizar el concepto de EPS, el Cuadrángulo de Formación, que es la articulación entre formación, gestión, cuidado y participación. Ceccim (2005) destaca que a través de este Cuadrángulo puede haber un cambio en la concepción tradicionalista de la educación en salud, la búsqueda de la integralidad y la inclusión de los usuarios como sujetos activos en las prácticas de salud.

En este contexto, cabe mencionar que, con la pandemia provocada por el SARS-CoV-2, el mundo se enfrentó a pérdidas, cambios y aprendizajes. La forma de hacer y

pensar la educación mediada por las tecnologías digitales surgió de repente. “El aislamiento social ha afectado claramente nuestra capacidad de planificar el futuro y pensar en nuevas aspiraciones” (MOURA-VIEIRA et al., 2021a, p. 3), en el contexto educativo, la situación requiere atención, ya que el momento necesita capacidad de colaboración y de compartir (MORGADO, 2020).

En este sentido, Morin (2020) advierte sobre la importancia de la educación en el mundo pandémico y post pandémico, en el que la educación es el motor y el principal dispositivo para hacer frente a las angustias e incertidumbres de los niños y jóvenes, tan fuertemente surgidas con la pandemia

Antes pensábamos que había cierto progreso y ahora el futuro es angustia. Por lo tanto, soportar, enfrentar la incertidumbre es no naufragar en la angustia, saber que es necesario, en cierto modo, participar con el otro, en algo en común, porque la única respuesta a quien tiene la angustia de morir es el amor y vida en común (MORIN, 2020).

Freire (2014) dialoga con Morin (2020) al defender una educación que busca develar la realidad y formar conciencias críticas, como camino hacia la emancipación de los oprimidos. “Debemos tener la resistencia que nos mantiene vivos, en la comprensión del futuro como problema y en la vocación de ser más como expresión de la naturaleza humana en proceso de estar siendo” (FREIRE, 2014, p. 31). Desde esta perspectiva, vemos la necesidad de que los procesos de formación, tanto de profesores como de profesionales de la salud, sean un compromiso ético, estético y político de los gobiernos y la sociedad, que se puede lograr a través de las EPS.

Sin embargo, algunas barreras y obstáculos deben ser superados en el ámbito de la EPS para una implementación eficiente y eficaz de sus procesos de formación. Según Carotta et al. (2009), las principales barreras que surgen de las estrategias y acciones de EPS son: (i) poca comprensión de los profesionales en la aplicación de los conceptos de EPS en la práctica; (ii) intensa jornada de trabajo, lo que dificulta que el equipo se reúna para reflexionar y tomar decisiones; y (iii) poca participación de los profesionales médicos y usuarios en las estrategias y acciones.

A pesar de los obstáculos presentados, entendemos que la EPS, además de un concepto pedagógico, avanza en el sentido de promover un modelo de educación permanente en salud estratégicamente orgánico, que favorece la superación de barreras y obstáculos. Por lo tanto, este modelo de educación permanente en salud debe considerar una relación mutua e intercambios entre la parte y el todo, presente en el hombre-mundo, teoría-práctica, científico-popular, educador-estudiante, profesional-gerente, médico-

paciente, etc, estableciendo no una dualidad entre estas dimensiones, sino relaciones dialógicas, amorosas, afectivas, políticas, estéticas y éticas.

Además, considerando la formación de los docentes, se deben incorporar nuevos principios/conceptos pedagógicos a los procesos de educación permanente en salud, tales como:

- **Intersectorialidad:** una estrategia y compromiso político del Estado entre los sectores de educación y salud. La intersectorialidad “constituye una concepción que debe informar una nueva forma de planificar, ejecutar y controlar la prestación de servicios”, según Junqueira (2005, p. 4). Su potencial radica en la eficacia de acciones coordinadas y en la sinergia entre diferentes sectores. La sinergia se define como “un acto o esfuerzo colectivo de cooperación” (INOJOSA, 1998). Es importante señalar que la intersectorialidad no debe ser vista como una iniciativa individual de profesionales o equipos, requiere decisiones institucionales y políticas en los niveles de planificación, seguimiento, implementación y evaluación que rompan con el status quo de una cultura política sectorial.

Así, la intersectorialidad incorpora la idea de integración, territorio, saber, experiencia, trabajo conjunto, equidad, derechos sociales, una visión de la acción integrada de las políticas sociales. Es un proceso que tiene riesgos por la previsible resistencia de los grupos de interés antagonizados. Suele ser oscurecida y particularizada por los objetos de cada una de las políticas sectoriales, así como por los intereses particulares, dificultando la formulación y articulación de propuestas intersectoriales, que consideren la realidad social como una totalidad compleja y dinámica (JUNQUEIRA, 2005), un problema este que necesita ser superado en el modelo EPS.

- **Internacionalización del conocimiento:** una forma de interconectar los fragmentos de conocimiento/saberes científicos y populares en los espacios educacionales. Con este principio, se pretende crear una interconexión entre el conocimiento científico a nivel internacional en diferentes áreas y la educación popular, sin embargo, establecer fronteras nacionales reales y abstractas entre formas de conocimiento, ya sean académicas o populares. Cabe mencionar que el concepto de internacionalización del conocimiento engloba el desarrollo del incremento de los sistemas educativos integrados y las relaciones universitarias más allá de la nación (MARGINSON; RHOADES, 2002).

Internacionalización del conocimiento en el diccionario significa captar la información de manera amplia, en todos los sentidos. Desde este punto de vista, sería comprender una idea/concepto con la máxima amplitud. Esto nos lleva a una mayor reflexión sobre la importancia de la información. Edgar Morin (2016) advierte que hoy estamos condenados al conocimiento ciego, “porque a pesar de la multiplicación de información y conocimiento sobre todo, no entendemos más que fragmentos separados”. Para él, necesitamos otro tipo de conocimiento, para poder asociar/conectar estos fragmentos/elementos.

Bondía (2002, p. 19), corrobora con lo expuesto, diciendo que hay un énfasis contemporáneo en la información, en estar informado, y esta intensa búsqueda de información y conocimiento no significa necesariamente conocimiento en el sentido de “sabiduría”, sino más bien en el sentido de “estar informado”. Según él, esta información no deja lugar a la experiencia, “es casi lo contrario de la experiencia y eso es importante separar la experiencia de la información y también separar el conocimiento de la experiencia del saber de las cosas, como sabemos cuando tenemos información de las cosas, cuando esté informado”.

En ese contexto, entendemos que las experiencias, en su contexto general, abren siempre nuevas visiones y, por tanto, entendemos también que el conocimiento es una obra abierta que se cierra con el hecho científico y con la experiencia, pero aun así con posibilidades de nuevas reaperturas; y que la información, por sí misma, no es sinónimo de conocimiento o experiencia.

Para obtener todos los significados del conocimiento (sabiduría), es necesario unir los fragmentos de conocimiento y su internacionalización, conectándolos con el hecho científico y el proceso de experiencia, que según Bondía (2002, p. 20), “la experiencia es lo que nos pasa, lo que nos sucede, lo que nos toca. No lo que pasa, no lo que sucede, o lo que toca”.

Desde esta perspectiva, Ceccim (2009) contribuye a la EPS, que, para Él, ocurre todo el tiempo en el mundo del trabajo, a través del intercambio de conocimientos, no solo técnicos y científicos, sino también de las dimensiones éticas de la vida o de las relaciones. Freire (1996) complementa esta visión, argumentando que el conocimiento exige una curiosa presencia del sujeto en el mundo, exigiendo su acción transformadora sobre la realidad, lo que implicaría en el proceso de invención y reinención.

La interconexión entre el saber científico y el popular ha sido una vía para que las personas experimenten potencialidades creativas y reconstruyan identidades como

agentes de sus procesos de vida. En ese proceso, las personas por un momento cambian de posición, comienzan a dar y recibir lo mejor que tienen, sus conocimientos, su experiencia. Con esto, existe la posibilidad de romper prejuicios introyectados, estableciendo así nuevos estándares de confianza y autoestima.

El conocimiento no se extiende desde lo que se cree saber hasta aquellos que se cree que no saben; el conocimiento se constituye en relaciones hombre-mundo, relaciones de transformación, y se perfecciona en la problematización crítica de estas relaciones (FREIRE, 1987, p. 19).

- **Interculturalidad e inclusión:** principios básicos para el respeto y valoración de la diversidad, la comunicación intercultural, la alteridad, así como la inclusión educativa para acoger y brindar oportunidades de participación a todas las personas. En este sentido, la inclusión es vista aquí como un “conjunto de prácticas que someten a los individuos para que pasen a mirarse a sí mismos y al otro, sin que necesariamente tengan como referencias fronteras que delimiten el lugar de lo normal y lo anormal, de lo incluidos” y los excluidos, los empleados y los desempleados” (LOPES; HATTGE, 2009, p. 107). Así, entendemos que la inclusión en la escuela tiene como principal objetivo acoger y dar la posibilidad a todos los niños, niñas y adolescentes de tener garantizado su derecho, sin importar clase social, condición psíquica o física.

La interculturalidad y la inclusión son dimensiones necesarias en el contexto educativo y en el proceso de internacionalización del conocimiento, ya que la incorporación del lenguaje intercultural en los procesos de formación y en la relación servicio versus usuario/estudiante es fundamental.

El diálogo intercultural debe estar presente en la vida cotidiana y se fundamenta en dos tipos de derechos fundamentales: el derecho a la ciudad, como espacio colectivo, que promueve la participación e integración de todos en la experiencia de la ciudad y el derecho a la diferencia, como promotor y valorando la diversidad, la comunicación intercultural y la alteridad (SANDERCOCK, 2004, p. 9).

La visión del citado autor, el encuentro intercultural y las relaciones entre el yo y el otro están influidos por representaciones sociales, estereotipos, prejuicios, proyecciones culturales, ideológicas y políticas. Estos elementos serán importantes en la aceptación/no aceptación, en la discriminación/exclusión de la diferencia, del otro, en el desarrollo y el bienestar, o incluso en el sufrimiento y la enfermedad. Además, estos elementos se ven favorecidos por la función del tiempo/espacio, que, según Santos (1988,



p. 5), “la sucesión de los tiempos es también una sucesión de espacios que recorreremos, y que nos recorren, dejando las marcas en nosotros”.

Freire (1997) corrobora esta visión al defender la valorización de la cultura, las memorias, los valores, los saberes, la racionalidad y las matrices culturales e intelectuales de los pueblos. También defiende la educación como acto político, una concepción de la educación vista en una relación inseparable con la conciencia política. Además, para él, la educación necesita considerar a las personas y sus culturas, respetar el modo de vida de los sujetos y promover la dignidad, además de tener la inclusión como base de ese proceso.

En la medida en que ignora el hecho de que no hay producción fuera de las relaciones hombre-mundo, no se puede percibir su importancia. Por eso no puede entender y, cuando lo hace, no le da la debida importancia al hecho de que, transformando la realidad natural con su trabajo, los hombres crean su mundo. Un mundo de cultura y historia que, creado por ellos, se vuelve contra ellos, condicionándolos. Esto es lo que explica la cultura como un producto, capaz al mismo tiempo de condicionar a su creador (FREIRE, 1997, p. 27).

Morin (2000) contribuye con el autor arriba, argumentando que es necesario avanzar en la construcción compleja del ser humano, la sociedad, el mundo y la vida. Para él, el ser humano es complejo, ya que concentra múltiples perspectivas: es social, económica, política, psicológica y de sabiduría. Por tanto, para él, “el conocimiento científico no es un reflejo de las leyes de la naturaleza. Trae consigo un universo de teorías, ideas, paradigmas”. Lo que nos lleva al movimiento pendular, tiempo de las condiciones bioantropológicas del saber, “porque no hay espíritu sin cerebro”, tiempo del arraigo sociocultural (MORIN, 2005, p. 21).

Si tratamos de pensar en el hecho de que somos a la vez seres físicos, biológicos, sociales, culturales, psíquicos y espirituales, es evidente que la complejidad radica en el hecho de intentar concebir la articulación, la identidad y la diferencia entre todos estos aspectos, mientras que el pensamiento simplifica o separa estos diferentes aspectos o los unifica a través de una reducción mutiladora (MORIN, 2005, p. 138).

- **Transdisciplinariedad:** abriendo la posibilidad de transmitir una visión más amplia y global del mundo, contraponiéndose al formato académico actual, que se configura en una disciplina cerrada, que no da cuenta de esta visión multidimensional. La transdisciplinariedad se proyecta como una posibilidad de conexión y comprensión de los problemas del mundo y, en consecuencia, de sus resoluciones. Esto es posible, a través de articulaciones entre las disciplinas y los diferentes tipos de conocimiento, que, para Morin (2005, p. 2), se destruyen por los cortes entre disciplinas,

entre categorías cognitivas y entre tipos de conocimiento, “la visión transdisciplinario es resueltamente abierta en la medida en que supera el dominio de las ciencias exactas a través de su diálogo y su reconciliación”.

Así, la transdisciplinariedad contempla la dinámica del mundo, ya que el contexto educativo actual, marcado por disciplinas aisladas, “hace imposible cualquier visión global del ser humano” (MORIN et al, 1994, p. 1), mirando esto, que incluye aspectos ambientales, culturales, económicos, políticos, sociales, éticos, estéticos y espirituales. La transdisciplinariedad requiere entonces proyectos y acciones que promuevan políticas públicas intersectoriales articuladas y conectadas para lograr una sociedad sostenible, tan necesaria en tiempos de pandemia/crisis.

Freire (1996) corrobora el contexto presentado anteriormente, cuando afirma que aprender y enseñar es dialéctico y no una mera transferencia. Para el autor, la enseñanza y el aprendizaje constituyen una relación de producción de conocimiento conexo, no separando la teoría de la práctica, considerando que el conocimiento no es algo absoluto, por el contrario, constituye un proceso de acción-reflexión-acción.

- **Amorosidad:** principio básico para una educación liberadora, emancipadora y como concepción de ampliación del diálogo en las relaciones de cuidado y en la acción educativa, a través de la incorporación de los intercambios afectivos y de la sensibilidad, permitiendo que el afecto se convierta en un elemento estructurador en la búsqueda de la salud y en la relaciones de enseñanza y aprendizaje, en una práctica de respeto y cordialidad entre estudiante y profesores, tejida en el afecto de la escucha y la apertura al diálogo con el mismo grado de legitimidad. Es un concepto muy difundido en la pedagogía freireana.

En Freire, la amorosidad es también la ética del reencuentro de la solidaridad infinita, del rechazo sólo de lo que rechaza. Frente a las fuerzas de la exclusión y el rechazo, el amor participa de nuestra condición humana como formador del carácter, irrigando las fuentes del bien y del entendimiento (AMORIM; CALLONI, 2017, p. 7).

Morin (2000) contribuye a esta reflexión al proponer la reconexión de saberes desde la perspectiva de la epistemología de la complejidad, que entiende el saber construido como una reconstrucción del sujeto a través de su nivel de percepción de la realidad. Y la realidad como multidimensional dada su compleja constitución.

- **Humanización:** forma de atención integral a la salud de los autores involucrados y la organización de espacios de trabajo saludables y

acogedores y la valorización de los diferentes sujetos involucrados en el proceso de producción de salud y aprendizaje, evidenciando la importancia de la relación inseparable entre el cuidado y la gestión. (MOURA-VIEIRA et al., 2021b).

Así, entendemos que los procesos de formación de los profesionales de la educación y la salud deben tener estos principios/conceptos como base pedagógica, pues, según Silva et al. (2017), la educación también necesita ser integral e interdisciplinaria, basada en referentes críticos y reflexivos, desarrollando así competencias y habilidades para acciones dirigidas al ser humano en su subjetividad y a partir de una relación de compromiso ético-político.

En este sentido, vale la pena mencionar que la integralidad no se limita a la gestión del sistema, provisión e integración de servicios, debe considerar el concepto ampliado de salud y sus determinantes. La salud sólo puede integrarse plenamente cuando considera la calidad y el acceso a la educación, el saneamiento y el trabajo para todos, de acuerdo con sus necesidades.

Desde esta perspectiva, el contexto actual demanda nuevas conexiones en la comprensión de la complejidad humana para el escenario educativo. Ya que hay que echar un vistazo más de cerca a la educación. Una mirada plural e integral con dimensiones políticas, sociales, económicas y culturales, pues no debemos olvidar que el hombre se constituye como especie-individuo-sociedad, en un proceso de entrelazamiento mutuo, que sólo será comprendido por el saber interconectado y transdisciplinario que la educación liberadora, emancipadora y humanitaria es capaz de promover.

En esta línea argumental, esta tesis ha recorrido caminos llenos de encuentros, encantos, diálogos y conexiones, pero también de desafíos, inquietudes y deseos de contribuir a una educación liberadora, inclusiva, humanitaria, guiada por procesos de trabajo corresponsables, amorosos y alegres.

## 2. OBJETIVO GENERAL

Analizar el modelo de Educación Permanente en Salud (EPS), adoptado por el Ministerio de Salud de Brasil en 2004, y evaluar si ese modelo es adecuado para los profesores de la Red de Educación Básica.

### 2.1 Objetivos específicos

- Analizar si la EPS es un modelo educativo a seguir en los procesos de formación de los profesionales de la educación.
- Identificar en qué medida los modelos de formación continua y educación permanente en salud satisfacen las necesidades formativas de los profesionales de la educación en el actual contexto de crisis sanitaria.
- Reflexionar sobre las fortalezas y debilidades de los dos modelos en relación a la promoción de nuevos convenios de gestión y dispositivos pedagógicos en las escuelas.
- Discutir el potencial de los dos modelos educativos en cuanto a la instrumentalización de los profesores en relación con la práctica pedagógica dialógica.
- Sistematizar y analizar los trabajos de Paulo Freire (12) y Edgar Morin (10) y tres ordenanzas de la Política Nacional de Educación Permanente en Salud para construir puentes de diálogo y vinculación, guiada, también, por los principios y dimensiones de la EPS.
- Desarrollar procesos de formación en el contexto de las EPS, desde la perspectiva de la transversalidad del proceso salud-enfermedad, con el objetivo de potenciar el conocimiento, la autoestima, la motivación y la promoción de la salud de profesores y estudiantes.
- Proponer un diseño metodológico alineado con los principios de la EPS, dirigido a los profesionales de la educación, en particular a los profesores, con agregados de dimensiones pedagógicas que respondan a la necesidad de procesos formativos dialógicos, cogestionados, humanizados y con lenguaje intercultural, de manera de repercutir en la práctica pedagógica en el cotidiano de la escuela.

### 3. MÉTODO

Esta investigación fue realizada en conjunto entre la Universidad de Valencia (UV), España, y la Universidad de Brasilia (UnB), Brasil. Fue aprobado por el Comité de Ética en Investigación de la Universidad de Valencia (Nº de Registro 1324161) y por la Facultad de Ciencias de la Salud de la UnB (CAAE: 20024819.3.0000.0030). Para cumplir con los objetivos específicos propuestos para la elaboración de esta tesis, que se interconectan en el objetivo general, se realizó un estudio cualitativo, participativo y exploratorio, en formato compendio (Anexo 1). La contextualización histórica del análisis se refiere a los años 2020/2021, el apogeo de la pandemia de COVID-19. Todo el curso fue seguido por caminos permeados por conceptos dirigidos a una práctica pedagógica liberadora y humanitaria.

Posteriormente, se desarrollaron ocho estudios, aquí denominados artículos 1, 2, 3, 4, 5, 6, 7 y 8. Con eso se lograron todos los objetivos en el proceso de redacción de los artículos, expuestos a continuación, en orden didáctico-cronológico.

#### 3.1. Artículo 1: “A prática docente em cena (informe de experiencia)”

La metodología utilizada en este estudio toma la forma de un recorrido narrativo de la vida en acción y se desarrolla bajo un enfoque en primera persona, ya que los hechos narrados se basan en las experiencias docentes de los autores. Las escenas ocupan dos escenarios, dos actos y dos perspectivas diferentes, en dos escuelas públicas del Distrito Federal, Brasil.

El estudio publicado como relato de experiencia, en 2020, en la Revista Com Censo, se incluye en los resultados y discusión de este trabajo, con la portada del original publicado, apareciendo en el Apéndice A.

#### 3.2 Artículo 2: “*Articulating Methodology: Germinating Mental Health In The Educational Space In Pandemic Times*”

Este estudio es una investigación-acción, de carácter cualitativo y participativo, en el que los autores exploraron las percepciones individuales de los participantes sobre la violencia en el ámbito escolar para la posterior promoción de una cultura de paz en estos ambientes. Las actividades se desarrollaron a través de Talleres de Formación y

Cultura Digital, realizados en 2019, vinculados al proyecto “Formación en Estrategias de Empoderamiento para Adolescentes y Jóvenes en Situación de Vulnerabilidad Social”, coordinado por la UnB. Específicamente en relación a los talleres, se anclaron en la metodología desarrollada hace muchos años por otro proyecto, denominado Proyecto Vidas Paralelas (HOEFEL et al., 2016), coordinado por la misma universidad.

Se transcribieron y analizaron registros de audio, imágenes/fotografías y documentos producidos durante los Talleres de Formación y Cultura Digital. Las experiencias vividas y los diálogos entre los autores durante los talleres forman parte del contexto investigado, pues a partir de estos diálogos, experiencias y las nuevas dimensiones y enfoques que fueron surgiendo con el proceso investigativo, se desarrolló la Metodología Articuladora.

Dado que los estudios cualitativos tienen como objetivo comprender las especificidades de los fenómenos sociales, teniendo en cuenta las diferentes dimensiones culturales, históricas y políticas de cada período, las variables que surgieron en los discursos de los participantes fueron agrupadas en categorías, lo que trajo un sentido para una mejor discusión con la literatura actual, sobre la complejidad del tema. Sin embargo, en este estudio fue fundamental comprender la subjetividad de los involucrados, considerando que las percepciones y vivencias de cada individuo le eran propias y consolidadas en la esencia de la existencia humana.

Los sujetos del estudio fueron profesores y estudiantes de la red de educación pública básica del Distrito Federal, Brasil. El estudio se llevó a cabo en formato de taller: talleres con docentes, en formato de multiplicación y talleres con estudiantes.

- Talleres con docentes: en total participaron 14 profesionales, siendo: 2 coordinadores pedagógicos, 11 profesores, 1 administrador hospitalario (invitado externo), 1 estagiario en la UnB.
- Talleres con estudiantes: en total participaron 125 estudiantes, con edades entre 11 y 13 años, y 2 profesores multiplicadores.

Los talleres se aplicaron en dos etapas:

- **Etapas 1:** Talleres con docentes: realizados los días 20, 25, 27 de febrero y 4 de marzo de 2019 en la ciudad de Brasilia-DF, Brasil.

En esta etapa, las actividades de los talleres se desarrollaron en tres momentos distintos y complementarios: a) construcción del mapa de violencia; b) intercambio de imágenes fotográficas de violencia y paz, así como discusión sobre violencia y derechos humanos y cultura de paz; c) acuerdos y planificación de acciones/alianzas, en un proceso

de reflexión sobre el contexto de violencia en el espacio escolar y promoción de una cultura de paz.

En todo momento se utilizó la Metodología de Análisis de Imágenes (HOEFEL et. al., 2016), que busca comprender los fenómenos subjetivos a partir de las vivencias de los sujetos involucrados, a través del diálogo entre palabras expresadas e imágenes y/o fotografías. Todas las actividades se desarrollaron en cuatro encuentros. En la primera reunión se utilizó el mapa del Distrito Federal para construir el mapeo de la violencia; en el segundo y tercer encuentro se compartieron imágenes fotográficas de violencia y paz traídas por los participantes, utilizando la Declaración Universal de los Derechos Humanos (ONU, 1948); y, en el cuarto encuentro, se construyó un plan a partir de las propuestas de los profesores para la prevención de la violencia y cultura de paz en el espacio escolar.

- **Etapa 2:** Talleres con alumnos: realizados entre el 20 de febrero y el 12 de abril de 2019. En esta etapa, las actividades se desarrollaron en cuatro momentos: a) presentación e identificación sociodemográfica, percepciones y sueños; b) construcción del mapa de afectos/emociones; c) intercambio de imágenes fotográficas de violencia y paz, con debate sobre derechos humanos y cultura de paz; d) construcción de la escuela soñada, en un proceso de reflexión sobre el contexto de violencia en el espacio escolar y la promoción de una cultura de paz.
- Las actividades de esta etapa se realizaron en cuatro encuentros de clases dobles, totalizando 8 horas de clases, en cada taller. Los talleres se desarrollaron en las clases de Proyectos transdisciplinario (PD) en cuatro grupos (dos clases de 6° año y dos clases de 7° año, en horario de la tarde).

En esta etapa, incorporamos otras variables e instrumentos para abarcar las dimensiones surgidas en la primera etapa y, así, profundizar las percepciones sobre los afectos/emociones que experimentan los estudiantes para la promoción de la salud mental y la prevención de la violencia y una cultura de paz.

Utilizamos como instrumento palabras tomadas de la Escala de Afecto Positivo y Negativo/PANAS (GALINHA; RIBEIRO, 2005; WATSON et al., 1988), versión portuguesa (interesado, perturbado, emocionado, atormentado, sorprendido, culpable, asustado, cálido, disgusto, orgulloso, irritado, encantado, remordimiento, inspirado, nervioso, decidido, tembloroso, activo, asustado), y palabras que se refieren a significados similares (humor, salud, esperanza, venganza, padre, madre, hermano, cariño, drogas, discriminación, bullying, discordia, prejuicio, amor, añoranza, falsedad, silencio, euforia,

saber, chistes, lucha, estudia la vida, familia, vergüenza, respeto, odio, saber, sufrimiento, convivencia, estrés, depresión, disciplina, armonía, alegría, paz, enseñanza, maldición, represión).

Los datos –audios, imágenes/fotografías, textos y observaciones– fueron analizados a través del análisis de contenido y del discurso (BARDIN, 2011). El análisis de Bardin (2011) prevé tres fases fundamentales: i) preanálisis; ii) exploración del material; iii) tratamiento de resultados – inferencia e interpretación.

En el *pre análisis* se consideraron todas las vivencias de los investigadores, ya que el investigador entra y sale de un trabajo de campo con percepciones diferentes, pues es investigador, pero a la vez investigado en el proceso de investigación. Esto fue importante para la construcción de nuevas preguntas de investigación.

Durante la *exploración del material* surgieron variables que culminaron con la inclusión de otros instrumentos que cumplieron con las necesidades de los investigadores encontradas durante el trabajo investigativo. Estas nuevas variables se incorporaron a los instrumentos que se aplicaron con el grupo de estudiantes, facilitando el proceso de agotamiento del análisis y categorización de los diálogos.

Así, el *tratamiento de resultados* - inferencia e interpretación transcurrió en un movimiento agradable y lleno de desafíos, especialmente en el tratamiento de datos llenos de subjetividades vividas por participantes e investigadores. Al final del estudio, fue posible reunir los materiales necesarios para desarrollar una nueva metodología, que luego llamamos Metodología Articuladora (MOURA-VIEIRA et al., 2021b), que incorporó elementos esenciales para el estudio de las emociones, subjetividades, fortaleciendo el establecimiento de vínculos afectivos frente a las necesidades individuales y colectivas de los sujetos involucrados.

El artículo, publicado en 2021, en *International Journal of Development Research*, se incluye en los resultados y discusión de este trabajo, con la portada del original publicado, apareciendo en el Apéndice B.

### **3.3. Artículo 3: “El ‘desierto digital’: repercusiones de la Covid-19 en la educación en España y Brasil”**

Este estudio es una investigación descriptivo-exploratoria, con enfoque cualitativo, que utilizó como instrumento de investigación entrevistas individuales semiestructuradas vía videoconferencia. Esta investigación busca conocer las



percepciones de los profesores de la educación básica, en España y Brasil, sobre las repercusiones del Covid-19 en la educación, así como en la práctica diaria de los profesores con sus estudiantes en el año 2020.

El público fueron los profesores de España y Brasil de la red de educación básica que se encontraban trabajando en el aula (virtual y/o presencial) en 2020. Se entrevistó a doce profesores: seis de España y seis de Brasil, ocho de ellos mujeres y cuatro hombres, con edades comprendidas entre 28 y 51 años. La experiencia de estos profesores oscila entre los 3 y los 29 años y abarcan las tres etapas de la educación básica (infantil, primaria y secundaria).

Para el análisis de los resultados se utilizaron los principios de análisis de contenido de Bardin (2011), la organización de la codificación seguida de la elección de unidades de registro a través del tema, y el recorte de ideas se representó a través de diferentes oraciones, las cuales tenían significados para el objetivo elegido en las respuestas a las preguntas abiertas, de donde surgieron las siguientes categorías: 1) el “desierto digital”; 2) educación – potencialidades y necesidades.

El artículo, publicado en 2021, en *Revista Electrónica Interuniversitaria de Formación del Profesorado*, se incluye en los resultados y la discusión de este trabajo, con la portada del original publicado, que aparece en el Apéndice C.

### **3.4. Artículo 4: “Digital Desert: Reality Of The Education In Pandemic Times”**

Es un trabajo de campo exploratorio descriptivo con enfoque cualitativo. Se utilizaron como instrumento de investigación entrevistas individuales semiestructuradas, aplicadas a 12 profesores de educación básica de Brasil y España.

Para el análisis de los resultados se utilizaron los principios del análisis de contenido de Bardin (2011). A la organización de la codificación siguió la elección de unidades de registro a través del tema y representó el corte de ideas a través de diferentes oraciones, que tenían significados para el objetivo elegido en cuanto a las respuestas a las preguntas abiertas. Estas variables se agruparon en categorías, tales como: 1) escucha y voz de los profesores ante la pandemia; 2) alfabetización digital; 3) aprendizaje y nuevas realidades.

El artículo, publicado en 2021, en *International Journal of Development Research*, se incluye en los resultados y la discusión de este trabajo, con la portada del original publicado, que aparece en el Apéndice D.

### **3.5. Artículo 5: “Olhares e abordagens metodológicas em tempos de pandemia”**

Se trata de un estudio en forma de síntesis crítico-reflexiva, participativa y exploratoria, sobre dos trabajos de campo (“Violencia y Percepciones de profesores durante la Pandemia”) y una revisión integradora (“Uso de Metodologías Activas”), desarrollados en el marco del alcance de este doctorado. Las inquietudes de los autores fueron presentadas en una línea histórico-metodológica, en torno a algunas preguntas de investigación, que motivaron la elaboración de esta síntesis, tales como: ¿cómo abordaron los gobiernos de España y Brasil la educación en el contexto de la Covid-19? ¿Se sienten preparados los docentes para afrontar este nuevo contexto educativo del entorno digital? ¿Cuál es el papel de la escuela en la identificación de la violencia para la promoción de una cultura de paz en este espacio escolar? ¿Cuál es el papel de las metodologías activas en el proceso de formación de estudiantes, profesores y profesionales de la salud? ¿Qué aspectos de la Metodología Articuladora pueden favorecer la implementación de los principios de la Educación Permanente en Salud (gestión, formación, servicio, participación)?

El artículo, presentado en 2021 en el II Congreso Internacional de Salud y Medio Ambiente (CINASAMA), edición online, también publicado como capítulo del libro Educación: los desafíos del nuevo escenario (ONE, 2022), y se inserta en el resultados y discusión de este trabajo, con la portada del original publicado, apareciendo en el Apéndice E.

### **3.6. Artículo 6: “Articulating Methodology: A Potentiator Device On Permanent Health Education”**

Se trata de un estudio cualitativo, exploratorio y participativo, en el que las experiencias de los autores fueron parte del contexto investigado. Se llevó a cabo en tres etapas:

- Etapa I: se construyó a partir de las experiencias y vivencias del autor principal, en diálogo con los demás autores, en forma de narración en primera persona.
- Etapa II: la Metodología Articuladora se estructuró con la incorporación de algunos principios: amorosidad; interculturalidad; humanización;

internacionalización del conocimiento; e intersectorialidad; y por el uso de algunos supuestos teóricos y metodológicos: Círculo de cultura de Paulo Freire (FREIRE, 1996); metodología de problematización (BERBEL, 2011); análisis de imágenes (HOEFEL, 2016); método de Vera F. Birkenbihl (2013).

- Etapa III: Se realizó una revisión integradora para una discusión detallada sobre la contextualización de metodologías activas y métodos utilizados durante la pandemia actual. Como estrategia metodológica para la realización de la revisión integradora, se siguieron seis pasos tal como se describe en un estudio anterior (BOTELHO et al., 2011). Para la revisión integradora, dos autores independientes (SAH y MEMV) buscaron en las siguientes bases de datos: Virtual Health Library (BVS) y Science Direct, utilizando las palabras clave: “metodología activa”, “educación permanente en salud” y “COVID -19/SARS- CoV-2”, en portugués/inglés. Los artículos incluidos para el análisis fueron seleccionados a partir de la lectura de los resúmenes; sólo se analizaron los textos completos en inglés y portugués publicados entre enero de 2020 y febrero de 2021. El criterio de exclusión utilizado significó que los artículos de revisiones bibliográficas y sistemáticas, así como aquellos que no cumplieron con los criterios de inclusión, no fueron admitidos para el análisis.

El artículo, publicado en 2021, en *Journal on Systemics, Cybernetics and Informatics* (JSCI), se incluye en los resultados y la discusión de este trabajo, con la portada del original publicado, que aparece en el Apéndice F.

### **3.7. Artículo 7: “Articulating Methodology – Weaving A Trans-Disciplinary Knowledge”**

Este estudio se caracteriza como una extensión teórico-conceptual de una investigación cualitativa, exploratoria y participativa, que consideró tres pasos sistemáticos y complementarios: I) descripción de las experiencias de los autores; II) revisión bibliográfica y conceptualización de la Metodología Articuladora; III) revisión integradora de metodologías activas (ver detalles en MOURA-VIEIRA et al., 2021b).

- Etapa I: en esta etapa, describimos en forma de narración, en primera persona, las experiencias teórico-prácticas de la autora principal, teniendo

como punto de partida sus inquietudes. Esta narrativa se complementa en un proceso de acción-reflexión-acción con las vivencias de la autora principal con los demás autores, con el fin de establecer una conexión inter y transdisciplinario entre los autores.

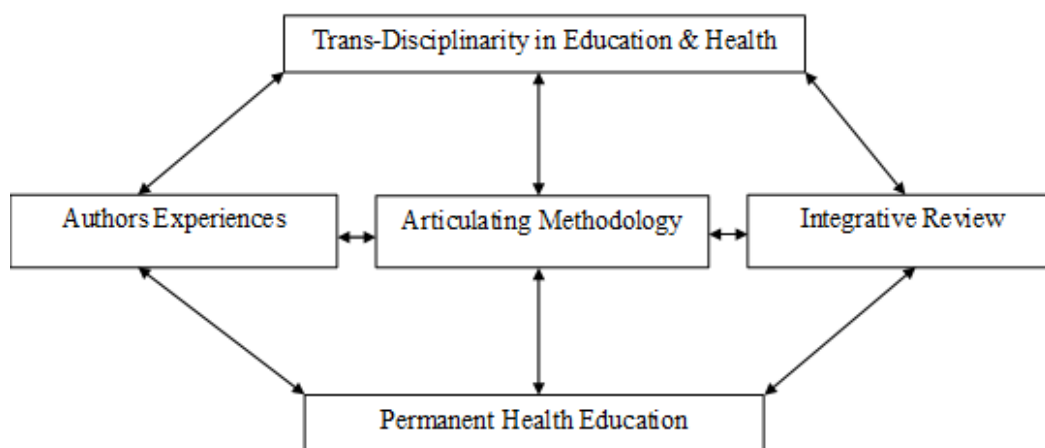
- Etapa II: para la revisión bibliográfica se utilizaron las principales obras de algunos autores y pensadores, que sirvieron de base para la estructuración conceptual de la Metodología Articuladora (MA). Los conceptos abordados para la estructuración del MA tuvieron su fundamento teórico en el Círculo de Cultura de Paulo Freire (FREIRE, 1996), en la metodología de problematización/arco de Maguerez (BERBEL, 2011), en el análisis de imágenes (HOEFEL, 2016) y en el Método de Vera Birkenbihl (BIRKENBIHL, 2007, 2013).
- Etapa III: la revisión integradora, como método de investigación que resume un pasado de literatura empírica o teórica para una comprensión integral del fenómeno estudiado (BOTELHO et. al., 2011), agregó a las etapas anteriores hallazgos importantes para una discusión detallada sobre la contextualización de metodologías activas utilizadas en tiempos de pandemia. Para tal contextualización, la revisión integradora se realizó en etapas: identificación del tema y pregunta de investigación; establecimiento de criterios de inclusión/exclusión; identificación de estudios preseleccionados; categorización de estudios preseleccionados; análisis e interpretación de estudios; y síntesis de hallazgos (BOTELHO et al., 2011).

A través de estos pasos sistemáticos y complementarios, fue posible realizar una exploración amplia del concepto teórico de transdisciplinariedad en la construcción del conocimiento y en la comunicación inter y transdisciplinario entre educación y salud. Tal exploración conceptual se enriqueció con las experiencias personales y profesionales de los autores, los resultados de la revisión bibliográfica e integradora y la sistematización de los conceptos teóricos de la Metodología Articuladora con los principios de la Educación Permanente en Salud (EPS).

La relación entre transdisciplinariedad y EPS fue presentada indirectamente, ya que, en un principio, la EPS pretendía unir sólo dos áreas del conocimiento (educación en salud). Además, entendemos que esta relación va más allá de la propuesta anterior; en este caso, tratamos de esquematizar esta relación con nuestro enfoque metodológico para

establecer un puente entre estos conceptos con la intención de fortalecer esta relación, como se muestra en la siguiente figura.

**Figura 1:** Relación conceptual entre comunicación transdisciplinario, Metodología Articuladora y Educación Permanente en Salud en la construcción del conocimiento



Fonte: Moura-Vieira, Alves-Hopf e Collado (2021)

El artículo, publicado en 2022, en *Journal on Systemics, Cybernetics and Informatics* (JSCI), se incluye en los resultados y la discusión de este trabajo, con la portada del original publicado, que aparece en el Apéndice G.

### **3.8. Artículo 8: “Century Encounters: Freire & Morin In Dialogue With Permanent Health Education”**

Este estudio se caracteriza por un recorrido metodológico-investigativo cualitativo, participativo y exploratorio. Este camino fue seguido permeado por conceptos y principios, que tenían como objetivo una práctica pedagógica liberadora, amorosa y humanitaria en diálogo con las obras de Paulo Freire y Edgar Morin y la Política de Educación Permanente en Salud.

Se realizó un análisis documental y exploratorio sobre 10 obras literarias de Edgar Morin, 12 obras de Paulo Freire y la Política Nacional de Educación Permanente en Salud (PNEPS, ordenanzas n° 198/2004; 1.996/2007; 1.858/2020).

Se realizó un análisis de contenido de estos trabajos restableciendo, a priori, dos categorías. Según Moraes (1999), las categorías, cuando se construyen a priori, parten de una fundamentación teórica que cumple con los criterios de clasificación de antemano, teniendo como base las preguntas de investigación desarrolladas por el investigador.

En esta perspectiva, a partir de las siguientes preguntas de investigación, construimos dos categorías que serán presentadas a continuación:

**Categoría 1:** La Propuesta de Educación Permanente en Salud en diálogo con las ideas de Freire y Morin.

- Si la Política Nacional de Educación Permanente en Salud y el Cuadrilátero (formación, gestión, atención, participación) de las EPS, propuesta por Ceccim y Feuerwerker (2004), dialoga con los trabajos de Freire y Morin.
- Si el modelo de Educación Permanente en Salud, tal como está estructurado (formación, gestión, atención, participación), responde a las necesidades pedagógicas del contexto educativo actual, impuesto por la pandemia. ¿O será necesario integrar otras dimensiones? y qué dimensiones serían?

**Categoría 2:** Freire y Morin, en diálogo con la transdisciplinariedad, la interdisciplinariedad y la complejidad humana para una educación liberadora, emancipadora y humanitaria.

- ¿Qué entendemos, desde la perspectiva/óptica de Freire y Morin, por transdisciplinariedad, interdisciplinariedad y complejidad humana?
- ¿Qué aporte teórico-conceptual defienden Freire y Morin para atender las necesidades educativas y de salud actuales que impone la pandemia?

El artículo, aceptado para publicación en 2021, por el *Journal on Systemics, Cybernetics and Informatics (JSCI)*, se incluye en los resultados y discusión de este trabajo, con la portada del original aceptado, apareciendo en el Apéndice H.

## 4. RESULTADOS E DISCUSSÃO

- Artigo 1: A prática docente em cena – relato de experiência
- Artigo 2: *Articulating Methodology: Seeding Mental Health In The Educational Space In Pandemic Times*
- Artigo 3: El “desierto digital”: repercusiones de la covid-19 en la educación en España y Brasil
- Artigo 4: *Digital Desert: Reality Of The Education In Pandemic Times*
- Artigo 5: Olhares e abordagens metodológicas em tempos de pandemia
- Artigo 6: *Articulating Methodology: A Potentiator Device On Permanent Health Education*
- Artigo 7: *Articulating Methodology – Weaving A Trans-Disciplinary Knowledge*
- Artigo 8: *Century Encounters: Freire & Morin In Dialogue With Permanent Health Education*

### 4.1. Artículo 1: “A prática docente em cena (informe de experiencia)”<sup>1</sup>

*Autores: Maria Edna Moura Vieira; Maria do Perpétuo Socorro Goulart; Maria da Graça Luderitz Hoefel (Publicado en agosto de 2020 en la Revista Com Censo, según Apéndice A)*

## RESUMO

Este trabalho tem como objetivo compartilhar a prática docente de duas professoras da Rede de Ensino Básica do Distrito Federal, que atuam na modalidade de ensino Educação de Jovens e Adultos (EJA), numa linguagem dialógica de suas experiências no contexto escolar, onde os protagonistas principais ora são os estudantes ora, os professores. A escrita busca criar um movimento, formando núcleo de sentido e conexão entre Professor, Estudante e Gestão. Ou seja, diálogos a partir da voz da experiência e saberes sobre o outro e sobre si mesmo. Vão sendo desenvolvidas cenas de vida a partir das recordações

---

<sup>1</sup> Os nomes utilizados aqui são pseudônimos.

e se materializam em um convite à magia da docência escolar e em novas formas de ver e sentir a prática docente. Dá-se em forma de percurso narrativo de vida em ação e é desenvolvido sob o foco em primeira pessoa, uma vez que os fatos narrados têm a participação ativa das autoras.

**Palavras-chave:** Educação de Jovens e Adultos. Educação permanente em saúde. Construção de Brasília. Gestão escolar. Prática docente.

## INTRODUÇÃO

Cada vez mais, se torna evidente que o desenvolvimento de trabalhadores não se faz descolado da atualização do próprio trabalho, isto é, que trabalho e trabalhadores constituem uma díade indissociável (MERHY, 2014). No interior dos setores da educação e saúde, tais processos requerem ampla comunicação/ correspondência às necessidades sociais, aos processos participativos e aos projetos políticos e pedagógicos.

É através do trabalho que o ser humano se produz, modificando a natureza, despertando suas próprias potencialidades e desenvolvendo novas possibilidades de vida, num ciclo contínuo de aprendizagem, conhecimento, invenção e reinvenção, afeto, desafeto, encontros e desencontros no tempo histórico.

Em cada tempo histórico o ser humano cria novos modos de agir, sobre a natureza e sobre a vida, produzindo novos conhecimentos e desenvolvendo novas possibilidades existenciais. A transmissão histórica do conhecimento produzido tornou-se fundamental para o desenvolvimento do ser humano, e isso vem ocorrendo de diversas formas ao longo da história. Uma delas é por meio da escola, como tarefa do professor.

Conforme Saviani (1995), o trabalho educativo é o ato de produzir, direta e intencionalmente em cada indivíduo singular, a humanidade que é produzida histórica e coletivamente pelo conjunto dos seres humanos.

Nessa perspectiva, o professor(a) assumiu a enorme importância de transmitir às novas gerações o conhecimento já produzido pelo gênero humano, sendo basilar para o desenvolvimento da sociedade, em geral, e da condição de humanidade, em cada um.

Seu desempenho e o trato do conhecimento são de fundamental importância ao delineamento de novos rumos na prática pedagógica. O aprendizado do professor no seu cotidiano como ser histórico e socialmente contextualizado pode auxiliar na definição de uma nova ordem pedagógica, assim como na intervenção da realidade no que se refere à sua prática.



Assim, se faz necessário, uma reflexão teórica e metodológica sobre o trabalho no contexto do desenvolvimento humano e direitos humanos, de forma a provocar o repensar do papel da formação dos trabalhadores da educação na perspectiva do desenvolvimento individual e coletivo, por meio de uma articulação reflexiva, dos encontros e construindo um universo de processos educativos em ato, em um fluxo contínuo e intenso de convocações, desterritorializações e invenções (CECCIM; MERHY, 2009).

É nesse contexto que alguns Atos e Cenas são narrados aqui, com o intuito de compartilhar com os leitores os afetos e desafetos de duas professoras em suas práticas de docência na Modalidade Educacional de Jovens e Adultos.

## **OBJETIVO GERAL**

Compartilhar experiências da prática docente na Modalidade de Educação de Jovens e Adultos (EJA) de duas Professoras da Rede de Ensino Básica do Distrito Federal.

## **OBJETIVOS ESPECÍFICOS**

1. Demonstrar parte da realidade vivenciada por duas professoras na sala de aula da rede pública de ensino do Distrito Federal, na modalidade de jovens e adultos;
2. Criar um movimento de reflexão sobre a necessidade de novos dispositivos de formação para os atores da escola;
3. Provocar o repensar da magia do ato de ensinar.

## **METODOLOGIA**

A metodologia utilizada no estudo dá-se em forma de percurso narrativo de vida em ação e é desenvolvida sob o foco em primeira pessoa, uma vez que os fatos narrados têm a participação ativa das autoras. As cenas ocupam dois cenários, dois atos e dois olhares distintos, em duas unidades de ensino da rede pública do Distrito Federal.

### **Primeiro ato - construção de autonomia**

*Basta-me um pequeno gesto,  
feito de longe e de leve,*

*para que venhas comigo  
e eu para sempre te leve  
Cecília Meireles (2001)*

O ano de 2017, para mim, foi recheado de interrogações, conexões e inquietações diárias sobre meu papel de mãe, mulher, professora e ativista social. Trabalhava, em um dos meus turnos, no período noturno, na modalidade de Jovens e Adultos e, ao mesmo tempo, preparando-me para fazer doutorado fora do país.

A Educação de Jovens e Adultos (EJA) é uma modalidade de ensino garantido pelo Governo Federal através da Constituição Federal de 1988, que perpassa todos os níveis da Educação Básica do país, destinada aos jovens, adultos e idosos que não tiveram acesso à educação na escola convencional na idade apropriada. Tem como objetivo tentar ou corrigir questões sociais, como, por exemplo, a exclusão social.

Art. 208 CF (1988)- O dever do Estado com a educação será efetivado mediante a garantia de: I – ensino fundamental, obrigatório e gratuito, assegurada, inclusive, sua oferta gratuita para todos os que a ele não tiveram acesso na idade própria; (...) § 1º O acesso ao ensino obrigatório e gratuito é direito público subjetivo.

A história da EJA no Brasil está muito ligada ao pedagogo Paulo Freire, que na década de 1950/1960 desenvolveu um projeto de alfabetização, atendendo, em 1963, a 380 trabalhadores em Angicos-RN, repercutindo por todo o país, mas sendo sufocado no início do regime militar em 1964.

Minha proposta de doutorado vinha muito na direção da saúde mental do público escolar, seja estudante, professores e/ou gestores, muito influenciada pela Educação Permanente em Saúde (EPS), nos escritos de Ceccim e Merhy (2009), e também pela pedagogia do oprimido de Paulo Freire (1987). Com isso, tudo que eu fazia em sala de aula era com olhar de EPS, tanto no conteúdo que administrava, como nos momentos da coordenação pedagógica. Tentava colocar em prática tudo que aprendi no curso de EPS em Movimento (2015), reinventando-me nos processos que produziam movimentos e afirmavam as potências criadoras de vida (DELEUZE, 2002).

Comecei a experimentar dispositivos mais participativos, mais contextualizados com a vida de cada um, com a história de cada um, na tentativa de trazer de volta, para mim, a magia da prática docente, perdida, totalmente, no ano de 2013, quando me senti “agredida” como pessoa e como docente, por um gestor (ou talvez um não-gestor, indicado por um político sem conhecimento profundo da educação, desprovido de qualquer pedagogia e sentimento de humanidade. Em outro momento, contarei essa

história, pois foi algo tão sério que, até hoje, quando me lembro, sinto uma onda de calafrio; foi e é muito dolorido, para mim, esse marcante “episódio”. Entretanto, me conforto com as palavras de Freire (1996, p. 134), em que ele diz: *“Olhar para o passado deve ser apenas um meio de entender mais claramente o que e quem eles são, para que possam construir mais sabiamente o futuro”*

Essas experimentações foram, também, a maneira que encontrei para me resguardar da frustração e sensação do não-lugar, do não pertencer, que muitas vezes, ocorrem em função de processos centralizadores da gestão e da tradição educacional “conteudista”, centrada no professor, desprovida de uma maior ênfase em processos dialógicos.

Complementar a isso, havia alguns estudantes que me chamaram muito a atenção, que, apesar do avanço da idade, não faltavam um dia de aula. Aproveitei a semana de Consciência Negra para conhecer melhor o contexto de vida desses estudantes.

Foi aí que surgiu Dona Maria<sup>1</sup> nas minhas inquietudes, no meu comodismo, fazendo que eu refletisse a minha prática docente, o estado de inércia profissional em que me vinha arrastando desde 2013. Aquela mulher idosa negra, tímida, cabisbaixa, mão trêmula e olhar sonhador, não tinha a ideia do quanto me ensinava. Gratidão!

Havia outros estudantes que também me chamavam muito a atenção, como o Sr. Marcos, mecânico de mão cheia, mas semianalfabeto, que igual a Dona Maria, nunca havia pisado no Congresso Nacional e na Universidade de Brasília (UnB), apesar de viverem no Distrito Federal desde jovens.

Um dia, fiz um convite para minhas quatro turmas: irem à Universidade de Brasília, que a maioria também não conhecia, para assistirem a uma apresentação sobre imigração, do Grupo de Pesquisa que eu participava na UnB. Cinco se prontificaram e entre eles estavam Sr. Marcos e Dona Maria. Levei-os em meu carro (muitas vezes, nós professores precisamos utilizar nossos recursos para desenvolver alguma atividade que não está dentro do script ou, até mesmo, as que estão).

A gestão das escolas, em sua maioria, não tem os recursos necessários, para atender à demanda pedagógica e administrativa do professorado, como exemplo, para solicitar um transporte, etc. Em geral, precisa de uma confirmação de número elevado de estudantes, pois são eles que pagam o transporte, têm que completar os assentos do ônibus, para a direção adotar as providências necessárias às atividades extras. Muitos não vão porque não têm esse dinheiro, nem para as passagens. E isso, com certeza,

desestimula muito o professorado a avançar no processo pedagógico; para mim, isso é fato.

Por essa e muitas razões, penso que é uma obrigação do Estado propiciar condições financeiras e logístico-administrativas nas escolas, para a realização de atividades extras, como por exemplo visitas a um museu, nos espaços históricos da cidade/campo, parques, teatros, cinemas, espaços arquitetônicos, além de incentivar trocas de experiências e culturais entre as cidades, como forma de apropriação de conhecimento e cultura do território vivido.

Mas valeu muito levar esses cinco estudantes para conhecerem a UnB; lembro-me dos sorrisos, da alegria, da conversa solta, falamos de muitas coisas, de nossas vidas, de personagens da história e da cidade que eles não conheciam como Darci Ribeiro e Paulo Freire. Comentei que o educador Paulo Freire, um brasileiro, foi o responsável pelo método que consiste na proposta de alfabetização de jovens e adultos, que hoje eles são beneficiados, e que ele é conhecido mundialmente, por suas propostas pedagógicas. Conversamos também sobre a construção de Brasília; aprendi tanto nesse dia, muito mais, que eles comigo.

Quando chegamos no local da atividade, olhar atento e curiosidade aguçada, sentaram-se na fila do me sugerida por mim, pois, timidamente, queriam ficar no “chamado fundão”. A atividade estava programada para terminar às 21h, e como o ônibus da escola saía às 22h30 (a escola oferecia ônibus escola para casa), então nós teríamos que sair o mais tardar às 21h; por isso, no decorrer das atividades do seminário, eu perguntava se eles estavam bem, se estavam gostando e se já queriam ir embora, e eles sempre respondiam: “estamos gostando, professora, e vamos esperar terminar; queremos permanecer até o fim”.

Quando finalizou o seminário, eles fizeram questão de tirar fotos com os organizadores e expositores do evento, e também os apresentei à coordenadora do grupo de pesquisa. Durante a semana subsequente, eles me agradeciam tanto e falavam tanto para os colegas sobre a ida à UnB e de como eles estavam contentes de terem ido, que todos passaram a me perguntar quando teria outro evento e que eles gostariam de ir também.

Sentia-me realizada como professora. Penso que tomei emprestado a lógica da EPS, a da reinvenção de mim mesma, pois passei a sentir, novamente, a magia de ser docente e o poder que essa tem para desenvolver em nós a inteligência amorosa. Vi-me totalmente motivada a seguir todas as veredas do meu papel de docente. Nesta mesma

semana, defini o meu objeto de pesquisa do projeto de doutorado: Educação Permanente em Saúde.

Percebi, ali, que as diretrizes e as dimensões da EPS dialogavam com a prática docente, e como professora consciente da “pedagogia do oprimido” de Paulo Freire, via-me implicada com a prática docente dialógica, desde o dedão do pé ao último fio de cabelo, em uma espécie de corpo-teoria-ação.

Quem, melhor que os oprimidos, se encontrará preparado para entender o significado terrível de uma sociedade opressora? Quem sentirá, melhor que eles, os efeitos da opressão? Quem, mais que eles, para ir compreendendo a necessidade da libertação? Libertação a que não chegarão pelo acaso, mas pela práxis de sua busca; pelo conhecimento e reconhecimento da necessidade de lutar por ela. Luta que, pela finalidade que lhe derem os oprimidos, será um ato de amor, com o qual se oporão ao desamor contido na violência dos opressores, até mesmo quando esta se revista da falsa generosidade referida (FREIRE, 1987, p. 43).

Assim, me deixei levar para o sertão de Guimarães Rosa (1958, p. 518), pois ele captava o tom das minhas afetações

*[...] o sertão é do tamanho do mundo.*

*Sertão: é dentro da gente.*

*Viver – não é? – é muito perigoso.*

*Porque ainda não se sabe.*

*Porque aprender-a-viver é que é o viver mesmo.*

*O sertão me produz, depois me engoliu, depois me cuspiu do quente da boca.*

O caminho no sertão não acaba; abre tantas veredas e encruzilhadas, e as pessoas nunca estão terminadas. O sertão é do tamanho da gente, a formação do ser humano é do tamanho da vida.

É nesse sentido que passei a refletir mais sobre o papel do educador(a). Tinha vontade que meus colegas de profissão que já perderam a magia da docência pudessem resgatá-la como eu estava resgatando. É importante que ela aconteça, seja por meio de propostas formais de educação, nas relações cotidianas de trabalho, ou mesmo da inserção do sujeito no mundo sociocultural, conforme preconiza a EPS.

Mesmo assim, ainda não estavam claros todos os sentidos e significados das veredas do sertão da docência que eu iria percorrer. O tempo todo me sinto em uma corda bamba nesse caminhar de professora. Conseguir o equilíbrio é o grande desafio que vivemos em sala de aula.

Foi com todas essas inquietações que organizei, juntamente, com os colegas e estudantes a Semana de Consciência Negra – (até quando vamos precisar ter uma semana

ou um dia específico para lembrar que somos todos iguais de direitos e singularizados?). Cada sala escolheu a forma de representar essa semana tão especial e de enfeitar as salas com frases conscientizadoras sobre nossa história escravocrata, que nos transportou para o imaginário coletivo do preconceito.

### **Dona Maria em prosa e verso**

A 5ª Série, turma da Dona Maria, escolheu fazer uma homenagem a ela na apresentação dos trabalhos da Semana de Consciência Negra. Como a maioria da turma faltava muito (menos Dona Maria e um outro estudante de uns 56 anos), adotei a estratégia de que, a cada dia, um iria contar sua história de vida.

Para tal, fiz um pequeno questionário de perguntas- -chave para eles responderem e tinham que contar sua história para todos. Isso me deu um trabalho enorme; tive que assumir, para mim, a responsabilidade de escrever a história de vida de Dona Maria, como a escolhida para ser homenageada.

Lembro-me dela entrando em sala e, na hora da chamada, chegava com uma sacola com os livros pesados e toda encurvada e cabisbaixa, sentava na primeira fila sempre, na mesma cadeira e falava tão baixo que não dava para ouvi-la.

Eu não tinha a prática de lecionar em alfabetização e muitos estudantes da 5ª Série do “EJA” chegam sem saber ler e escrever direito, e Dona Maria era um desses, mãos trêmulas e com uma timidez impressionante.

Colocava no quadro uma frase de três linhas e eles demoravam bastante tempo para copiar. Tive que modificar totalmente a minha metodologia de sala de aula. E como todas as turmas eram formadas, em sua maioria, por jovens, fui, aos poucos, formando grupos de estudos, onde o critério era sempre ter um idoso na composição do grupo. Tinha como objetivo a troca de experiências e gerar um clima de respeito e responsabilidade na classe, já que havia também muitos jovens rebeldes.

Todas as turmas fizeram trabalhos maravilhosos. Mais uma vez, senti toda a magia da docência, da importância do meu papel de professora e da Modalidade EJA, para a sociedade. Vi-me reinventando na prática e aquilo tudo me fazia um bem tão grande como profissional e como pessoa; mais uma vez, vi-me bebendo da fonte da EPS, nas sábias palavras de Merhy:

Os encontros, em micropolítica, são intensamente pedagógicos, atuam diante de práticas de homogeneização, com trocas entre domínios de conhecimento e

prática, construindo um universo de processos educacionais em ação, em um fluxo contínuo e intenso de Chamadas/Convocações, desterritorializações e invenções (MERHY, 201).

Quando comecei a escrever a história de Dona Maria para a sua homenagem, tinha uma preocupação bem pontual, que era transformar uma vida de dureza, de sofrimento, luta, tristeza e recheada de um contexto de desrespeito e exclusão social, numa história mais leve, que demonstrasse toda a potência daquela mulher semianalfabeta, que chegou aos seus 73 anos com sonhos de adolescentes (tira sua habilitação) e com resiliência impressionante.

Além disso, a sua filha que seria convidada para participar da homenagem a sua mãe; a preocupação, aqui, seria em relação a seu pai, que era um dos pontos problemáticos da história. Além do mais, sua história seria lida para todos os colegas. Com isso, fiz a opção de uma escrita poética de forma a transformar a dureza na leveza de direito que a Dona Maria merecia.

### **Simplesmente, Maria**

Escrevi a história de Dona Maria, mas quando foi para fazer a diagramação e a impressão, a instituição escolar não tinha condições de fazer a impressão do pequeno livreto de 15 páginas; a impressão tinha que ser colorida, e a escola não tinha máquina de xerox com impressão colorida. Para a diagramação, contei com a ajuda de uma amiga. Depois, tive que custear o impresso de sete cópias coloridas. Arrecadei um pouco de dinheiro com a turma que se dispôs a ajudar e contribuir com o restante, mais da metade. A realidade da vida de professor da rede pública no Brasil muitas vezes é essa – de equilibrista e bom samaritano.

*Simplesmente Maria*, foi o título escolhido para a história daquela descendente de indígena por parte da avó paterna e de escrava por parte da avó materna, que nasceu no ano da abolição da escravatura (1888). Foi criada pela mãe que nasceu no ano de 1917 (já no final da 1ª guerra mundial), juntamente, com mais 8 irmãos.

Começou a trabalhar aos 4 anos de idade, na fiação de algodão com seus vários primos e irmãos, à época, todas crianças. Ou seja, *Simplesmente Maria*, é a história de uma mulher negra que nasceu e viveu no contexto escravocrata, apesar de ter nascido no século posterior à abolição da escravatura no Brasil e de ser produtiva até hoje.

## Segundo ato – território compartilhado

*Oculto consciência de não ser,  
 Ou de ser num estar que me transcende,  
 Numa rede de presenças  
 E ausências,  
 Numa fuga para o ponto de partida:  
 Um perto que é tão longe,  
 Um longe aqui.  
 Uma ânsia de estar e de temer  
 A semente que de ser se surpreende,  
 As pedras que repetem as cadências  
 Da onda sempre nova e repetida  
 Que neste espaço curvo vem de ti  
 José Saramago (1981)*

Lembro que nos conhecemos há muito tempo, quando dávamos aula em uma mesma escola. Foi constituída uma amizade – mais que uma amizade, uma irmandade, e desde então, estamos juntas no movimento da vida e das emoções que a prática docente nos proporciona. Ajudando uma a outra a realizar as atividades, os projetos que tanto nos movimentam e que, muitas vezes, não tem o apoio necessário da gestão, mesmo em territórios diferentes, sempre nos apoiamos a cada nova ideia, novo projeto. Até neste de compartilhar nossas experiências. O espaço escolar tem dessas coisas – a possibilidade dos encontros, dos vários encontros e isso é que mantém aquecido o meu coração, apesar de muitas vezes sentir vontade de jogar tudo pro alto.

Minha trajetória como professora/educadora foi, realmente, moldada passo a passo, onde vivenciei experiências maravilhosas e marcantes, em cada olhar, em cada história e realidades diversas dos meus alunos. Com toda a dificuldade que se descortina, pelo sistema educacional apresentado e/ou por quaisquer outros agentes educacionais, consegui atingir vários objetivos nas mais variadas situações.

Idealizei, criei e fiz acontecer, com meus alunos, colegas professores, comunidade escolar e demais servidores das unidades por onde passei, por vários projetos lindíssimos e cheios de conteúdos, em que alunos que, a princípio, se sentiam tímidos, “inatingíveis”, aparentemente, silenciosos, acuados mesmo, foram tocados pelas objetividades dos projetos e sobressaíram- -se de uma forma ímpar e tocante.

Há que se convir que Saraus Poéticos e Musicais foram apresentados com sucesso e reavivaram nos educandos um carinho e amor muito grande pelos poemas – esse



momento único do autor. Conseguia, numa mescla de razão e coração, implantar nos envolvidos naqueles projetos, toda a minha empolgação enquanto agente transformadora que sou.

Trago uma experiência de um projeto que é a “menina” dos meus olhos e que foi, quando da época da sua estreia, uma das minhas maiores realizações: a arte de redigir aos moldes do ENEM, vestibulares e concursos.

O que se convencionou apresentar nesse projeto é a arte de redigir, considerando que a redação é, antes de qualquer conceito prévio, o diálogo com a vida. Não se pode permitir surpresas em se tratando de temas. Redigir é a expressão do pensamento, por escrito, onde a coesão/coerência, a clareza, a correção, a concisão, a elegância fazem parte de um todo indivisível. Requer um tratamento com zelo, carinho, respeito e com olhos de educandos ávidos pelo dinamismo da aprendizagem. Que o redigir faça parte do nosso cotidiano e esteja nas linhas e entrelinhas do fenômeno comunicação! Exatamente, aos moldes de um dos nossos parnasianos Olavo Bilac, em seu poema Língua Portuguesa:

*Última flor do Lácio, inculta e bela,  
És, a um tempo, esplendor e sepultura:  
Ouro nativo, que na ganga impura  
A bruta mina entre os cascalhos vela...  
Amo-te assim, desconhecida e obscura.  
Tuba de alto clangor, lira singela,  
Que tens o trom e o silvo da procela,  
E o arrollo da saudade e da ternura!  
Amo o teu viço agreste e o teu aroma  
De virgens selvas e de oceano largo!  
Amo-te, ó rude e doloroso idioma,  
em que dá voz materna ouvi: “meu filho!”,  
E em que Camões chorou, no exílio amargo,  
O gênio sem ventura e o amor sem brilho!  
(BILAC, 1964, p. 262).*

Nesse contexto, sempre procurei fazer também um passeio pelo mundo das palavras e permiti apresentar a língua/idioma como construção social, histórica, que se atualiza, permanentemente, e que a linguagem é considerada produto das relações sociais, da interação entre os diversos interlocutores. Equivale dizer que o “ensino” da Língua Portuguesa, através da Redação, entre outros, não é considerado como fim, mas como uma condição para que o sujeito possa atuar de forma efetiva na sociedade onde se insere. Em síntese, redigir é deixar que a alma fale, num processo e interação mágicos.

Dessa forma, sempre deixei claro que uma redação de peso deve seguir alguns tantos critérios essenciais, para que as intimidades escritor e obra se abracem, reciprocamente, num todo indivisível.

Elenquei alguns objetivos muito importantes e a observação dos mesmos fez e fará toda a diferença, quando os desafios do ENEM, vestibulares e concursos surgirem.

É importante levar a sério alguns cuidados a seguir:

- Expressar-se, oralmente, com eficácia em diferentes situações, ampliando seus recursos expressivos e enriquecendo seu vocabulário;
- Interessar-se pela leitura e escrita como fontes de informação, aprendizagem, lazer e arte;
- Desenvolver estratégias de compreensão e fluência na leitura e, a partir daí, buscar redigir sob as competências apresentadas pelo ENEM;
- Exercitar as estratégias de construção de um texto, independente do tema, sob as exigências de vestibulares e concursos;
- Elaborar proposta (s) de intervenção para o problema abordado, respeitando os direitos humanos;
- Expressar-se por escrito com eficiência e de forma adequada em diferentes situações comunicativas, primando pela correção ortográfica e gramatical.

Resultado insatisfatório?! Nunca! Essa foi sempre a minha tônica. Com ela, sei que atingi e moldei o pensamento de muitos.

Em contrapartida, o interesse da maioria dos alunos, num olhar de esperança por algo novo, e a vontade de quebrarem o tabu e desmistificarem o bicho-papão da “Arte de Escrever”, me enchiam de ânimo e tirava forças de onde, realmente, não tinha.

Quantas vezes ouvia de algum aluno que “odiava” escrever, que não suportava “redação”, tanto mais a vontade de ensinar aumentava. Quando das apresentações, ao final, a história era outra e os comentários se descortinavam positivamente: “É... até que não é tão ruim assim!”, “Pensei que fosse mais complicado”.

E eu, no meu íntimo, já começava a sentir o sabor da vitória.

Assim, é a alma do professor que acredita na verdadeira mudança. Nem tudo está perdido. Educar é construir, inventar e reinventar; aprender e ensinar, ensinar e aprender. O mínimo que você consegue passar para o seu aluno, talvez, naquele momento, é o tudo que ele precisa para fazer a leitura das entrelinhas da sua vida. Faça o melhor, dê o melhor

de si. Com certeza, num futuro, não muito distante, tudo se justificará, e você sentirá a leveza do dever cumprido.

Que nosso caminhar na docência nos direcione para os bons encontros, para as boas atitudes e para a defesa de uma educação de qualidade, defesa dos nossos estudantes, de nossa saúde mental e de todos nós trabalhadores. Não nos desanimemos com crise, com as adversidades políticas e econômicas de países. Sejam os guerreiros e confiantes sempre! Muito bom podermos compartilhar um pouco de nossas experiências com vocês. Não acaba por aí; certamente, encontrar-nos-emos nesse mundinho pequeno...

## CONSIDERAÇÕES FINAIS

As trocas de experiências, de linguagem e de mundos distintos, no processo de escrita dos Atos, demonstrou a realidade de sala de aula, das dificuldades que a equipe escolar, em particular os professores(as), têm em desenvolver processos pedagógicos na sua prática diária, bem como, da necessidade de terem acesso a dispositivos de formação que ressignifique sua prática docente, como a EPS, que se configura como uma proposta de aprendizagem no trabalho, onde o aprender e o ensinar se incorporam ao cotidiano das organizações.

Além disso, é urgente propiciar condições financeiras e logísticas-administrativas nas escolas, para todas as atividades, permeando o espaço escolar de práticas pedagógicas, espaço vivo de cultura, de apropriação de conhecimento do território vivido, de aprendizagem significativa, de filosofia e magia.

Aproveitamos para concluir com o doce calor das palavras de Cecília Meireles (1983, p. 411-412):

Vem a lua, vem, retira as algemas dos meus braços. Projeto-me por espaços cheios da tua Figura. Tudo mentira! Mentira da lua, na noite escura. Não te encontro, não te alcanço... Só – no tempo equilibrada, desprendo-me do balanço que além do tempo me leva. Só – na treva, fico: recebida e dada. Porque a vida, a vida, a vida, a vida só é possível reinventada.

O presente relato é um convite para lembrarmos que não existe aprendiz que não seja ‘egiptólogo’ de alguma coisa. Tudo que nos ensina alguma coisa emite signos, todo ato de aprender é uma interpretação de signos ou de hieróglifos (DELEUZE, 2003) e que a educação só é possível a partir da relação com o outro e com os signos, só é possível ser transformado pelo saber quando se deixa afetar por eles.

## REFERÊNCIAS

BILAC, O. Poesias. 23. ed. Rio de Janeiro: Livraria Francisco Alves, 1964. BRASIL.

Constituição 1988. Constituição da República Federativa do Brasil. Brasília, DF: Senado Federal: Centro Gráfico, 1988.

CECCIM, R. B.; MERHY, E. E. Um agir micropolítico e pedagógico intenso: a humanização entre laços e perspectivas. Interface Comunicação Saúde Educação, v.13, supl.1, p.531-542, 2009.

DELEUZE, G. Espinosa: filosofia prática. Tradução de Daniel Lins e Fabien Pascal Lins. São Paulo: Escuta, 2002.

DELEUZE, G. Proust e os signos. Tradução Antônio Carlos Piquet e Roberto Machado. 2ª ed. Rio de Janeiro: Forense Universitária, 2003.

FREIRE, P. Pedagogia do Oprimido. 17. ed. Rio de Janeiro: Paz e Terra, 1987.

FREIRE, P. Pedagogia da autonomia: saberes necessários a prática educativa. São Paulo: Paz e Terra, 1996.

MEIRELES, C. Poesia completa: Volume I. Rio de Janeiro: Editora Nova Fronteira, 2001. MEIRELES, C. Obra poética: Vaga música. Rio de Janeiro: Editora Nova Aguilar S.A., 1983

MERHY, E. E. EPS em Movimento: Depoimento Emerson Elias Merhy sobre Educação Permanente em Saúde, 2014. Disponível em: <https://www.youtube.com/watch?v=o-nApG0Wgks>. Acesso em 20 dezembro 2019.

ROSA, J. G. Grande sertão: veredas. 2. ed. Rio de Janeiro: J. Olympio, 1958.

SARAMAGO, J. Os poemas possíveis. 3.ed. Lisboa: Editorial Caminho, 1981.

SAVIANI, D. Pedagogia histórico-crítica: Primeiras aproximações, 5. ed. São Paulo: Autores Associados, 1995.

## 4.2. Artículo 2: “Articulating Methodology: *Seeding* Mental Health in the Educational Space in Pandemic Times”

*Autores: Maria Edna Moura Vieira1, Simone Alves-Hopf, Maria da Graça Luderitz Hoefel (Publicado en septiembre de 2021 en el International Journal of Development Research, según Apéndice A).*

### ABSTRACT

COVID-19 pandemic resulted in losses, and lessons being learned world-wide. Isolation has impacted our planning abilities, as well as our ability to ponder about new aspirations. In the education, the situation at hand demands attention, given the rise of violence during social isolation. It is necessary to promote teachers' and students' mental well-being, given the complexity involved in teaching work. Our main goal was to develop training processes in the context of Permanent Health Education (PHE), from the perspective of the transversality of the health-disease processes, meaning to enhance knowledge, self-esteem, motivation, as well as health promotion for teachers and students. Image Analysis Methodology has been applied. From that as well as from the authors' praxis, an Articulating Methodology was developed, based on pedagogical-dialogical, intercultural, intersect oral, PHE principles and, finally, on cognitive neuroscience devices. We have explored strengths and weaknesses both in teachers and in students, meaning to prevent violence, meaning to build into learning environments for a culture of peace. This study has revealed the application of Articulating and Imaging Methodologies are able to facilitate the establishment of a PHE process, which promotes teacher training to impact their practices toward the development of healthy learning spaces, knowledge exchange, affections.

**Key Words:** Active Methodologies, Mental Health, Peace Culture Promotion, Permanent Health Education, School Violence.

### INTRODUCTION

This article emerges from the concerns of the authors. It became the trigger for its concreteness and a PhD work development from the main author, in a movement that was

constituted of “Freirean Praxis” action-reflection-action-reflection. Considering that we are all creatures of praxis, and that we may only act from the goals we set for ourselves, which in itself creates new realities, and reinvent us in a process that reverses accommodation and repositions us in our mutual encounters. “We humans [thus] find ourselves in the world, with the world and with others, as beings concretely situated in a process of mutual construction” (Freire, 1987, p. 39). The COVID-19 pandemic resulted in losses, changes and lessons being learned worldwide, rendering this 21st century a quite challenging one. Isolation has clearly impacted our planning abilities, as well as our ability to ponder about new aspirations, especially considering the increase in physical and psychological violence (Acosta, 2020).

Violent events are experienced by both teachers and students in diverse environments. It is noteworthy that violence suffered by teachers should not be excluded from the agendas, as it is a growing concern, as educational policies aimed only at students seem not to be sufficient, if the safety and well-being of teachers are not to be promoted (Yang, Qin & Ning, 2021). In addition, both teachers and students will have to deal with lived experiences caused by social isolation, losses, and scholar distancing, which may have left several negative impacts, not restricted to the learning process, but also affecting socio-emotional development. In such sense, in addition to functional needs, teachers and students shall need emotional support, whether in presential, virtual or hybrid classes. According to World Vision’s report (2020), up to 85 million children and teenagers, between 2 and 17 years old, may join the victims of physical, emotional, and sexual violence during a period of social isolation.

The NGO’s report figures represent an increase ranging from 20% to 32% of the annual average on official statistics data. In Brazil, according to data from Ouvidoria Nacional de Direitos Humanos (2021), in April 2020, 19,663 reports of sexual violent events against minors were registered, which represents an increase of 47% as compared to the same period in 2019. If one considers the importance of school as a networked protection infrastructure for children and adolescents connected to agents from areas such as Health and Social Assistance, then it becomes clear that educators have an essential role in protecting this age group’s rights, as provided for by Estatuto da Criança e do Adolescente/ECA (1990) [Brazil’s main statute regarding the protection of the rights of children and adolescents. This highlights the importance of education’s role in the social, cultural, political, and economic contexts of society. Due to online learning, children and adolescents are no longer present in the classroom, which makes it ever more difficult to

identify events of physical, psychological, and sexual violence students might be confronting. Therefore, it is important for the State to provide basic conditions for both teachers and educational institutions, even when corporally distanced during this pandemic period, to remain as much as possible in contact with their students and to pay special attention to the most vulnerable ones. Concurrently, adopting measures that guarantee safety, physical and mental health of teachers it is important to enable them to perform their activities in a full, pleasant way, dealing properly with their fears and uncertainties. In this sense Morin (2020) alerts to the importance of education in both the pandemic and the post-pandemic periods, highlighting the importance of children and young people learning to how to deal with their fears, anxieties, and uncertainties. The author warns us to the need for a new educational order, a new gift, whose engine and main anxieties and uncertainties dealing device is education itself. Thus, the promotion of the mental health of teachers and students, is imperative due to the complexity involved in teachers' work in pandemic and post-pandemic scenarios.

This article focuses on the discussion of Permanent Health Education principles (Ceccim & Feuerwerker, 2004), by means of a proposal meant to materialize mechanisms incorporating motivation and social empowerment strategies to the promotion of mental health in school environments. To operationalize the concept of PHE Ceccim (2005) has proposed some principles, which articulate amongst training, management, health care, and participation, highlighting that through such principles there may be a change in the traditional, and elitist, conception of health education, searching for integrality and for the inclusion of users as active subjects in the realm of health practices. The objectives of the endeavor were: (a) to develop training processes within the context of PHE, from the perspective of the transversality of the health-disease process, (b) to enhance the knowledge, self esteem, motivation and promotion of mental health of teachers and students belonging to the Basic Public Education in the [Brazilian] Federal District [Area]; (c) to reveal their daily life, culture and health; (d) to understand the socio-cultural reality of the subjects; (e) to promote their empowerment; and (g) to create public policies basic instruments on equity and violence prevention and on the promotion of the culture of peace in school environments. Such liberating pedagogical pursuit, whose humanizing practices constitute a fundamental condition to education itself and which do reverberate onto social relations able to generate human sociability, has resulted in the genesis of the Articulating Methodology, which shall be hence forth presented.

## RESEARCH ELABORATION

This is an action research study, being qualitative and participatory in nature, during which authors have explored participants' individual perceptions on school violence, later promoting a culture of peace onto the sad environments. Reported activities were carried out as Training and Digital Culture Workshops held in 2019, linked to the "Training in Empowerment Strategies for Adolescents and Youth in Situations of Social Vulnerability" project, coordinated by the University of Brasília (UnB). The workshops were specifically anchored in the method developed many years ago in another project, called Projeto Vidas Paralelas (Hoefel et al., 2019), coordinated by the same University.

**Subjects in complex Essence:** The study subjects were teachers and students from the public education system of [the Brazilian] Federal District [Area]. The study has taken place as a series of workshops: with teachers, in the form of multiplication and with students. As for the workshops with teachers: 14 professionals in total have participated, being: 2 pedagogical coordinators, 11 teachers, 1 hospital administrator (external guest), 1 UnB intern. As for those with students: 125 students in total aged between 11 and 13, and 2 multiplier teachers have participated.

### Procedure - A Work Full of Emotions and Subjectivity

The Workshops were applied in 2 steps.

**1st Step: Workshops with Teachers.** Held on the 20th, 25th, 27th of February and 4th of March 2019 in the city of Brasília-DF, Brazil. At this stage, Workshop activities took place in 3 distinct and complementary moments: a) The Construction of the Violence Map; b) The Sharing of photographic Violence and Peace images and the discussion on Violence, Human Rights and Culture of Peace; c) The Agreeing and planning of actions/partnerships, in a process of reflection on the context of school violence and on the promotion of a culture of peace. The Image Analysis Methodology (Hoefel et. al., 2016), which seeks to understand subjective phenomena from the experiences of the subjects involved, through the dialogue between expressed words and images and/or photographs, has always been applied. Every activity was developed in 4 meetings. In the first meeting, the map of the Federal District was used in the making of the Map of Violence; in the second and third meetings, photographic images on violence



and peace brought by participants referring to the Universal Declaration of Human Rights/UDHR (1948) were shared; and in the fourth meeting, a Plan was conceived based on the teachers' proposals for violence prevention and for the promotion of the Culture of Peace in school environments.

**2nd Step: Workshops with Students.** Held between February 20th and April 12th, 2019. In this stage, activities took place in 4 moments: a) Presentation - Socio-demographic identification, perceptions, and dreams; b) Making of the Affects/Emotions Map; c) Sharing photo Violence and Peace images accompanied by a discussion on Human Rights and the Culture of Peace; d) Conceiving the School of their Dreams, in a reflective process within the context of school violence accompanied by the promotion of the Culture of Peace. Activities in this stage were carried out in 4 meetings of double classes, totaling 8 hours of classes in each workshop. Workshops were developed in the Disciplinary Projects/PD classes in four groups (two 6th grade groups and two 7th grade groups, in the afternoon). At this stage, we were including extra variables and instruments to encompass the dimensions that had emerged during the first stage, and thus, deepening the perceptions on the Affections/Emotions experienced by students for use in the process of promoting mental health wellness, of preventing violence and of promoting the Culture of Peace. As an instrument, we used words taken from the Positive and Negative Affects Scale/PANAS (Galinha & Ribeiro, 2005; Watson et al., 1988), Portuguese version (Interested, Perturbed, Excited, Tormented, Surprised, Guilty, Scared, Warm, Repulsed, Enthusiastic, Proud, Angry, Delighted, Remorse, Inspired, Nervous, Determined, Trembling, Active, Frightened), alongside words that convey similar meanings (Humor, Health, Hope, Revenge, Father, Mother, Brother, Affection, Drugs, Discrimination, Bulling, Discord, Prejudice, Love, Longing, Falsehood, Silence, Euphoria, Knowing, Toasts, Fight, Studies Life, Family, Shame, Respect, Hate, Knowing, Suffering, Coexistence, Stress, Depression, Discipline, Harmony, Joy, Peace, Teaching, Cursing, Repression).

**Data Analysis - The Complex Mission of Dissociating Subjectivity and Objectivity:** Audios, images/photos, texts, and observations were analyzed through the application of Content and Discourse Analysis methods (Bardin, 2011), which recommend three fundamental phases: treatment - inference and interpretation.

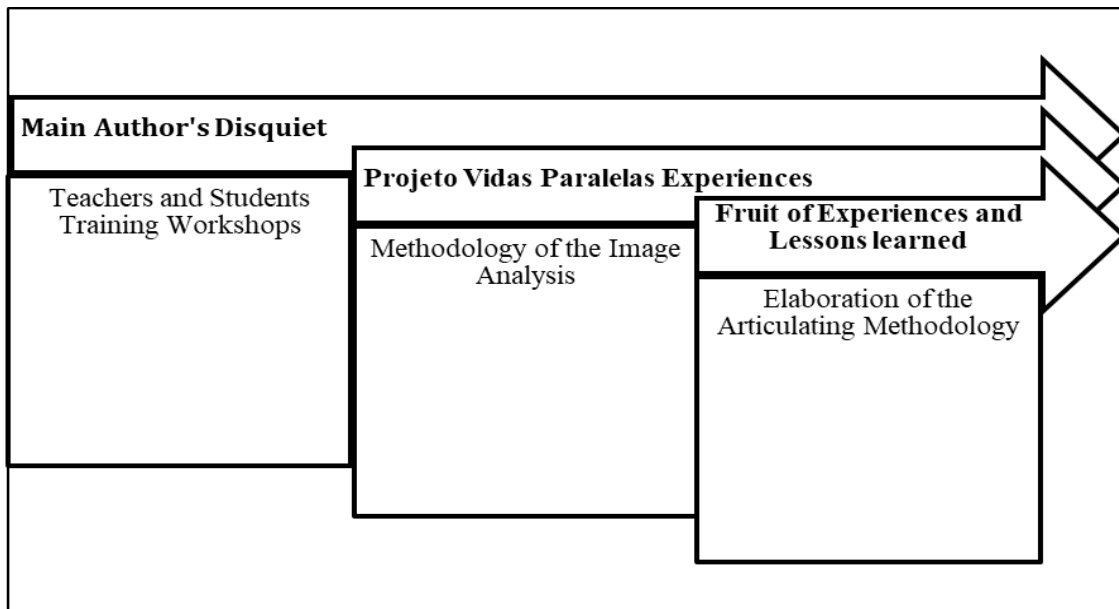


Figure 1. Scheme of the Data Collection and Elaboration of the Articulating Methodology.

In previous analysis, previous experiences of the researchers have been considered, as the investigators enter and leave any work field with distinct perceptions, due to being researchers, as well as subjects investigated in the very research process. This has been important for the creation of new survey questions. During the exploration of material, variables have emerged that culminated in the inclusion of additional instruments, that could meet the needs researchers had come across during the investigative work. These additional variables have been incorporated into the instruments that were to be applied onto the group of students, facilitating the process of analytic exhaustion and dialogue categorization. Thus, the treatment of results - inference and interpretation took place in a pleasurable and challenging motion, especially in the treatment of data plentiful of experienced subjectiveness both the participants' and the researchers' sides. At the conclusion of the study process, it was possible to gather all the material required to the development a n method, which we later named Articulating Method (Moura Alves-Hopf, Callado and Hoefel, 2021), and which encompassed elements fundamental for the study of emotions and subjectiveness, strengthening the establishment of affective ties in view of i as well as collective needs of subjects involved.

## RESULTS

### Workshops with teachers/pedagogical coordinators

**Violence Map:** Beginning with the map of the Federal District, participants have described work routes and places based on their personal territorial experiences, indicating places where they had previously suffered, witnessed and/or provoked violence. In reports some violence categories have been identified (loving, childish, moral, intellectual, sexual, psychological, gestural, ver gender, racial, financial, institutional, and physical abuse, militarization). Spaces they related to their previous violent experiences were schools, the airport, hospitals, school roundabouts, as well as their home to school and school to home routes. As one can see in some of the following reports:

At the Escola do Plano where I used to work there was much more violence, even greater than here in Guara, I've always imagined that because it was on the Plano Piloto [National Capital's Main Area], everything would be more structured, which implied lesser violence levels. I was wrong, overthere the school is hostage to the students (Participant A).

I used to teach 7th grade students in Samambaia, while I was doing some work for the Cultural Fair with my class, all along some students were messing around, getting in the way, being noisy with a balloon. I asked them to help a group, I'dset the activity they were supposed to do on a poster, but a student wanted to irritate me,so he had tidied the room for the exhibition at the Fair; and when he did that, I reacted by slapping him. Immediately I stopped, I realized how high my stress level was, took a deep breath, started to cry, went to the pri for help. I talked to the student there and apologized, he realized what he had done to me, recognized his mistake, and apologized as well. After that, he became a great student in my classes (Participant B).

**Sharing Photographic Images of Violence:** Each participant was asked to bring an image that represented an act of violence and another that represented peace. Each participant commented on their image of violence and on the image of peace during the following meeting. Some questions were asked to the participants (1. Why does this type of violence happen? 2. How could it be prevented? 3. What strategy should be adopted to confront violence?). The main violence categories that emerged relating to the images were: violence against children, political violence, violence at work, and domestic violence. As a result, we obtained the following reports:

Violence against children moves me a lot, as they are the most fragile and, thus, are most subject to any type of violence. That's what I've lived in a greater context of passive vulnerability to violence, both domestic, sexual, amongst others and in diverse spaces (Participant C).

I brought this photo because of the current situation of repression against women in Venezuela. There are several cases of women who are being censored for speaking, they can no longer denounce the violence they are suffering, their denunciations cause other forms of violence. For women's protests are harshly repressed. This to me is a very serious form of violence. The curtailment of women's participation in both social and political contexts is something we need to tackle (Participant D).

After an eight-month relationship on a social networking site, and some meetings arranged in person that he never showed up, because he always found an excuse, she decided to make an appointment at her apartment... Perhaps because of her emotional weakness, she ended up making an appointment meeting at home (Participant E).

It's happened to me that I'd be in the work environment, and I'd be passing by, and several students would whistle and talk sexy in front of everyone. I didn't know where to hide my face at those moments, I felt bad about it. We think it's common, even normal, even laugh sometimes, but this is not normal (Participant F).

**Agreements and Planning, in a process of reflection on the context of school violence and the promotion of a culture of peace:** The reflection on Human Rights, violence, and the promotion of a culture of peace was based on the Universal Declaration of Human Rights (1948) and the keywords defined in the collective. The human rights letter was distributed and each participant was asked to remove three words from those shown in the table, and individually form complementary sentences from the letter: The most frequent words, which were related to the UDHR are: Shame - Art – 23°; Humanity - Art. 1; Will to live - Art. 3; Hope – Art. 13; Transformation - Art. 19; Emotional – Art. 2nd, 3rd, 7th, 8th and 13th; Solitude – Art.25; Violation – Art. 8; Life – Art. 3; Violence – Art.5; Pleasant – Art. 7, 23 and preamble; Secret – Art. 12, 21 and preamble; Compassion – Art. 5; Love – Art. 26; Spirit of Fraternity. Some solutions were pointed out by the participants for preventing violence and promoting a Culture of Peace in schools. These solutions were separated according to the triggering questions.

What do we need to do? Identifying violence, conflicts, and types of violence at school; differentiate play from violence; form partnerships with the health and social assistance sector; improve infrastructure and pedagogical work; increase self-esteem with words of support/encouragement from the teacher to students; develop awareness and empathy; share problems.

What is necessary? Establish partnerships; think about local potentials; motivate and define strategies; sensitize students; exchange knowledge; do not let bad acts become “fad” (do not replicate the idea).

How are we going it? Hear more; consider vulnerabilities; make diagnosis; share information.

What is possible? Replicate the methodology; set limits; speak no to certain things; dialogue on social issues and student interests; collect data to identify cases of vulnerability in the school; dynamic activities to diagnose the different types of violence suffered by students; use non-violent communication; recognize the different forms of violence that are part of everyday school life (denaturalize). Who should do it? All but the replication of the methodology will be carried out by the teachers in the PD class.

### **Training and digital culture workshops with students**

***Presentation - Socio-demographic Identification, Perceptions and Dreams:*** The main socio-demographic Identifications, Perceptions and Dreams were: (1) Students from different regions of Brazil (Brasilia, Maranhão, Piauí, Rio Grande do Norte, Santa Catarina, Goiás, Minas Gerais, Bahia, Espírito Santo and Ceará), and from other countries (Japan and Russia); (2) As for color/race - they declared themselves to be brown, white, and black; (3) Outstanding events - they highlighted parental separation, mental health (depression); (4) Main dreams – they would like to be a football player, a policeman, a doctor, a teacher, a space scientist, a violinist, or return to Japan, have good living conditions, travel around the world.

**Construction of the Affects/Emotions Map:** In this activity, a Styrofoam board marked with 04 territories/spaces was handed out to each group of students: Home, Block/Street, School, and the last board marked Another Emptiness. Asking each group to build their territories of affection/emotions with words taken from PANAS/Similar.

The main words related to the spaces were: Home – teaching, enchanted, peace, mother, father, brother, revenge, affection, respect, family. Block/Street – pain, fear, scared, violence, love, hate, humor, father, sadness, joy, drugs, play. School – hate, shyness, friend, friendship, play, love, joy, respect, conversation, knowledge, fight, happiness, shyness, suffering, interested, humor, violence. Another emptiness – health, love, sadness, life, depression, prejudice, affection, happiness, discipline, surprise. In the general context, it was observed that according to the students' perceptions, school is seen both as a space of affective relationships and as a place of violence.

**Sharing Photographic Images of Violence and Peace:** Students also reported and brought images of violence like those found in the categories that arouse in dialogues with teachers, such as: violence against children, politics, at work and at home, reaffirming the school as a space for affection and violence.

**Conceiving the Dream of a School:** Based on a reflection on the context of school violence on the promotion of a culture of peace, the construction of a Dream Of a School was proposed. All propositions for the conception of this Dream of a School Were simple, powerful, and tangible to materialize, as one can see: at this Dream of a School students would enjoy infrastructure such as sports' courts, lockers, air circulator/air conditioning; drinking fountains with cold water; cafeteria with bench and chairs to sit at snack time; better bathrooms; internet for everyone, computer room, multimedia kit in every classroom, better food, sightseeing tours, outdoor classes, music during breaks and educational activities, more dialogue, teachers who'd understand them, comprehensive education, affection, and friendship. What there shall not be: violence, drugs, fights, shyness, disrespect in any way, shape or form, bad behavior, revenge. Proposal for the Dream of a School: community refrigerator; affections' box (where everyone could manifest their feelings); wish mural; a day where everyone could go dressed as they pleased; conversation circles with diversified themes about various cultures and peoples (Africans, Indigenous) including dance, music, cooking, theater, experience laboratory (art, culture, and science), and social activities (visits to old people's homes); a day for sharing ice cream and snacks.

### **Development of the Articulating Methodology**

According to Moura-Vieira (2021) “It was in a movement of experimentation, dynamic and reflexive that we developed the Articulating Methodology (AM), which seeks to fill in the gaps found during my career as a teacher, full of concerns and

curiosities”. The Articulating Methodology arose from the need to fill gaps found in the didactic-pedagogical praxis. From a perspective of exchanging knowledge and experiences between researchers working in the education and health sector.

AM is based on scientific methodologies and methods articulated and structured to encompass dimensions of education and health (cognitive, emotional/affective, neural, and social). It emphasizes the realities of a phenomenon in terms of its origins and its *raison d'être*, through dialectical approaches, exchange of experiences, knowledge, and affections, providing the mapping of the frontiers of knowledge and emotions, thus allowing the construction of a new work connected with the local reality and creation of proposals based on mapped needs and potentials.

This Methodology plays a role, both as an evaluative method and as a device for the formation of permanent health education. In addition, the entire training process provided by it is transversalized by some principles and concepts, such as: i) Loving - by the conception of the expansion of dialogue in care relationships and in educational action through the incorporation of emotional exchanges and sensitivity, allowing affection to become a structuring element in the search for health; ii) Interculturality - by valuing diversity, intercultural communication and alterity; iii) Humanization - as a principle of comprehensive health care and the organization of healthy and welcoming work spaces, making clear the importance of the inseparable relationship between care and management; iv) Internationalization of knowledge/exchange of knowledge - through the interconnection between scientific and popular knowledge in dialogue with thinkers and the reality of the territory; v) Intersectoriality - for the articulated planning of health and education policies.

Thus, encompassing the PHE principles: Training, Management, Health Care and Participation. The AM was based on some scientific methodologies and methods, such as:

*Paulo Freire Culture Circle* (Freire, 1963) - Dialogical strategy that generates a critical movement of people, knowledge, and powers for socio-educational transformation. It is a place and a learning strategy in which a moderator organizes circularly with people.

*Problematization Methodology* (Berbel, 2011) - Through the Arch of Charles Magueres, this methodology provides the development of skills and the systematization of experiences and knowledge, from the perspective of human rationalities.

*Image Analysis* (Hoefel, 2016) - Through images and maps it is possible to map/identify potentials and vulnerabilities in the context to be investigated, considering the complexity of human subjectivities.

*Vera F. Birkenbihl's Method* (Birkenbihl, 2007a, 2007b) - It is based on learning processes, considering aspects of neuroscience that seek to enhance affective relationships and human development.

The organizational structure of AM is systematic and complementary based on the construction of an Action Project in Service (Proactive Agenda), which, according to the authors, is considered the reinvention and organization of pedagogical practices in action. It is possible to apply this methodology in face-to-face and virtual formats, in 4 moments (Moura-Vieira, Alves-Hopf, Callado and Hoefel, 2021).

***Moment 01*** - Situational Diagnosis: Mapping of lived experiences and learning, empowering, vulnerable aspects and determinants of the work experienced.

***Moment 02*** - Empowerment of Pleasurable Learning Processes: Application of Association and Visualization Techniques that promote a dynamic and interactive dialogue, considering the discussion and reflection on the aspects and determinants of empowerment and vulnerability, mapped in the situational diagnosis.

***Moment 03*** - Promotion of self-care: Collective, artistic, and cultural experiences, based on the participants' stories and knowledge, using Integrative and Complementary Practices in Health, as health promotion devices.

***Moment 04*** - Construction of a Proactive Agenda: Invitation to actors to reflect on themselves, on the other and on the relationships at work with a view to solving the problems discussed by the group.

## DISCUSSION

In this study, we observed important elements in the participants' reports about violence in school, leisure, and residential spaces. In addition, the proposals of teachers and students were mapped, with the objective of agreeing and developing actions to prevent violence and promote a culture of peace in school spaces. In the dialogues



established between moderators and students, it was possible to identify suggestions brought by students for the construction of a School of Dreams.

Considering these findings, the care and protection networks for children, adolescents, young people and adults are configured in a set of protective actions and services, which must be articulated at different levels of complexity, including the school, in order to guarantee the completeness of care.

According to Henry (2000, p.17), when violence is only defined as the use of force towards the other, resulting only in physical damage, it omits some critical elements, which he calls damage. These damages do not include emotional and psychological pain, they tend to focus on the visible and interactionist interpersonal, ignoring the violence of social and systemic processes, and excluding the symbolic violence of domination. Corroborating the definition of violence and respective harm presented by Henry (2000). We also found different dimensions of violence that manifested themselves in various spaces, including the school space. For example, at school, various forms of violence were identified, such as: threats from drug dealers; threats to students by other students; fights between students; pushes; aggression to the teacher, from parents to teachers; culture of disrespect; politics that belittle the teacher; militarization at school; marking violent attitudes in everyday school life; fights between students with physical aggression; harassment of professors with students and students with professors; student son of a drug dealer who intimidates his colleagues because he feels powerful; vicious cycle of family violence; veiled violence; violence against women; scar of symbolic violence; and fear of the unsaid.

According to Wessels & Kostelny (2021), violence, whether physical, psychological, and sexual, against children and adolescents is contextual, considering that the way in which it presents itself varies, not only from country to country, but also in how the figure of children appear within their families, communities, and societies. In this context, the school as one of the points of the protection network for childhood and adolescence constitutes a mechanism for identifying this violence and supporting students, thus reaffirming the importance of the role of education in the social, cultural, political, and economic context of a society to promote a culture of peace and non-violence.

We can observe that even before the current pandemic, caused by SARS-CoV-2, the topic of violence has had a profound impact on personal and interpersonal relationships. An Australian study (McLean & McIntosh, 2021), for example, showed

that during the pandemic, there was a significant increase in family violence, including emotional abuse and serious threats against women, child emotional abuse/neglect, and child exposure to family violence, in addition, increases in professional stress among educators were found, due to changes in work practices. Our study also revealed that even before the Pandemic, violence has had impacted political, economic, and social structures in Brazil, which can be reaffirmed in some of the participants' reports below.

*The speech of the Excellency of the President, Bolsonaro, strengthens the trivialization of aggression and violence, both against women and in any context. His gestures, his speech, attack me. Everything he propagates is violent, everything he represents is violent, even before he was president, already in the campaign period he already used this discourse of violence (Participant G)*

*When the whole world unites for disarmament and a culture of peace, Brazil comes up with this fallacy, of legalizing the use of weapons (Participant H).*

*Militarization at school is something else, it is not acceptable (Participant I).*

If, on the one hand, violence is something that is rooted in school spaces, on the other hand, according to the proposals presented, both by teachers and students, to combat violence, strategies and actions in school spaces that promote the culture of peace, to achieve a peaceful and humanitarian culture. In this sense, it is essential to carry out broad work in the Federal, State and Municipal spheres, covering the most diverse dimensions, working together with policy makers, teachers, students, families, entrepreneurs, and the community in general.

According to Omeghie & Olorunleke (2021), government bodies and cooperative work play an essential role in promoting the implementation of legislation that supports human rights in schools for sustainable learning and national development. When students call for a humanitarian school, or when they propose social activities, such as visits to old people's homes, in the perception of a School of Dreams, they place themselves in the position of an active social subject and establish a bridge between learning and care, where the social value is added to all dimensions of the school space. The strengthening of this space for the culture of peace and the prevention of violence comes from the experience of a sense of co-responsibility in the education and integral health processes of the school team, through dialogue between health, education and social care professionals, students, managers, politicians, governments, family members, entrepreneurs, and other members of the school community. Since building a culture of

peace in schools is a joint task that depends on everyone involved, valuing cultural diversity, a safe, comfortable, and peaceful environment through approaches that are included in intra and extracurricular activities (Mas'ud, 2021).

The construction of a common bridge between schools, communities and governments is essential for the development of didactic and pedagogical practices across sectors that favor a culture of peace from the perspective of promoting human rights. In this context, it will also be necessary to provide permanent training processes for teachers, to generate a feeling of love and co-responsibility in their didactic-pedagogical processes, building shared affections and emotions about the space and people's relationship with it. In this way, it will be possible to promote common work processes that relate to the need and potential in the school spaces where we work.

In this perspective, as indicated by the teachers, there are structural, organizational, formative, and emotional needs and gaps within the school context. To minimize these needs and gaps, the teachers proposed actions of agreement and planning, such as: the practice of identifying types of violence in schools; intersectoral work with the formation of a partnership with Health and Social Assistance; improvement of the pedagogical work infrastructure; loving relationships between teachers and students to promote self-esteem, collective awareness, and empathy.

In addition, the teachers also signaled that these gaps and needs can be filled, through qualified listening, daily dialogue, an attentive look at vulnerability, information sharing, permanent health education processes for teachers, based on the need for the territory, the replication of active and participatory methodologies, the creation of spaces for dialogue on social issues and student interests, and the use of non-violent communication.

Also, the teachers' speeches reaffirmed the need for the participation of all those involved in the process of preventing violence and a culture of peace in the school space. From this perspective, the Articulating Methodology offers many possibilities for active, cooperative, and participatory work, if we consider its methodological, didactic-pedagogical aspects, and affective and organizational principles (Amorosity, Interculturality, Humanization, Internationalization of knowledge, and Intersectoriality, Proactive Agenda).

In the organizational context, the Articulating Methodology through the Proactive Agenda, reinforces social participation, health promotion, political participation, and the

development of training processes, where the tone of the narratives and propositions emerge from the participants' experiences, voices and listening, for social transformation.

## CONCLUSION

Both teachers and students point to the need for practices that promote a culture of peace and prevent violence in the school spaces. The creation of a Culture of Peace is to generate the necessary transformations, considering that peace is the guide of all human and social relations, in the sense of promoting human coexistence with differences and mutual respect.

These changes range from the dimension of values, attitudes and lifestyles to the economic and legal structure and citizen participation. Furthermore, the affections and emotions of students and teachers is a field that should be explored, as the identification of affections and emotions that are related to personal and professional growth. It will provide subsidies for a deeper understanding of the individual (Waters, Allen & Arslan, 2021).

We concluded that permanent health education processes, which involve teachers and students are necessary, for the empowerment and development of a sensitive and loving reason, guided by the inseparability between training, management, health care and participation, in dialogue with the new needs presented during pandemic and post-pandemic, through a political and social processes of dislocation and questioning, which seek to transform realities.

## ACKNOWLEDGMENT

We thank the Direction, the Pedagogical Coordination; Teachers and Students of the Elementary Education Center 10, Guara II, Braslia-DF.

## REFERENCES

- Acosta, M. L. (2020). *Gender-based violence during the pandemic and lockdown*. Spanish Journal of Legal Medicine, 46 (3), pp. 139-145.
- Bardin, L. (2011). *Anlise de contedo*. So Paulo: Edioes 70.
- Berbel. N. A. N. 201). *As metodologias ativas e a promoo da autonomia dos estudantes*. Semina Cincias Sociais e Humanas, 32 (1), pp. 25-40.
- Birkenbihl, V. F. (2007a). *Birkenbihl Denkwerkzeuge*. Mnchen: Mvg.
- Birkenbihl, V. F. (2007b). *Stroh im Kopf?: Vom Gehirn-Besitzer zum Gehirn-Benutzer*. Mnchen: Mvg-Verlag.

- Brasil. (1990). LEI Nº 8.069, DE 13 DE JULHO DE 1990. Estatuto da Criança e do Adolescente, Brasília/DF.
- Brasil. (2021). Ministério da Mulher, da Família e dos Direitos *Humanos*, *Ouvidoria Nacional de Direitos Humanos*. Disponível em <[https://www.gov.br/mdh/pt-br/ondh/paineldedadosdaondh/copy\\_of\\_dados-atuais-202](https://www.gov.br/mdh/pt-br/ondh/paineldedadosdaondh/copy_of_dados-atuais-202)>. Acesso em: 22 de Agosto de 2021.
- Ceccim, R. B., & Feuerwecker, L. C. M. (2004). *O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social*. Physis, Rio de Janeiro, 14(1), pp. 41-65.
- Freire, P. (1996). *Pedagogia da autonomia: saberes necessários à prática educativa*. São Paulo: Paz e Terra.
- Galinha, I., & Ribeiro, J. (2005). *Contribuição para o estudo da versão portuguesa da Positive and Negative Affect Schedule (PANAS): I - Abordagem teórica ao conceito de afecto*. *Análise Psicológica*, 23 (2).
- Henry, S. (2000). *What is school violence? An integrated definition*. *Annals American Academy of Political and Social Science*, 567, p.16-29.
- Hoefel, M. G. L. (2016). *Projeto Vidas Paralelas: relações entre a imagem, a estética e a política*. Relatório de Pesquisa de Pós-Doutorado, Universidade de Brasília.
- Hoefel, M. G. L., Severo, D. O., & Washington, C. (2019). *Experiência do Projeto Vidas Paralelas Migrantes no Brasil: narrativas imagéticas sobre o trabalho e suas repercussões sobre a saúde*. *Saúde em Redes*, 5(2), pp. 227-236.
- Mas'ud, A. R. (2021). *Building a Culture of Peace and Multiculturalism in the World of Education*. *Psychology and Education*, 58(1), pp. 5321-532.
- Moura-Vieira, M. A., Alves-Hopf, S., Callado, J. T. R., & Hoefel, M. G. L. (2021). *Articulating Methodology: A potentiator device on Permanent Health Education*. *Proceedings of the 15th International Multi-Conference on Society, Cybernetics and Informatics (IMSCI 2021)*, Single Volume, pp. 121-126 ISBN: 978-1-950492-58-9 (Print).
- Moura-Vieira, M. A., Hoefel, M. G. L., & Callado, J. T. R. (2021). *El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil*. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 24(2), pp.181-19
- Omeghie, I. B., & Olorunleke, E. E. (2021). *Implementation of peace culture practices in Nigerian secondary schools for sustainable learning and national development*. *Kiu Journal of Education*, v. 16 (1), p. 193-212.
- Siân A. McLean & Jennifer E. McIntosh (2021) *The mental and physical health of family mental health practitioners during COVID-19: relationships with family violence and workplace practices*. *Australian Journal of Psychology*, pp. 1-10.
- Unicef. Organização das Nações Unidas. *Declaração Universal dos Direitos Humanos*, 1948. Disponível em: <<https://www.unicef.org/brazil/declaracao-universal-dos-direitos-humanos>>. Acesso em: 22 de Agosto de 2021
- Waters, L., Allen, K-A., & Arslan, G. (2021). *Stress-Related Growth in Adolescents Returning to School After COVID-19 School Closure*. *Front. Psychol.* 12:643443. doi: 10.3389/fpsyg.2021.643443.
- Watson, D., Clark, L., & Tellegen, A. (1988). *Development and validation of brief measures of positive and negative affect: the PANAS scales*. *Journal of Personality and Social Psychology*, 54, pp. 1063-1070.
- Wessells, M. G., & Kostelny, K. (2021). *Understanding and ending violence against children: A holistic approach*. *Peace and Conflict: Journal of Peace Psychology*, 27(1), 3–23.
- World Vision. (2020). *COVID-19 aftershocks. A perfect storm: millions more children at risk of violence lockdown and into the “New Normal”*, p p. 4-5.
- Yang, Y., Qin, L., & Ning, Ling (2021). *School Violence and Teacher Professional Engagement: A Cross-National Study*. *Frontiers in Psychology*, 12, p. 1174.

### 4.3. Artículo 3: “El ‘Desierto Digital’: Repercusiones de la COVID-19 en la Educación en España y Brasil”

*Autores: Maria Edna Moura Vieira, Maria da Graça Luderitz Hoefel, José Thomas Réal Collado. (Publicado en abril de 2021 en la Revista Electrónica Interuniversitaria de Formación del Profesorado, conforme Apêndice B).*

#### RESUMEN

Con la aparición de la COVID-19, la forma de hacer y pensar la educación mediatizada por las tecnologías digitales, surgió con una fuerza repentina y nunca experimentada de la forma en que la vimos ocurrir en el año 2020. Así, la nueva realidad educativa se evidencia en la distancia de los cuerpos y la distancia en los procesos de enseñanza y aprendizaje, que ha tenido numerosos impactos en la práctica diaria de la educación. Esta investigación busca conocer las percepciones de los profesores/as de educación básica en España y Brasil, sobre las repercusiones de la COVID-19 en la educación. Se trata de una investigación descriptiva exploratoria, con enfoque cualitativo, que realizó 12 entrevistas semiestructuradas a profesores/as de educación básica de ambos países. Los resultados indican que la incorporación abrupta de tecnologías digitales provocó un gran sufrimiento a los docentes, debido a la falta de formación para ellos, falta de condiciones mínimas de trabajo, aparición de nuevas demandas profesionales y psicológicas, así como diferencias generacionales en las relaciones con las tecnologías.

**Palabras clave:** Educación; educación básica; tecnologías digitales; COVID-19.

#### ABSTRACT

With the emergence of Covid-19, the way of doing and thinking education permeated by digital technologies came up with sudden and never before seen strenght as we experienced in the year of 2020. With it, the new educational reality is highlighted in the distance between the bodies and the distance in teaching and learning processes, which has had numerous impacts in the daily practice of education. This investigation seeks to know the Basic Education professors and lecturers perceptions in Spain and Brazil, about

the repercussions of Covid-19 in Education. It is a descriptive-exploratory investigation, with qualitative focus, that performed 12 semi-structured interviews to Basic Education teaching staff from both countries. The results indicate that the abrupt incorporation of digital technologies lead to a great suffering to teachers, on the account of a lack of training, lack of minimum working conditions, emergence of new professional and psychological demands, as well as generational differences in the relationships with the technologies.

**Key words:** Education; basic education; digital technologies; Covid-19.

## INTRODUCCIÓN

Con la aparición del SARS-CoV-2, Coronavirus (COVID-19) a principios de 2020, el mundo se enfrenta ahora al mayor desafío del siglo XXI – evitar el colapso total de sus sistemas de salud y estructuras socioeconómicas (ILO, 2020, p. 7).

La pandemia mundial derivada de la COVID-19, declarada por la (Organización Mundial de la Salud (OMS) el 11 de marzo de 2020), tuvo un impacto especial en el sistema educativo, que comenzó con la suspensión de la actividad educativa presencial en todos los ciclos, grados, cursos y niveles de educación en el contexto mundial (UNESCO, 2020).

En el contexto educativo, esto se desarrolló de tal manera que es muy difícil mantener su status quo, con necesidades inmediatas de nuevos arreglos estructurales y pedagógicos, mientras que su importancia se reafirma en un marco estructural de la sociedad.

Para reducir la transmisión del Coronavirus, muchos gobiernos han adoptado el distanciamiento social. Las instituciones educativas tuvieron que suspender las clases presenciales y la mayoría de ellas dieron continuidad a los procesos educativos mediante la enseñanza a distancia o no presencial.

La forma de hacer y pensar la educación, mediatizada por el entorno digital, surgió con una fuerza repentina y nunca experimentada de la forma en que la vimos ocurrir en el año 2020. La tecnología digital se ha convertido en el dispositivo estructurador de la educación, que proporciona formación en línea, a distancia o remota y diferentes formas de comunicarse, interactuar y relacionarse.

Con ello, la nueva realidad educativa se evidencia en el distanciamiento de los cuerpos y la distancia en los procesos de enseñanza y aprendizaje, entre las generaciones de las tecnologías digitales (estudiantes) y las tecnologías analógicas (profesores/as).

La rapidez con que todo se dio y ha estado ocurriendo, en este período de COVID-19, ha hecho el tiempo sin tiempo, un tiempo suspendido, un tiempo impredecible. La velocidad con la que se presentan las necesidades puede ser un obstáculo para una conexión significativa entre los eventos y las necesidades reales de la sociedad.

En ese sentido, intentaremos identificar lo que la pandemia está aportando al aprendizaje y las necesidades de la práctica educativa a partir de las experiencias de los profesores/as de España y Brasil, con el fin de comprender las principales repercusiones y sustentar la discusión en torno a la superación futura de los obstáculos de la formación.

Con este fin, proponemos contribuir a la reflexión sobre las siguientes preguntas: ¿Cómo los gobiernos de España y Brasil abordaron la educación en el contexto de la COVID-19? ¿Cómo están tratando los profesores/as de los dos países el actual contexto educativo donde ocurre un distanciamiento de los cuerpos y unos desgastes debido al confinamiento y las medidas restrictivas impuestas en el aula? ¿Ha sido posible construir un vínculo entre los profesores/as y estudiantes? ¿Los profesores/as se sienten preparados para enfrentarse a ese nuevo contexto educativo mediatizado por el entorno digital?

### **Educación y COVID-19 en el contexto de España y Brasil: impactos y reflexiones**

La educación es un derecho fundamental que ayuda no sólo al desarrollo personal, sino también al desarrollo de los países. Las repercusiones de la educación son extensas y profundas, impactando en todas las áreas de nuestras vidas. A través de ella garantizamos nuestro desarrollo social, económico y cultural.

En este sentido, la educación es un elemento de suma relevancia en cualquier momento, y especialmente en tiempos de crisis sanitaria, como la que vive el mundo en este año de 2020, cuando, según la UNESCO (2020) alrededor de 190 países de todo el mundo tuvieron que cerrar sus escuelas y universidades para evitar la propagación del coronavirus. Esta situación obligó a 1.500 millones de estudiantes a quedarse en casa.

Conscientes de su importancia y la gravedad del contexto de la pandemia, muchos países han discutido y adoptado mecanismos para asegurar la convivencia y la conexión escolar, a pesar de la distancia causada por el confinamiento social. Las escuelas fueron las primeras instituciones que no pudieron funcionar, ya que son uno de los espacios



sociales con mayor intercambio y movilidad de sujetos de diferentes edades, donde puede producirse una contaminación masiva.

En España, desde que la Organización Mundial de la Salud (OMS, 2020) declaró que la situación relativa al coronavirus COVID-19 era una emergencia de salud pública de importancia internacional, se adoptaron una serie de medidas con el fin de proteger la salud y la seguridad de los ciudadanos, contener el avance de la enfermedad y fortalecer el sistema de salud pública. Estas medidas se ampliaron a la luz de la situación generada por la evolución de la pandemia en todo el territorio nacional por parte del Gobierno mediante el Real Decreto 463/2020 de 14 de marzo (ESPAÑA, 2020a) y por los artículos 1 y 2 del Real Decreto 555/2020, de 5 de junio (ESPAÑA, 2020b).

En consecuencia, el año escolar de la educación básica 2019/2020 en España, que comenzó en septiembre de 2019, se celebró de forma presencial (de septiembre de 2019 a principios de marzo de 2020) y a distancia (desde marzo hasta junio de 2020). Y el nuevo año escolar 2020/2021, que comenzó en septiembre de 2020, se inició de forma presencial, pero con medidas restrictivas que hacen que la práctica educativa no sea la misma, tales como: distancia mínima, uso de mascarillas, medidas de higiene que incluyen limpieza/higienización del aula dos veces durante el turno escolar, lavado de manos, entre otras.

También están las restricciones que interfieren directamente en la práctica pedagógica/didáctica del profesor/a y su estado emocional, como la orientación de no trabajar en grupo, no poder tener contacto físico, como el abrazo, entre otras.

En Brasil, a diferencia de España, el Gobierno Federal no adoptó una directriz consistente para bajar la curva epidémica, proteger la salud y la seguridad de los ciudadanos. Sobre todo contener el avance de la enfermedad o fortalecer el sistema de salud pública, incluso en relación con las actividades escolares. Según Said (2020) el presidente Jair Bolsonaro reafirmó su política neoliberal en el contexto de la pandemia y relativizó la amenaza del virus, criticó las medidas de confinamiento social y siempre ha defendido el mantenimiento de todas las actividades económicas y sociales, incluidas las escuelas, sin adoptar ningún plan nacional de lucha contra la COVID-19.

A pesar de eso, la mayoría de los gobiernos estatales y municipales han optado por el cierre total de las escuelas para reducir las posibilidades de que los estudiantes se conviertan en vectores del virus para sus familias. Sin el apoyo del gobierno federal, que desde el principio adoptó una política negacionista, lo que dificultó que los gobiernos estatales tomaran medidas efectivas para proteger la salud y la seguridad de los ciudadanos.

Según datos de la Federación Nacional de Escuelas Privadas (FENEP, 2020), las actividades pedagógicas presenciales de las escuelas públicas de Brasil se reanudaron primero en el Estado de Amazonas (agosto de 2020) y seguidamente el Estado de Río Grande do Sul (septiembre de 2020). En el Estado de Pará, el gobierno autorizó clases en algunas regiones. En los demás Estados, las actividades escolares todavía no son presenciales y no tienen una fecha establecida de regreso.

En este contexto, el escenario que se presenta, tanto en España como en Brasil, como en todo el mundo, es complejo y lleno de nuevas necesidades para el universo educativo. De hecho, la pandemia parece haber puenteado, paradójicamente, la importancia de la educación como motor del desarrollo humano, así como las necesidades de formación del profesorado para enfrentar demandas intrínsecas e incertidumbres históricas.

De acuerdo con estas reflexiones, Morin (2020, p.2), alertan sobre la importancia de la educación en el mundo pandémico y post pandémico, destacando que es “necesario enseñar en escuelas y universidades para comprender al ser humano y enseñar a los niños y jóvenes a afrontar las incertidumbres”. Y además destaca que: “Antes pensábamos que había cierto progreso y ahora el futuro es angustia”(p.2) .

En el curso de estos pensamientos, Morin (2020) destaca la importancia de que los niños y jóvenes aprendan a lidiar con sus miedos, ansiedades e incertidumbres, y al mismo tiempo alerta sobre la necesidad de un nuevo orden educativo, un nuevo don, donde la educación es el motor y el principal dispositivo para hacer frente a la angustia/incertidumbre.

De esta forma, este autor destaca también que la situación actual pone de manifiesto una nueva realidad que aspira a generar una conciencia transformadora de la sociedad, en la que las personas se reconozcan como parte de los problemas, pero sobre todo como parte de las soluciones. Es un momento de solidaridad y empatía, por eso, es necesario que los gobiernos desarrollen políticas educativas considerando los contextos, las múltiples identidades, saberes y singularidades que configuran a las personas involucradas en el acto educativo.

## **METODOLOGÍA**

Este estudio es un extracto de la tesis doctoral, “Educación Permanente en Salud, el Camino Pedagógico para Reinventar el Trabajo Docente”, que se encuentra en

desarrollo, vinculado el Departamento de Medicina de la Universidad de Valencia/España, en cotutela con la Salud Colectiva de Universidad de Brasilia/Brasil.

Es una investigación descriptivo-exploratoria, de enfoque cualitativo, que utilizó como instrumento de investigación entrevistas individuales semiestructuradas por videoconferencia. Esta investigación busca conocer las percepciones de los profesores/as de educación básica en España y Brasil, sobre las repercusiones de la COVID-19 en la educación, así como en la práctica diaria de los profesores/as con sus estudiantes en el año 2020.

Según Minayo & Sanches (1993) la investigación cualitativa trabaja con el universo de significados, motivos, aspiraciones, creencias, valores y actitudes, lo que corresponde a un espacio más profundo de las relaciones, de los procesos y de los fenómenos que no pueden ser reducidos a una fórmula matemática.

En esta perspectiva, entrevistamos a profesores/as de España y Brasil, de la red de educación básica, que estuvieran trabajando en el aula (virtual y/o presencial) en el año 2020. Fueron entrevistados a un total de 12 profesores(as): 6 de España y 6 de Brasil, de los cuales 8 fueron mujeres y 4 hombres, con edades comprendidas entre los 28 y los 51 años. La experiencia en la enseñanza de esos profesores(as) variaba entre los 3 y los 29 años y abarcan las tres etapas de la enseñanza básica (infantil, primaria y secundaria). Los nombres (ficticios) utilizados para los profesores/as están relacionados con ciudades de su actividad laboral.

Para el análisis de los resultados se utilizaron los principios del análisis de contenido de Bardin (2008), la organización de la codificación seguida de la elección de las unidades de registro a través del tema, y se representó el recorte de ideas a través de diferentes oraciones, que tenían significados para el objetivo elegido sobre las respuestas a las preguntas abiertas, de las que surgieron las categorías: 1) El “desierto digital” ; 2) Educación - Potencialidades y Necesidades.

## **DISCUSIÓN**

### **1 Categoría – El “desierto digital”**

La escuela, como uno de los espacios sociales con mayor probabilidad de contaminación, por ser uno de más intercambios y movilidad de sujetos de diferentes edades, fue el primer espacio en el que se suspendieron las actividades presenciales,

debido a la COVID-19. Con esto, las tecnologías se han convertido en los principales dispositivos destinados a mantener la conexión educativa.

La tecnología fue la gran aliada para minimizar los impactos negativos que el confinamiento social trajo a la educación. El sistema educativo cambió por completo sus rutinas. Las instituciones educativas, los estudiantes, los profesores/as y los padres aún se están adaptando a la nueva realidad de la enseñanza causada por el Coronavirus.

Con la pandemia, los profesores(as) fueron arrojados frente a la computadora y llevaron las aulas a sus casas, cambiando las pizarras y pupitres de la escuela por pantallas y aplicaciones digitales. El trabajo escolar y los quehaceres domésticos se fusionaron, la vida privada y la profesional no podían separarse y el trabajo se triplicaba: “me siento extremadamente sobrecargada e invadida también, tengo una hija que aún amamanto y tuve que amamantarla cuando estaba enseñando y además mi casa se ha convertido en un espacio público” (Brasília).

Aprender, en un tiempo récord, a utilizar las herramientas digitales para enseñar fue el primer desafío, luego tuvieron que aprender a lidiar con las limitaciones impuestas por la distancia, tuvieron que enfrentarse a las pantallas de las computadoras a menudo sin rostros, las cámaras apagadas y la ausencia de presencia. "Nunca sabemos si los estudiantes están participando, y siempre existe la sensación de que no están participando" (Independencia).

Según los entrevistados, al principio fue bastante difícil para los profesores/as lidiar con las computadoras, el aula virtual, la clase grabada, la clase en vivo, los videos y varias tecnologías que se utilizaban y probaban como: Google Scholar, Meet, Zoom, WhatsApp, radio, televisión, entre otras; "Fue complicado, te echaban toda la responsabilidad, teníamos que aprender la tecnología por nuestra cuenta, la formación de los profesores(as) era sólo el registro e inicio de sesión en el sistema” (Manaos).

Muchos tuvieron que superar sus miedos, su timidez, sus inseguridades para atravesar el espacio digital rompiendo no sólo las barreras tecnológicas, sino también las psicológicas, según los profesores/as; "me siento como si estuviera en una prisión mental" (Brasília). Todo esto con un cambio drástico en la rutina doméstica y con una complicación aún mayor, para los que tienen niños en casa; “hoy tengo que lidiar con hijos, abuela enferma y estudiantes, todos de un mismo sitio, es todo muy malo” (Brasília).

Además, con el trabajo digital era imposible formar vínculos con los niños, pero con los estudiantes de secundaria es posible, según algunos de los entrevistados: “No hay

forma de que pueda tomar la mano de un niño a través de una pantalla para enseñarle a escribir, el aprendizaje a distancia para los niños es imposible” (Barcelona). “Con los alumnos de primaria fue difícil desarrollar actividades, pero con los de secundaria fue positivo” (Valencia).

Según los profesores(as) de Brasil y España, ellos están viviendo un momento totalmente nuevo en su vida profesional causado por la COVID-19. De un momento a otro, tuvieron que adaptarse para seguir dando sus clases desde su espacio privado, sus casas, generalmente sin la infraestructura ideal y sin la ayuda del Estado.

Muchos profesores(as) que acceden sólo por el móvil porque no tiene un ordenador y otros tienen que compartir el ordenador con sus hijos, según Brasilia: “Todo lo que se está usando es de uso privado del Profesor; tecnología, energía e internet, mis gastos aumentaron, tuve que cambiar mi internet por una más potente y mi factura de energía aumentó mucho”.

Sin embargo, la falta de estructura de las escuelas y las malas condiciones de acceso a las actividades a distancia por parte de los estudiantes en diferentes entornos sociales, dio lugar a una agudización de las desigualdades y un aumento de la exclusión en la educación. Situación que fue remarcada por los profesores entrevistados: “utilizamos redes sociales, aplicaciones, etc. Pero como tenemos muchos estudiantes que viven en zonas rurales, alrededor del 6% no tiene acceso a ninguna tecnología” (Independencia).

En este contexto, según la UNESCO (2021) la pandemia ha agravado la exclusión educativa, especialmente de los estudiantes en entornos de vulnerabilidad social, un total de 258 millones de niños y jóvenes quedaron absolutamente excluidos de la educación durante el confinamiento, lo que equivale al 17% de la población en edad escolar en todo el mundo. En Brasil, según UNICEF (2020), el 17% de los niños y adolescentes de entre 9 y 17 años viven en sus casas sin acceso a Internet, lo que demuestra la desigualdad en el acceso a la educación digital.

Así, surge otra cuestión a simple vista, la desigualdad social, como una de las mayores limitaciones para el uso de las nuevas tecnologías. Otra barrera relevante, según los entrevistados, es la falta de habilidades y el desconocimiento de la mayoría de los profesores/as y estudiantes en manejo y conocimiento de las tecnologías: “Para mí, al principio fue muy difícil tratar con la tecnología, pero los estudiantes lo tomaron muy rápido y ahora están con mucha autonomía, exploran la tecnología con bastante facilidad, nosotros los profesores estamos aprendiendo de los alumnos” (Brasilia).

## 2 Categoría - Educación - Potencialidades y Necesidades

El sistema educativo en el escenario mundial, incluso antes de la pandemia, ya tenía necesidades y desafíos aún no resueltos. La pandemia lo que hizo fue aumentar el desgaste y los problemas, tal como expuso Valencia: "en la educación, hay cosas que ya no funcionaban bien antes de la pandemia, como la falta de capacitación digital de los profesores/as y la necesidad de conectarse más con la realidad de los alumnos y la comunidad, con lo social, con la naturaleza, y todo esto es posible".

En el escenario actual, muchos profesores/as se sienten exhaustos y ansiosos, incluso después del regreso a aula. "Con la mascarilla la cuestión auditiva se complica, porque el fonema se forma desde la boca (por ejemplo, en la palabra moto), lo auditivo y lo visual son necesarios para comprender más fácilmente el sonido de las palabras/sílabas" (Barcelona). Y Valencia complementó: "Es como gritar en el desierto y que nadie te escuche, no puedes trabajar sin enfermarte, por eso yo también me enfermé de la garganta, el médico dijo que es como si cantara opera durante horas y horas".

Además la actual pandemia ha puesto aún más de manifiesto la importancia de la educación y su papel en el contexto del desarrollo social, económico y cultural para una sociedad sostenible, tal como sostiene Boff (2020) en una clase magistral virtual, disponible en youtube: "Tenemos que aprender de las señales que nos da la tierra, la COVID-19 es la consecuencia de la falta de educación de la humanidad, es un problema de educación, y a partir de ahora la educación no puede ser la misma que antes".

Boff (2020) también advierte que debemos reinventarnos como humanos, "creo que el lugar y la mayor forma de recrear las nuevas relaciones y una nueva proyección de lo que es ser humano, hombre y mujer, es la educación, porque la educación forma a las personas. Vosotros, profesores/as, tenéis la extraordinaria misión de rediseñar otro tipo de habitante del planeta tierra".

Si la crisis, es una crisis de la educación, como afirma Boff (2020), es importante señalar que la transmisión histórica del conocimiento producido, de generación en generación, se ha convertido en fundamental para el desarrollo del ser humano. Esta transmisión histórica se ha producido de diversas maneras a lo largo de la historia, pero en especial, en la escuela, como tarea del profesor/a.

En esta misma dirección, Saviani (2010) afirma que la labor educativa es el acto de producir, directa e intencionadamente en cada individuo, la humanidad que es producida histórica y colectivamente por todos los hombres.

En esta perspectiva, el profesor/a asumió la enorme importancia de transmitir, reinterpretar y recrear con las nuevas generaciones los conocimientos ya producidos por la raza humana, siendo básicos para el desarrollo de la sociedad en general y la condición de la humanidad en cada una de ellas. Como manifiesta otro de los entrevistados: "Porque el ser humano es naturalmente sociable desde la época de los monos, las relaciones de solidaridad son importantes y para eso, necesitamos el ojo en el ojo, el estar juntos, los intercambios, esto que la escuela nos ofrece" (Brasília).

La escuela como espacio de visión integral, de sistematización de conocimientos y afectos, hace que la educación generada en este espacio, sea la propia materialización del sentido de la vida. Y este sentido de la vida de ahora en adelante debe construirse principalmente a partir de los aprendizajes de esta pandemia, es decir, "tratar a la Naturaleza y a la Tierra con más cuidado, amor y respeto" (Boff, 2020).

En ese sentido, todo el equipo de la escuela, su desempeño y el tratamiento de los conocimientos son de fundamental importancia para delinear nuevos rumbos de la práctica pedagógica en esta nueva realidad educativa que se evidencia en el confinamiento de los cuerpos y la necesidad de sentimientos de empatía.

Trabajo en una escuela donde vivo con más de 20 nacionalidades diferentes. Es un desafío, pero me siento preparada, siempre estoy estudiando. Pero no es porque la escuela o el gobierno fomente o apoye esta preparación, sino por mi propia necesidad de saber cómo tratar con este contexto diverso (Sevilla).

Sevilla, alerta a los gobiernos sobre la importancia de la formación permanente y continua de los profesores, sujetos responsables de la realización del acto pedagógico. Ya que el aprendizaje del profesor/a en su vida cotidiana como ser histórico y socialmente contextualizado, puede ayudar en la definición de un nuevo orden educativo/pedagógico.

Entendemos que, debido a que el mundo ha cambiado, la educación ya no es la misma, necesita ser recreada y los profesores(as) tendrán que estudiar más, saber más, relacionarse más, intercambiar más conocimientos, socializar más y extrapolar la información y el conocimiento. Es decir, desarrollar la "razón sensible", a fin de satisfacer las nuevas necesidades educativas y de vida impuestas por el Coronavirus.

Así, por ejemplo, Sevilla lo expresa claramente diciendo: "No entiendo la educación sin socialización, el aprendizaje es motivación social, somos emociones y si no trabajamos relacionándonos, no aprendemos".

En esta perspectiva, este mismo entrevistado advierte que debemos considerar al profesor como un aprendiz/estudiante/trabajador que inevitablemente necesita estar en un proceso constante de formación que incluye las dimensiones de inclusión, integración e

internacionalización del conocimiento, y que permite la reinención de su práctica en acto. Porque la práctica de la enseñanza, exige una amplia comunicación, información, socialización y correspondencia con las necesidades sociales, procesos de participación y conexión contigo y con el otro (Vieira, 2013).

Según un otro entrevistado: “En los colegios hay mucha diversidad, es importante discutir y promover acciones de internacionalización del conocimiento en las escuelas, porque los alumnos son el futuro y muchos que terminan el bachillerato no van a la universidad por sus condiciones económicas” (Barcelona). Así, entendemos que, la internacionalización del conocimiento en el espacio escolar es intrínseca a las necesidades pedagógicas que impregnan este espacio.

La internacionalización del conocimiento en el diccionario significa captar la información de manera amplia, en todos los sentidos. Eso nos lleva a reflexionar más sobre la importancia de la información en la visión de Morin (2008, p. 6), que advierte que “hoy en día estamos condenados al conocimiento ciego, porque a pesar de la multiplicación de la información y el conocimiento, sobre todo, sólo entendemos fragmentos separados”.

Todo ha cambiado de perspectiva, hay que pensar mucho, hay que tener mucho cuidado de no generar más esfuerzo a partir de ello. Estamos aprendiendo mucho más, nuestra práctica cambiará con el aprendizaje digital, que ahora es una tormenta, pero es un aprendizaje que ayudará más tarde cuando volvamos al aula. Hay momentos en el que uno no lo logra, uno no sabe cómo hacer esto o aquello. Pero intercambiamos conocimientos, uno ayuda al otro (Brasilia).

Brasilia, dialoga con Morin (2008) cuando trae a escena la importancia del intercambio de conocimientos y aprendizajes relacionados con la práctica. Y en esa misma dirección, Bondía (2002 p. 22) dice que: “hay un énfasis contemporáneo en la información, en estar informado y esta intensa búsqueda de información y conocimiento, no significa necesariamente, un conocimiento en el sentido de "sabiduría", sino en el sentido de estar informado”.

Las experiencias, en su contexto general, siempre abren nuevas visiones. “La experiencia con la clase en línea/remota fue muy diferente de algo a lo que estaba acostumbrada, pero descubrí muchas posibilidades, como el contacto más directo con las familias” (Sevilla).

En esa perspectiva, entendemos que el conocimiento es una obra abierta que se cierra con el hecho científico y la experiencia y aun así, con posibilidades de nuevas



reaperturas y que la información por sí misma no es sinónimo de conocimiento o experiencia.

Para obtener todos los sentidos y para que los fragmentos de conocimiento y de saber se unan, para generar conocimiento y su internacionalización, es necesario conectarse con el hecho científico y pasar por el proceso de la experiencia, que según Bondía (2002 p. 23), “la experiencia es lo que nos pasa, lo que nos sucede, lo que nos toca. No lo que sucede, no lo que pasa, o lo que toca”.

Desde esta perspectiva, Ceccim (2005, p. 10) contribuye con la concepción de Educación Permanente en salud (EPS), lo que para él sucede todo el tiempo en el mundo del trabajo, “ya sea a través del intercambio de conocimientos, estos no sólo técnicos y científicos, sino también las dimensiones éticas de la vida, o a través de las relaciones”. En ese sentido, estos procesos deben estar guiados por la inseparabilidad entre la formación, la gestión, la atención, la participación, definida como cuadrilátero de formación en salud (Ceccim & Feuerwerker, 2004).

Uno de los entrevistados/as dialoga con los autores arriba citados al traer al contexto de la educación la necesidad de la interculturalidad e internacionalización del conocimiento en el espacio escolar, así como la necesidad de formación de los profesores/a en la perspectiva del aprendizaje en el escenario del conocimiento del otro y los intercambios interculturales: "La base del alumno es su conocimiento, su lenguaje y su cultura y necesitamos conocer este contexto primero para luego poder enseñarles algo" (Manaos).

## CONCLUSIONES

En esta investigación, tanto los profesores brasileños como los españoles vivieron momentos de gran sufrimiento, envueltos por la metáfora del "desierto" digital. Los profesores tuvieron que adaptarse a las nuevas tecnologías, a la distancia de los cuerpos y a trabajar a través de pantallas digitales muchas veces sin poder ver las caras de los estudiantes y sin saber realmente si estos estaban siguiendo la clase. Además, los profesores tuvieron que superar miedos y carencias en relación a las tecnologías a emplear y sus temores a ser contagiados durante las clases presenciales, todo ello en una situación de precariedad laboral.

Pero la mayoría de los entrevistados/as, expresaron sentimientos de solidaridad y son conscientes de la importancia de su rol y el papel social que juega la educación en la

vida de miles de estudiantes y familias y harán todo lo que esté a su alcance para ayudar a sus estudiantes de la mejor manera posible.

La escuela y la educación escolar ya no son las mismas, incluso después del retorno a las clases el contexto educativo se ha vuelto más complejo, otros desafíos se han añadido a los ya existentes, como las condiciones de trabajo que se han vuelto mucho peores, el manejo de sus propios temores/emociones de pérdidas y el desafío de reavivar la llama de los estudiantes que están desanimados, enfermos y sin estímulo.

Por un lado, la nueva realidad educativa se evidencia en el distanciamiento en los procesos de enseñanza y aprendizaje, entre las generaciones de tecnologías digitales (estudiantes) y las de tecnologías analógicas (profesores/as) y la distancia de los cuerpos provocada por la necesidad de un confinamiento y el uso de equipos de protección como la mascarilla, que dificulta la práctica de la enseñanza, la constitución de vínculos y el aprendizaje de los niños y jóvenes.

Por otra parte, se hace imperativa la reafirmación de la importancia del papel del profesor/a como protagonista del acto de educar y la necesidad de desarrollar la "razón sensible" para una práctica docente más humanizada. Los procesos formativos de los docentes y la propia educación deben ser un compromiso ético, estético y político de toda sociedad, pero especialmente por los gobiernos, y deben estar guiados por la inseparabilidad entre la formación, la gestión, la atención, la participación (Ceccim & Feuerwerker, 2004), la interculturalidad, la intersectorialidad, la inclusión, internacionalización del conocimiento y el proyecto político pedagógico de la escuela.

## **REFERENCIAS**

Bardin, L. (2008). *Análise de Conteúdo de Laurence Bardin (Vol. 70)*. Edições 70.

Boff, L. (2020, 20 setembr0) *Aula Magna: Educação & Cidadania com Leonardo Boff*. [Vídeo] YouTube. <https://www.youtube.com/watch?v=PiNOsoWgq9w>.

Bondía, J. L. (2002). *Notas sobre a experiência e o saber de experiência*. *Revista Brasileira de Educação*, 19, 20-28. <https://doi.org/10.1590/s1413-24782002000100003>

Ceccim, R. B. (2005). *Educação Permanente em Saúde: descentralização e disseminação de capacidade pedagógica na saúde*. *Ciência & Saúde Coletiva*, 10(4), 975-986. <https://doi.org/10.1590/s1413-81232005000400020>

Ceccim, R. B., y Feuerwerke, L. C. M. (2004). O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social. *Physis: Revista de Saúde Coletiva*, 14(1), 41- 65. <https://doi.org/10.1590/s0103-73312004000100004>

España. Real Decreto nº 463 (2020, 14 de marzo), por el que se declara el estado de alarma para la gestión de la situación de crisis sanitaria ocasionada por la COVID-19. Ministerio de la Presidencia, Relaciones con las Cortes y Memoria Democrática Española BOE nº 67.

España. Real Decreto nº 555 (2020, 5 de junio), por el que se prorroga el estado de alarma declarado por el Real Decreto 463/2020, de 14 de marzo, por el que se declara el estado de alarma para la gestión de la situación de crisis sanitaria ocasionada por la COVID-19. Ministerio de la Presidencia, Relaciones con las Cortes y Memoria Democrática Española BOE nº 2022.

ILO. (2020, 29 April) ILO Monitor: COVID-19 and the world of work. Third edition. Updated estimates and analysis.

FENEP. (2020). Portal. <https://www.fenep.org.br/>

Minayo, M. C. S. y Sanches, O. (1993). Quantitativo-qualitativo: oposição ou complementaridade? *Cadernos de Saúde Pública*, 9(3), 237-248. <https://doi.org/10.1590/s0102-311x1993000300002>

Morin, E. (2020). Lições da pandemia: o despertar para as grandes verdades humanas. *Fronteiras do Pensamento* <https://www.fronteiras.com/artigos/licoes-da-pandemiao-despertar-para-as-grandes-verdades-humanas>.

Morin, E. (2008). *Introdução ao Pensamento Complexo*. 5. ed. Lisboa: Instituto Piaget.

OMS. (2020, 11 marzo). Organización Mundial de la Salud. <https://www.who.int/es/directorgeneral/speeches/detail/who-director-general-s-opening-remarks-at-the-mediabriefing-on-covid-19---11-march-2020>.

Said, F. (2020, 25 marzo). Em meio à pandemia, Bolsonaro quer crianças de volta à escola. *Congresso em Foco*. <https://congressoemfoco.uol.com.br/governo/bolsonarocontraria-autoridades-de-saude-e-pede-fim-do-confinamento-em-massa/>.

Saviani, D. (2010). *Interlocuções pedagógicas: conversa com Paulo Freire e Adriano Nogueira e 30 entrevistas sobre educação*. Campinas: Autores Associados.

UNESCO. (2020, 28 abril). El aprendizaje nunca se detiene – Cuénteles a la UNESCO cómo hace frente al cierre de las escuelas durante la crisis del COVID-19. <https://es.unesco.org/news/aprendizaje-nunca-se-detiene-cuentele-unesco-comohace-frente-al-cierre-escuelas-durante-crisis>.

UNESCO (2021, 05 enero). Coalición Mundial para la Educación COVID-19. <https://es.unesco.org/covid19/globaleducationcoalition>.

Vieira, M. E. M. Programa Saúde na Escola: a Intersetorialidade em Movimento. Dissertação de mestrado, UnB, 2013. <https://repositorio.unb.br/handle/10482/14859>.

#### 4.4. Artículo 4: “*Digital Desert: Realty of the Education in Pandemic Times*”

*Autores: Maria Edna Moura Vieira, Simone Alves-Hopf, José Thomas Réal Collado, Maria da Graça Luderitz Hoefel. (Publicado en noviembre de 2021 en el International Journal of Development Research, según Apéndice D).*

#### **ABSTRACT**

With COVID-19, the way of doing and thinking about education mediated by digital technologies suddenly emerged. The new educational reality is evidenced by the distance between the bodies and the teaching and learning processes, requiring teachers, who are prepared and committed to the act of educating. This paper is a theoretical-practical study that explores professional development and teacher education in the context of the current pandemic. Objective: This research sought to understand the perception of basic education teachers in Spain and Brazil about the impact of COVID-19 on education. Method: This is a descriptive-exploratory research, in which 12 basic education teachers from both countries were interviewed. Results: The abrupt incorporation of digital technologies caused great suffering to teachers. It was observed the precariousness of work and the emergence of new professional and psychological demands, as well as the urgent need to adopt training processes for teachers that meet the new realities and challenges presented. Conclusion: Education has become more complex: working conditions have worsened; difficulties in dealing with their own fears, emotions and losses; increase in educational inequality and illness. Teachers express feelings of solidarity and are aware of the importance of education.

**Keywords** - Continuing Education, COVID-19, Digital Education, Permanent Health Education.

#### **I. INTRODUCTION**

Education on the world stage, even before the pandemic caused by SARS-CoV-2, already presented needs and challenges that had not been overcome for decades. The pandemic only increased the erasures, exposing the need for initiatives that foster policies,

projects and actions with innovative strategies that enhance learning, so that participants are immersed in an inclusive, free and universal education.

These policies, projects and actions must contribute to the role of the individual in the context of political, social, economic and cultural development for a sustainable society (Moura-Vieira, Alves-Hopf, Hoefel and Collado, 2021).

As Morgado (2020, p. 2) emphasizes, “we are facing a situation that requires great capacity for collaboration, sharing and innovation among the actors of the educational community”. In this sense, it is important to rethink the training of education professionals, aligning actions to the promotion of individual and collective health, and encompassing the dimensions of intersectorality, interculturality, subjectivity, and internationalization of knowledge, through a positive language and reflective articulation (Moura-Vieira, Alves-Hopf, Collado and Hoefel, 2021).

In order to promote a continuous and intense flow of deterritorialization and dislocation, meeting and interaction with the principles of Permanent Education in Health (PHE): Training, Management, Service and Social Participation (Ceccim and Merhy, 2009). Thus, favoring connections, exchanges, learning, autonomy and the construction of collectives of learning and practices, in a process of translating critical reflections, into attitudes, into a way of being, an engagement, effective and resolute presence in the world (Gadotti, 2003).

In this perspective, Morin (2020) warns of the importance of education in the pandemic and post-pandemic world, highlighting the need for children and young people to learn to deal with their fears, anxieties and uncertainties, while pointing to the need for a new educational order, a new gift, where education is the engine and the main device to deal with anxieties and uncertainties.

In this context, the school, as a learning space, should be considered a space for health promotion, with a comprehensive view, for the systematization of knowledge and affections, making the education generated in these spaces the very materialization of the meaning of life, mainly from the lessons learned with the current pandemic (Moura-Vieira, Hoefel and Collado, 2021). Furthermore, we have to consider the new challenges posed by the pandemic. According to Moura-Vieira, Hoefel and Collado (2021):

School and education are no longer the same, even with the return of in-person classes. The educational context became more complex, other challenges were added to the existing ones, such as working conditions that got much worse (Moura-Vieira, Hoefel and Collado, 2021, p. 190).

According to these authors, many teachers had to adapt to virtual reality and new technologies, the distance from the bodies caused by social isolation and the use of protective equipment, such as the mask, which makes teaching, bonding and learning difficult students.

In this sense, it is essential to reaffirm the importance of the teacher's role as protagonist of the act of educating and its importance, developing a "sensitive reason" for a more humanized teaching practice, full of meanings and affections.

The processes of teacher training and education itself must be an ethical, aesthetic and political commitment, involving governments and society, and it must be based on the inseparability of training, management, service, and participation, in addition to the inclusion of language and dimensions of interculturality, intersectoriality, inclusion, internationalization of knowledge, both in the educational process and school's pedagogical political project (Moura-Vieira, Hoefel, and Collado, 2021).

In this context, it is imperative to dialogue with some concepts and with the protagonists of school education (teachers, managers, students) from an educational perspective.

As a starting point, we put in scene some variables, dimensions, discussions and/or concepts that dialogue with the needs/challenges that education is experiencing in this time of pandemic, not with the intention of overcoming the discussion, but as a starting point for starting a dialogue with what has already been produced and/or signaled and with the new educational needs imposed by the pandemic.

Therefore, we will start by dialoguing with the following questions: How do deal Teachers in Brazil and Spain with the current educational scenario permeated by the digital environment? What is the impact caused by the distancing of the bodies and what are the erasures imposed by this distancing? Have the teachers received a training process, especially in digital literacy? What the message, these teachers would like to leave to their fellow teachers and government officials.

In this sense, the objective of this study was to dialogue with teachers from Brazil and Spain and some authors/thinkers about the needs presented during the pandemic, drawing a parallel with the models of Continuing Education (CE) and Permanent Education in Health (PHE).

## **Educational context in times of pandemic: Spain and Brazil**

Education is a fundamental right of children and adolescents. The repercussions of education are vast and profound, impacting every area of our lives. Through it, we guarantee social, economic and cultural development. The rights to education of children and adolescents must be protected at all times, anywhere, especially in times of pandemic (Unicef, 2020).

The pandemic is impacting the education system in Brazil, Spain and the world. The suspension of in-person classes, the unequal access to technologies for monitoring online/remote classes, the lack of digital literacy of education professionals and students and the effects on medium and long-term learning are some challenges that will have to be faced in the current context of pandemic and post pandemic.

Aware of the importance of education and the seriousness of the pandemic context, many countries have discussed and adopted mechanisms to guarantee coexistence, school ties and the guarantee of continuity in school learning.

In Spain, there was the suspension of classroom teaching activity and the closing of educational centers across the country, when a state of alarm was declared, through Royal Decree 463/2020, of March 14, 2020.

The suspension of classroom classes was accompanied by the implementation of digital/distance education and the first proposals and measures adopted to face this new educational reality. Consequently, the school year of basic education 2019/2020 in Spain, starting in September 2019, had its in-person activities until March 11, 2020. And distance learning until June 2020.

The new 2020/2021 school year, which began in September 2020, started with a return to in-person classes, but with several restrictive measures that made the educational practice more complex, such as: minimum distance, use of masks, hygiene measures, others. In Brazil, the Federal Government has not adopted a consistent guideline to reduce the curve of the epidemic, protect the health and safety of citizens, or even guidelines related to school activities. On the contrary, he criticized the measures of social distancing adopted by state governments, and always defended the maintenance of all economic and social activities, including school activities, without adopting any national plan to combat COVID-19.

*We must return to normality. A few state and municipal authorities must abandon the scorched earth concept, the ban on transport, the closing of trade*



*and mass confinement, said President Jair Messias Bolsonaro (in a statement on national radio and television, on 24.03.). 2020) and still asked, why close schools?*

The result of the policy adopted by the Brazilian government is disastrous. Because 579,010 deaths of Brazilians were confirmed on 08.28.2021 (<https://covid.saude.gov.br/>) and schools are still in the process of opening. According to UNESCO (2021), worldwide, schools remained closed, totally or partially, for an average of 5.5 months (22 weeks). In Spain, the average is 4 months (16 weeks). In Brazil, it reaches 53 weeks. When the ideal would be for schools to be the last institutions to close and the first to open – as in any humanitarian emergency (Unicef, 2021).

The long closing time of most Brazilian schools has profoundly impacted not only learning, but also the mental health, nutrition and protection of children and adolescents (Unicef, 2021).

### **Continuing Education (CE) and Permanent Health Education (PHE) – A Necessary Connection**

Human development is a process of expanding the range of personal options, so it is closely related to work. The positive relationship between human development and work is reciprocal. Health, education and development are interlinked, as there is no development process without proper attention to health and knowledge.

Likewise, the development of workers is not disconnected from updating the work itself, that is, work and workers constitute an inseparable dyad (Merhy, 2015). In the educational sector, for example, processes require extensive communication, harmony and correspondence with social needs, comprehensiveness, inclusion, internationalization of knowledge and with political-pedagogical projects, especially in the current context of the health crisis.

In addition, if we focus on the context of education professionals, given the sociocultural vulnerability of their target audience (e.g. teachers and students) and further aggravated by COVID-19, it appears that the organizational structure of schools, derived from current educational policies and of their way of functioning, they do not offer enough possibilities for the reconstruction of dynamics, processes, participative methodologies and forms of democratic management that reaffirm themselves in the practice of the school group.

In this context, the discussion on teacher training processes has gained momentum in recent decades, and to keep teams in a constant educational process, to improve educational practices and, consequently, optimize service to the school community, Continuing Education was adopted as a mechanism for training education professionals.

Pan American Health Organization (1978) - defines continuing education as a process of permanent and constant education, which is accompanied by basic training whose main objective is to update and improve the capacities of individuals or groups for technical and according to the proposed social needs.

For Pereda (1982), CE is a process that professionals must carry out permanently and systematically, in order to obtain new knowledge, assess the validity of previously acquired knowledge and compensate for their deficiencies so that the performance of their work reaches its maximum efficiency for society. In this perspective, CE has also become the training mechanism for several other sectors, including Health.

For the health sector, CE is the process that includes experiences after initial learning, with the objective of training, improving the profession and professional practice with greater safety and productivity, through the acquisition of new concepts and reformulation of existing practices. "Adequate continuing education must reflect the health needs of the community and lead to a planned improvement in community health" (WHO, 1982).

But Continuing Education as it is being made available is not managing to challenge teachers to a posture of change and problematization of their own practices. Teacher training focuses on initial preparation courses, generally based on models of technical rationality and, when available, continuing education programs are usually centered on theoretical and short-term courses (Diniz-Pereira, 1999; Diniz-Pereira and Zeichner, 2002).

In this context, in 2007, Permanent Health Education was instituted in Brazil as a Public Policy by the Ministry of Health, to meet the demands of the Unified Health System - SUS, since CE did not meet the health sector's need for learning at work. The concept of PHE is defined in the Policy as learning at work, in which learning and teaching are incorporated into the daily life of organizations and into the work process, and it proposes that health workers' education processes are based on problematization of the practice itself.

The PHE, as a public policy elaborated and agreed upon by a group of actors that make up the SUS, happens all the time in the world of work and in management, in the

processes of exchange, learning, management and formulation. The exchange of knowledge, not only technical and scientific, but also of ethical dimensions of life, work, human development, health, education and relationships (Brasil, 2018).

We understand that PHE aims to discuss the work and, based on this work, seek to transform the institutional space into a space for problematization, reflection, dialogue and construction of consensus, exchanges and co-production. PHE is based on the conception of critical education, meaningful learning and the appreciation of work as a source of knowledge.

It is no longer possible to sustain the almost exclusive managerial views that are systematically positioned by the notion that the low effectiveness of health actions is due to the lack of competence of workers and that can be corrected as we supply, through compensatory courses, what they do. lack. Given this view of the problem, these managers start to propose courses to exhaustion, which consume immense resources and have not been generating positive and changing effects in the practices of these professionals (Merhy, 2005, p. 172).

It is important to point out that PHE is much more than a pedagogical or methodological concept, according to Ceccim and Ferla (2008). PHE proposed a political process of dislocation and questioning that seeks to transform reality. This dislocation and this questioning, we would say, would encourage the expansion of dialogue in work relations and educational action by incorporating emotional exchanges and sensitivity, allowing to go beyond dialogue based only on logically organized and planned knowledge and arguments, towards a dialogue of encounters and connections.

To advance from theory to practice, Ceccim and Feuerwerker (2004) propose, as a way of operationalizing the concept to Permanent Health Education, the *Quadrilátero da Formação*, which is the articulation between training, management, care and participation. Ceccim (2005) highlights that through this *Quadrilátero* there can be a change in the traditionalist and elitist conception of health education, the search for integrality and the inclusion of users as active subjects in health practices.

The entire scenario presented makes us glimpse a new scenario for education, in response to the current needs imposed by SARS-CoV-2. For example, the need to equip teachers to develop a "sensitive reason" and the dissemination of pedagogical skills, via training processes implemented by CE and guided by the PHE principles and by the school's pedagogical political project, towards a common project of society.

## **II. METHOD**

This study is part of a doctoral thesis under co-tutorship (Brazil and Spain) of the main author. This paper composes a qualitative, descriptive and exploratory study with use of the comparative method, which is defined as a systematic research procedure, based on the differentiation of phenomena, in order to establish similarities and differences between them (Durkheim, 1985).

### **Research Subjects**

We interviewed teachers from Spain and Brazil, from the basic education network, who worked in the classroom (virtual and/or face-to-face) in 2020. Twelve teachers were interviewed: 6 from Spain and 6 from Brazil, 8 women and 4 men, aged between 28 and 51 years old. The teachers' teaching experience varies between 3 and 29 years and covers the three stages of basic education (kindergarten, elementary and secondary).

### **Inclusion criteria**

The inclusion criteria were: teachers from Spain and Brazil working in the public school system who were working in the classroom (virtual and/or face-to-face) in 2020. The fictitious names used in this research for teachers are related to the Country, where they worked.

### **Procedure and Data Analysis**

The research used individual semi-structured interviews via video call as a research instrument. Each interview lasted around 90 minutes, and followed a script of provocative questions, covering the dimensions of the issues mentioned in the introduction about the teachers' perception of the challenge caused by the pandemic. To analyze the results, we used the principles of content and discusses analysis method by Bardin (2011).

The coding organization was followed by the choice of registration units through the theme, and represented the clipping of ideas through different sentences, which had meanings for the chosen objective regarding the answers to the open questions. These variables were grouped into categories, such as: 1) Listening to and Voices of Teachers facing the Pandemic; 2) Digital Literacy; 3) Learning and New Realities.

### III. RESULTS & DISCUSSION

#### Category 01 - Teachers' Listening to and Voices facing to the Pandemic

If there's one thing this pandemic is teaching us, it's that we should take a closer look at education. A plural and integral look with a political, social, economic and cultural dimensions. The Brazilian pedagogue Rubens Alves, in the Documentary “Rubens Alves, the Professor of Amazement”, warned that, “The possibility of education has nothing to do with government programs, it has to do with two things, two fragile things: feelings and the teachers' intelligence” (Alves, 2003).

Agreeing with Alves (2003), the feelings and intelligence of teachers are essential for a plural and integral education and for that, it is necessary to place the work of the educators at the center of debates and theoretical, political and methodological reflections. But on the other hand, teachers and the educational system, in its general context, need policies that value education, and committed managers who develop actions for the personal and professional development of teachers, from the perspective of listening to the actors involved, of intelligence love, building affections and emotions, continuing education in health for teachers, and administrative support (infrastructure, logistics, didactic-pedagogical).

Respondents dialogue with the above, when asked what message they would like to leave for government officials/managers/teachers:

*Managers, listen to the professors to make the laws, facilitate the communication channel between you and us professors. So that the opinions and educational needs presented by teachers can influence and contribute to your decisions (Spain).*

*Above all, you need to look more carefully at the needy, providing both health and education conditions. Students cannot afford the technology, with remote learning the poorest population does not have access. The difference in access to education is that it was already big and now it has become enormous. Sometimes it's just a cell phone for an entire family (Brazil).*

*You guys are pretty clueless. You cannot promise what you cannot deliver. They promised many things, and they did nothing, the schools had to shake themselves up to get the school working (Brazil).*

*Fellow Professors, we are all in the same boat, it is difficult, we continue paddling together. Thank you very much for the support, friend (Spain).*

*I am grateful for all the effort that each one has had, as it is not easy. Many did not have the knowledge of digital technologies and dedicated themselves a lot to be able to learn. And they are still in the fight (Brazil)*

The scenario that presents itself for education is one of multiple needs, of reinventing its status quo. For Gadotti and Carnoy (2018, p. 16), this reinvention of education “is only possible through a collective, collaborative, plural, non-sectarian effort, thinking of a gradual transition to other ways of conceiving educational systems, their planning, its management and monitoring”. Candau (2016) complements this maxim, when he argues that the change in the educational context should be born from the words of educators, who are in the daily life of the school and not just from a group of specialists.

In this perspective, facing to the new challenges imposed by the pandemic, the school has a role much more as a knowledge manager than as a lecturer of content (Gadotti and Carnoy, 2018). This management role should be the responsibility of everyone involved, as education should not be seen, under any circumstances, as just an institutionalized work, that is, restricted to the school institution. Education must be seen as community work for a community guided by a common goal.

Thus, both teachers, managers, and students need to understand and appropriate the broad role of education, considering social, philosophical, ethical and moral values, that is, ethical dimensions of life, as a path to be followed for materialization of education in its role of educating for life, and not just for literacy.

In this sense, change needs to start from the social context, from what is experienced, from what is in process, “from critical reflection on practice” (Freire, 1996, p. 43), from the experiences experienced, such as when asked to the teachers how they felt in this moment of social isolation and having to work at a distance with digital classes: “...I feel extremely overwhelmed and invaded too. I have a daughter, who is still breastfeeding and I had to breastfeed her when I was teaching. My house became a public space” (Brazil). The teacher's speech is filled with listening needs.

In addition, it is imperative that the processes of teacher education encompass the context of human development and the integrality of the subject, in the view of Paulo Freire (1996) “of a pedagogy that proposes learning to read and write not only the letters, but also the world” (Freire, 1996, p 42), the world with the magnifying glass in reality, this reality of the classroom and the school environment and the subjects involved.

According to the reality presented by the teachers regarding the beginning of classes in digital format, the interviewees reported:

*... It was complicated, they threw you all the responsibility, we had to turn around to learn the technology, teacher training was just about registering and*

*logging into the system. Not even the education department was prepared for this (Brazil).*

*It was very complicated in the first month, the public network was not prepared for this digital universe (Spain).*

The school as a space of an integral vision, of systematization of knowledge and affections, makes the education generated in this space the very realization of the meaning of life. And this sense of life from now on must be built mainly from the lessons learned from this pandemic, that is, *“to treat Nature and the Earth with more care, love and respect”* (Boff, 2020).

In this sense, the entire school team, its performance and the treatment of knowledge are of fundamental importance to delineate new directions for pedagogical practice in this new educational reality, which is evidenced by the separation of bodies and the need for feelings of empathy.

*I work at a school where I live with over 20 different nationalities. It's a challenge, but I feel prepared, I'm always studying. But it is not because the school or the government encourage and support this preparation, but because of my own need to know how to deal with this diverse context (Spain).*

The interviewed above alerts government officials about the importance of permanent and continuous training of teachers for a more significant practice, subjects responsible for carrying out the pedagogical act. Since the teacher's learning in their daily lives as a historical and socially contextualized being can help to define a new educational/pedagogical order. Oliveira, Figueiredo and Félix (2020, p. 176) contribute to the above by stating that *“the most significant teaching practice is one in which the teacher also gives new meaning to the activity developed with the students”*.

Thus, we understand that the world has changed, education is no longer the same. It needs to be recreated in the direction of how-know-do, and teachers will have to study more, know more, relate more, exchange more knowledge, socialize more and extrapolate information and academic knowledge. By Spain, *“I don't understand education without socialization, learning is social motivation, we are emotions and if we don't work in relationships, we don't learn”*.

From this perspective, this same interviewee warns that we must consider the teacher as a learner/student/worker, who inevitably needs to be in a constant process of problematizing and liberating training, permeated by the critical reflection of their practice (practice in action). Because the practice of meaningful teaching requires

extensive communication, information, socialization and correspondence with social needs, processes of participation and connection with oneself and the other (Vieira, 2013).

According to another respondent:

In schools there is a lot of diversity, it is important to discuss and promote actions for the internationalization of knowledge in schools, because students are the future and many who complete high school do not go to university because of economic conditions (Spain).

Thus, we understand that the internationalization of knowledge in the school space is intrinsic to the pedagogical needs that permeate this space, as can be seen in the following report:

It was very complicated for the school, when we received two indigenous students, they didn't know how to speak Portuguese, they left the community straight for school. The teacher didn't understand her language, so she worked with gestures. No matter what happens, we teachers always have to get by (Brazil)

Furthermore, according to the interviewed, many had to overcome their fears, their shyness, their insecurities to cross the digital space, breaking not only technological but also psychological barriers - *"I feel that I am in a mental prison"* (Brazil). Complements another respondent:

School is sorely missed. I miss contact with students and that organization when it's not working. For some, less contact is better, but not for me. In the classroom, you can hold your hand and make you do the task, there is hugging, affection and the power to teach, I really miss all of this (Brazil).

All this with a drastic change in the domestic routine and an even greater complication for those who have children at home; "Today I have to deal with children, a sick grandmother and students, all from the same place, it's all very bad" (Brazil).

The scenario that presents itself is complex and full of new needs for the educational context. A new reality that aspires to generate a transforming awareness of society, in which people recognize themselves as part of the problems, but above all as part of the solutions. It is time for solidarity, collaboration and empathy. Therefore, it is necessary that governments develop educational policies considering the contexts, multiple identities, knowledge and singularities that configure the subjects involved in the educational act and that it values the teaching staff of schools as a fundamental agent in the work of education for a more sustainable society .

In this perspective, Morin (2020), in a process of reflection on a world experienced, lived and seen, of a century of existence, alerts us about the importance of education in the pandemic and post-pandemic world, which is *"must teach in schools and*



*universities human understanding and teach children and young people to face uncertainties”.*

Before, we thought that there was certain progress and now the future is an anguish. Therefore, to bear, to face uncertainty is not to sink into anguish, to know that it is necessary, in a way, to participate with the other, in something in common, because the only answer to those who have the anguish of dying is love and life in common (Morin, 2020).

In this context, in addition to making it necessary to invest in the ongoing training of teachers, as they are responsible for a teaching practice filled with meanings, teaching, learning and creative research, it is also necessary to include them in the political/management decision processes in relation to the needs of the educational system.

## **Category 02: Digital Literacy - Open Gap**

Education in digital format and/or at a distance has increased educational opportunity inequalities, widening the existing digital gap between students with different economic and social backgrounds and housing areas (rural or urban). According to the Ministry of Education of Spain (2021), this gap is due, in addition to the issue of access to technology and/or connectivity, the low level of literacy of the most vulnerable families. This situation, reaffirmed by the interviewees - *“as we have many students from rural areas, some 6% do not have any technology. Thus, we do printed work and the family comes to school or the teacher goes to the students to take them away”* (Brazil).

This distance learning format can also generate differences beyond the digital divide, because in this format, it involves carrying out tasks autonomously at home, and not all students can receive the same support from their families.

The digital divide also exists between schools, because there are schools with more resources, with a higher proportion of teachers with a higher level of competence and skills, situations that are aggravated by the great school segregation in some areas, where the most disadvantaged students are concentrated and more vulnerable, this happens, both in Brazil and in Spain.

Some schools extrapolated the normative requirements to try to reach the maximum number of students, “in the ordinance the requirement was only remote activities, but the school chose to enter a live class” (Brazil). However, the lack of

structure in schools and the lack of access conditions to remote activities by students in different social contexts, has meant that remote education provokes a deepening of inequalities in conditions and an increase in exclusion in education.

In this context, according to UNESCO (2021), the pandemic aggravated educational exclusion, especially of students in socially vulnerable environments, a total of 258 million children and young people were totally excluded from education during confinement, which is equivalent to 17% of the school-age population around the world. In Brazil, according to UNICEF (2020), 17% of children and adolescents between 9 and 17 years old live at home without Internet access, which shows the inequality in access to digital education. In Spain, according to the Ministerio de Educación y Formación Profesional (2021):

... although the vast majority of homes have an internet connection, the devices do not reach everywhere. In 2020, 93.2% of households with a monthly net income above 1,600 euros had some type of computer; on the other hand, this percentage dropped to 58.2% when earnings did not reach 900 euros (Ministerio de Educación y Formación Profesional, 2021, p. 19).

On the other hand, technology was the great ally to minimize the negative impacts that social isolation brought to education. This situation, reaffirmed by the interviewees:

The whole context brings something positive. With distance classes, I was able to help with the learning of some students who did not participate before and now send messages, ask questions on whatsapp and on the platform, feel less shy through technology. we left the book summary and it was easier to address certain content and that is positive (Brazil).

Teachers were thrown in front of the computer and took the classrooms into the house, tripling the work, made teachers change the boards and school desks for screens and digital applications, they became immersed in a true digital desert. “Being in the classroom today is like screaming in the desert and nobody is listening” (Spain).

Morgado (2020, p. 2), corroborates the interviewees' statements by stating that, “the educational community has undergone immense changes in its practices and, exacerbated by the physical absence and invisible presence that the world of digitalization has got used to it”.

Learning, in record time, to use digital tools to teach was the first challenge, then they had to learn to deal with the limitations imposed by distance, they had to face computer screens often without faces, cameras turned off and the absence of absence, “we never know if the students are participating, and there is always that feeling that they are not participating” (Brazil). The new educational reality is also evidenced by the distance

in the processes of teaching and learning, between the generations of digital technologies (students) and those of analog technologies (teachers).

For me, in the beginning it was very difficult to deal with technologies, but the students took it very quickly and now they are very autonomous, they explore technology very easily, we professors are learning from the students (Brazil).

In addition, at first glance, another issue arises, social inequality, as one of the greatest limitations to the use of new technologies. Without discussing its benefits and support for teaching and learning processes and due access for all, the educational inequality of students will continue to be glaring. Another relevant barrier, according to the interviewees, is the lack of competence and lack of knowledge of most professors and students in technology management and knowledge.

Thus, education today has challenges that intersect with the context of the pandemic and the digital literacy of teachers and students. Having access to the internet, computers, telephones or other devices are part of digital access and consequently of access to education. The lack of access to these technologies becomes a barrier to teaching and learning. These accesses are gaps that must be dimensioned, faced and resolved so that education is for everyone.

### **Category 03 - Learning and New Realities: Reflection Points and Contexts**

The pandemic exposed and contributed to widen the gaps and differences that already existed between students from different socioeconomic backgrounds and further increased the strain and educational problems, as explained by one respondent:

In education, there are things that did not work well before the pandemic, such as the lack of digital training for teachers and the need to connect more with the reality of students and the community, with the social, with nature, and all of this is possible (Spain).

In the current scenario, many teachers feel exhausted and anxious, even after returning to classes. The use of a mask, for example, which makes teaching and learning in literacy very difficult, as reported by the respondent below.

With the mask, the auditory issue becomes complicated, as the phoneme is drawn in the mouth (for example, motorcycle), the auditory and the visual are needed to understand the sound of words/syllables more easily (Spain).

Furthermore, the current pandemic has further highlighted the importance of education and its role in the context of social, economic and cultural development for a sustainable society, as Boff (2020) argues in a virtual master class, available on

youtube: "We have to learn from the signs that the earth gives us, COVID-19 is the consequence of humanity's lack of education, it is a problem of education, and from now on, education cannot be the same".

Boff (2020) also warns that we must reinvent ourselves as humans:

I believe that the place and the best way to recreate new relationships and a new projection of what it is to be human, man and woman, is education, because education focuses on people. You teachers have the extraordinary mission of redesigning another type of inhabitant of Planet Earth (Boff, 2020).

If the crisis is an educational crisis, as stated by Boff (2020), it is important to highlight that the historical transmission of the knowledge produced, from generation to generation, has become fundamental for the development of human beings. This historical transmission took place in various ways throughout history, but mainly at school, as a teacher's task. In the same direction, Saviani (2010) states that educational work is the act of producing, directly and intentionally in each individual, a humanity that is historically and collectively produced by all men.

In this perspective, the teacher assumed the enormous importance of transmitting, re-interpreting and recreating with the new generations the knowledge already produced by humanity, being basic for the development of society in general and the condition of humanity in each one. As stated by another interviewee - "*Because human beings have been naturally sociable since the time of the apes, relationships of solidarity are important and for this it is necessary to look them in the eye, to be together, this is what the school offers us*" (Brazil).

According to teachers from Brazil and Spain, they are living a totally new moment in their professional lives caused by COVID-19. All of a sudden, they had to adapt to continue teaching their classes remotely/virtually/at a distance (not in person), in their private space, in their homes, generally without the ideal infrastructure and without the help of the State.

When remote learning was defined, they (government) said they were going to offer databases, but they did not take any initiative. There are teachers who only enter by cell phone because they don't have a computer. Everything that is being used is for the teacher's private use: technology, energy and the internet. My expenses increased, I had to change my internet for a more powerful one and my energy bill increased a lot (Brazil).

Most teachers had to learn from scratch how to use technology for emergency digital study. They had to learn to deal with various technologies that were hitherto unknown. They turned to find the best digital tools, the best platforms. Learn to master

official platforms made available by governments, Teams, Zoom, Google for Education, Google Classroom, among others.

Many teachers are feeling overloaded, exhausted, anxious and confused. After returning to classroom classes, the educational context became more complex, other challenges were added. With this, school work and housework were mixed, private life and professional life were not separated, as expressed by the interviewees- *“I feel extremely overwhelmed and invaded. My house became a public space”* (Brazil).

For schools that are back on-site, whether in Brazil or Spain, the picture is the same. They had to adopt several restrictive measures to avoid contamination, making the educational practice not the same, such as: minimum distance, use of masks, both by teachers and students and shift shifts, among others, are part of the new reality school.

In addition, there are also restrictions that directly interfere with the pedagogical/didactic practice of the teacher (a) and his/her emotional one, such as the orientation of not working in groups, not being able to have physical contact (such as hugging), and the impossibility of performing the laboratory practice in person (which are only being carried out remotely).

What is important for students has to be taken into account, including this situation of need that students are living. When I'm in the classroom, in normal times, the student sees us as a confidant and now it's difficult, because there are family members listening and/or colleagues, so they lost a lot with this (Brazil).

Finally, the context presented demands attention from the school team, students, especially teachers. Development of training processes guided by the inseparability between training, management, care, and participation, in dialogue with the new needs and that incorporate motivation and empowerment strategies to promote the health of these teams, favoring sustainable development, work motivation and appropriation knowledge, becomes imperative.

#### **IV. CONCLUSION**

In this research, both Brazilian and Spanish teachers are living through moments of great suffering, they had to adapt to new technologies, faceless screens, to the distance of bodies, immersed in a true digital desert, and often without minimum conditions work, moreover, they had to overcome their fears, not only of technology, but also their personal fears and suffering, due to the erasures imposed by SARS-CoV-2.

The education is no longer the same, even after returning to face-to-face classes. The educational context has become more complex, other challenges have added to the existing ones, in addition, teachers need support to deal with their own fears/emotions, due to losses, and especially the challenges of rekindling the flame of the students they meet in a context of poor motivation, sickness and discouragement.

Thus, we conclude, if on the one hand, the new educational reality is evidenced by the distancing of bodies, caused by protective measures against the spread of SARS-CoV-2, such as the use of masks, social isolation and non-attendance classes, on the other hand, digital technology has become a reality in the educational context, but with some gaps, especially in access and lack of digital literacy for teachers and students.

Furthermore, it is imperative to develop training processes aimed at teachers, guided by the inseparability between training, management, care, and participation, in dialogue with the new needs and that incorporate motivation and empowerment strategies for the health promotion of these actors, to promote motivation at work, appropriation of knowledge and love in teaching practice.

Finally, we reaffirm the importance of the role of the teacher as a protagonist in the act of educating and the need for them to develop "sensitive reason". Since digital technologies in education have become a reality, emerging as powerful devices for the development of a creative and inclusive education.

## **V. ACKNOWLEDGMENT**

We would like to thank the Professors from Spain and Brazil, who kindly made themselves available to be part of this study, as well as Dr. Leonardo Cunha to give us a proof language of this manuscript.

## **VI. REFERENCE**

Alves, R. (2003). O professor dos espantos. (Video) <https://www.youtube.com/watch?v=iyQw5kLu1nU&t=603s> Bardin, L. (2011). Análise de conteúdo. São Paulo: Edições 70.

Boff, L. 2020. Aula Magna: Educação & Cidadania com Leonardo Bof . [Vídeo] YouTube. <https://www.youtube.com/watch?v=PiNOsoWgq9w>.

Brasil. (2018). Ministério da Saúde. Política Nacional de Educação Permanente: O que se tem produzido para o seu fortalecimento? 1ª Revisão Edição. Brasília-DF. Brasil. (2007).

Ministério da Saúde. Política Nacional de Educação Permanente em Saúde, Portaria GM/MS nº 1.996/2007.

Candau, V.M.F. (2006). *Sonhar que é possível reinventar a educação*. São Paulo: NOVAMERICA ([http://www.novamerica.org.br/medh2/arquivos/texto\\_4oficina.pdf](http://www.novamerica.org.br/medh2/arquivos/texto_4oficina.pdf)).

Candau, V. M. (2016). Cotidiano escolar e práticas interculturais, 802 Cadernos de Pesquisa, Vol. 46 n. 161 pp. 802-820.

Ceccim, R. B. and Feuerwerker, L. C. M. (2004). O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social. *Physis*, Rio de Janeiro, Vol. 14, n. 1, pp. 41-65.

Ceccim, R. B. (2005). Educação Permanente em Saúde: descentralização e disseminação de capacidade pedagógica na saúde. *Ciência & Saúde Coletiva*, Vol. 10, n. 4, pp. 975-986.

Ceccim, R. B. & Ferla, A.A. 2008. Educação e saúde: ensino e cidadania como travessia de fronteiras. *Trab Educ Saúde*, vol. 6, n. 3, p. 443- 456, 2008.

Ceccim, R. B. Merhy, E.E. (2009). Intense micropolitical and pedagogical action: humanization between ties and perspectives. *Interface - Comunicação, Saúde, Educação*, Vol.13, supl.1, pp. 531-42.

Diniz-Pereira, J. E. (1999). As Licenciaturas e as novas políticas educacionais para formação docente. *Educação & Sociedade*, n. 68, pp.109-125.

Diniz-Pereira, J. E. & Zeichner, K. M. (2002). A pesquisa na formação e no trabalho docente. Belo Horizonte: Autêntica, p.11-42.

Durkheim, E. (1985). *As regras do método sociológico*. São Paulo: Editora Nacional.

España. Real Decreto nº 463 (2020, 14 de marzo), por el que se declara el estado de alarma para la gestión de la situación de crisis sanitaria ocasionada por la COVID-19. Ministerio de la Presidencia, Relaciones con las Cortes y Memoria Democrática Española BOE nº 67.

España. Ministerio de Educación y Formación Profesional Consejo Escolar del Estado. (2021). Situación actual de la educación en España a consecuencia de la pandemia, pp 7-73.

Freire, P (1996). *Pedagogia da autonomia: saberes necessários à prática educativa*, São Paulo: Paz e Terra, pp 01-76.

Gadotti, M. (2003). *Boniteza de um sonho: ensinar e aprender com sentido*. Associação Pró-Ensino Superior em Novo Hamburgo/ASPEUR Centro Universitário Feeval, pp.1-80.

Gadotti, M. and Carnoy. M. (2018) *Reinventando Freire: A Práxis do Instituto Paulo Freire*. São Paulo: Instituto Paulo Freire, Lemann Center, Stanford Graduate School of Education, pp. 1-482.

Merhy. E. E. (2005). O desafio que a educação permanente tem em si: a pedagogia da implicação. *Interface - Comunicação, Saúde, Educação*, Vol. 9, n. 16, p.161-177.

Merhy. E.E. (2015). *Educação Permanente em Movimento - uma política de reconhecimento e cooperação, ativando os encontros do cotidiano no mundo do trabalho em saúde, questões para os gestores, trabalhadores e quem mais quiser se ver nisso*. *Saúde em Redes*, 1 (1): 07-14.

Morgado, J. C. (2020). Transformações educativas em tempos de pandemia: do confinamento social ao isolamento curricular. *Práxis Educativa*, Vol. 15, e2016197, pp. 1-10.

Morin, E. (2020). Lições da pandemia: o despertar para as grandes verdades humanas. *Fronteiras do Pensamento*. Access:<https://www.fronteiras.com/artigos/licoes-da-pandemiao-despertar-para-as-grandes-verdades-humanas>.

Moura-Vieira, M. A., Hoefel, M.G.L., and Collado, J.T.R. (2021). El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, Vol. 24, n. 2, pp.181-191.

Moura-Vieira, M. A., Alves-Hopf, S., Callado, J. T. R., and Hoefel, M. G. L. (2021). *Articulating Methodology: A potentiator device on Permanent Health Education*. *Proceedings of the 15th International Multi-Conference on Society, Cybernetics, and Informatics (IMSCI 2021)*, Single Volume, pp. 121-126 ISBN: 978-1-950492-58-9 (Print as best paper).

Oliveira, A. J. F. Figueiredo, Oliveira, C.A.D.M. and Félix, N.M.R. (2020). Metodologias Ativas na formação de professores da modalidade de ensino a distância. *Revista Científica de Ensino a Distância*, Vol. 12, n. 21, pp. 168-180.

Organización Panamericana de la Salud. (1978). *Educacion Continua. Guia para la organización de programas de educación continua para el personal de salud*. Washington, DC: Organización Panamericana de la Salud., 113 p. (OPS. Serie Desarrollo de Recursos Humanos, 29).

Pereda, P.M. (1982). La educación continua y su aplicación en el sector del abastecimiento de agua y saneamiento. *Educ Med. Salud*, Vol. 16, n. 4, pp. 531-551.

Saviani, D. (2010). *Interlocuções pedagógicas: conversa com Paulo Freire e Adriano Nogueira e 30 entrevistas sobre educação*. Campinas: Autores Associados.

Vieira, M.E.M. (2013). *Programa Saúde na Escola: a Intersetorialidade em Movimento*. Dissertação de mestrado, Universidade de Brasília (UnB).

UNESCO. (2021). *Coalición Mundial para la Educación COVID-19*. Access in <https://es.unesco.org/covid19/globaleducationcoalition> .



UNESCO. (2020). El aprendizaje nunca se detiene – Cuénteles a la UNESCO cómo hace frente al cierre de las escuelas durante la crisis del COVID-19. Access <https://es.unesco.org/news/aprendizaje-nunca-se-detiene-cuenteles-unesco-comohace-frente-al-cierre-escuelas-durante-crisis>.

UNICEF. (2020). Access: <https://www.unicef.org/brazil>.

UNICEF. (2021). Impacto de la Crisis por COVID-19 sobre los Niños y Niñas más Vulnerables. Access:

[https://www.unicef.es/sites/unicef.es/files/comunicacion/COVID\\_infanciavulnerable\\_unicef.pdf](https://www.unicef.es/sites/unicef.es/files/comunicacion/COVID_infanciavulnerable_unicef.pdf).

World Health Organization (WHO) . (1982). Continuando la educación de los trabajadores de salud: principios y guías para el desarrollo de un sistema. Ginebra.

#### 4.5. Artículo 5: “Olhares e abordagens metodológicas em tempos de pandemia”

*Autores: Maria Edna Moura Vieira, Simone Alves-Hopf, José Thomas Réal Collado, Maria da Graça Luderitz Hoefel. (El artículo, presentado en diciembre de 2021, en el CINASAMA - Congreso Internacional de Saúde e Meio Ambiente II Edição on-line según Apêndice E).*

#### RESUMO

Com a COVID-19, a forma de fazer e pensar a educação mediada por contextos diversos emergiu de forma desafiadora. A nova realidade educacional se evidencia pelo aumento das desigualdades e pela exclusão educacional, exigindo profissionais da educação e saúde preparados e comprometidos com seu papel de agente público. Objetivo: Contribuir com a discussão sobre a formação dos profissionais de educação e saúde e o uso de metodologias ativas no contexto da Educação Permanente em Saúde, visando a promoção de espaços de práticas didático-pedagógicas reflexivas e libertadoras. Método: Trata-se de uma síntese crítica-reflexiva, participativa e exploratória, acerca de dois trabalhos de campo (Violência e Percepções dos Professores durante a Pandemia) e de uma revisão integrativa (Uso de Metodologias Ativas). Resultados: As escolas se apresentaram tanto como um espaço de violência, como promotora de cultura de paz; Os professores se viram imersos em um verdadeiro deserto digital, tiveram que enfrentar as telas dos computadores muitas vezes sem rostos, câmeras desligadas e a ausência da ausência; A exploração e experimentação científica de novos conceitos e construtos teóricos serviram de pilar para a estruturação da Metodologia Articuladora. Conclusão: Torna-se necessário o uso de novas abordagens metodológicas reflexivas e que contemplem a dimensão humana e os princípios da Educação Permanente em Saúde.

**Palavras-chave:** Educação. Saúde. Metodologia. Educação Permanente . COVID-19.

#### INTRODUÇÃO

*O papel do Professor é essencial no ato de educar, no entanto, é necessário desenvolver uma razão sensível (MAFFESOLI, 2014) para uma prática mais humanizada.*

O presente Capítulo é uma síntese crítica-reflexiva, no idioma Português, de dois trabalhos exploratórios de campo e uma revisão integrativa, realizados entre o ano de 2019-2021, que culminou na elaboração de uma metodologia denominada, Metodologia Articuladora (MA), estruturada de forma a abarcar dimensões de educação e saúde.

A pandemia da COVID-19 impactou o mundo com perdas, mudanças e aprendizados, a forma de fazer e pensar a educação mediada pelas tecnologias digitais emergiu de forma repentina. O isolamento social tem afetado claramente nossa capacidade de planejar o futuro e de pensar em novas aspirações. No contexto educacional, a situação exige atenção, visto que o momento requer capacidade de colaboração e partilha (MORGADO, 2020).

Além disso, Morin (2020) alerta para importância da educação no mundo pandêmico e pós-pandêmico, onde a educação seja o motor e o principal dispositivo para lidar com angústias e incertezas de crianças e jovens, tão fortemente emergidas com a pandemia. Ao mesmo tempo, esse autor aponta para a necessidade de uma nova ordem educacional, um novo dom, onde a educação seja o motor e o principal dispositivo para lidar com angústias e incertezas.

Antes, a gente achava que existia um progresso certo e agora o futuro é uma angústia. Por isso, suportar, enfrentar a incerteza é não naufragar na angústia, saber que é preciso, de certa forma, participar com o outro, de algo em comum, porque a única resposta aos que têm a angústia de morrer é o amor e a vida em comum (MORIN, Fronteiras do Pensamento, 2020).

Freire (2014) defende uma educação que busca desvelar a realidade e formar consciências críticas, como caminho para a emancipação dos oprimidos.

É preciso que tenhamos na resistência que nos preserva vivos, na compreensão do futuro como problemas e na vocação para o ser mais como expressão da natureza humana em processo de estar sendo, fundamentos para a nossa rebeldia e não para a nossa resignação em face das ofensas que nos destroem o ser. Não é na resignação mas na rebeldia em face das injustiças que nos reafirmamos. (FREIRE, 2014, p. 31).

Nesta perspectiva, vislumbramos a necessidade para que os processos de formação dos professores e dos profissionais de saúde devem ser um compromisso ético, estético e político dos governos e da sociedade, e devem ser pautados na indissociabilidade entre formação, gestão, cuidado, participação (CECCIM; FEUERWERKER, 2004), bem como, nos preceitos da interculturalidade, intersetorialidade, inclusão, internacionalização do conhecimento e do projeto político educacional da escola (MOURA-VIEIRA, HOEFEL & COLLADO, 2021).

O objetivo dessa síntese crítica-reflexiva é contribuir com a discussão sobre a formação dos profissionais de educação e saúde e o uso de metodologias ativas no contexto da Educação Permanente em Saúde, visando a promoção de espaços de práticas didático-pedagógicas reflexivas e libertadoras.

## **MATERIAIS E MÉTODO**

Trata-se de uma síntese crítica-reflexiva, participativa e exploratória, acerca de dois trabalhos de campo e uma revisão integrativa, realizados como parte de um doutorado da principal autora, em regime de cotutela, entre a Universidade de Valencia - Espanha e a Universidade de Brasília - Brasil.

Segundo Matos (2021), a síntese busca discutir e compreender as principais ideias, questões e resultados apresentados em um artigo, tese, narrativa, etc. Deste modo, a síntese busca integrar interações teórico-práticas para uma documentação e discussão das principais ideias apresentadas em um texto.

Etimologicamente, a palavra síntese é de origem grega (Do Grego antigo σύνθεσις, *sýnthesis*), e significa “composição ou união de dois ou mais elementos”. Portanto, em uma síntese de textos acadêmicos, busca-se unir ou compor ideias/argumentos/diálogos, de forma crítico-reflexiva, para se chegar a um consenso teórico com a literatura científica.

Segundo Ockenburg e Colaboradores (2019), diferentes informações ou fontes podem ser integradas em uma síntese, de forma que essas informações possam se contradizer ou se complementarem.

Além disso, é importante ressaltar, que as sínteses requerem uma ampla capacidade cognitiva, lógica, crítica e reflexiva do autor, uma vez que o mesmo tem como missão selecionar e organizar as principais informações para a elaboração de um texto inédito (KLEIN; BOSCOLO, 2016).

Nessa perspectiva, apresentamos, em uma linha histórica-metodológica, as inquietações dos autores, em torno de algumas questões de pesquisa, que motivaram a elaboração desta síntese. Tais questões são apresentadas a seguir: Como os governos da Espanha e do Brasil abordaram a educação no contexto da COVID-19? Os professores se sentem preparados para enfrentar esse novo contexto educacional do entorno digital? Qual o papel da escola na identificação de violências para a promoção de cultura de paz, neste espaço escolar? Qual o papel das metodologias ativas no processo de formação de

estudantes, professores e profissionais da saúde? Quais aspectos da Metodologia Articuladora podem favorecer a implementação dos princípios de Educação Permanente em Saúde (Gestão, Formação, Serviço, Participação Social)?

O processo de investigação científica, proporcionado por estes trabalhos, resultou na elaboração da Metodologia Articuladora (MA), como um importante dispositivo nos processos de formação de professores e profissionais da saúde, uma vez que ela busca compreender o processo de ensino-aprendizagem, considerando o homem em sua total essência.

Na sessão de Resultados e Discussão, será apresentada, em formato de síntese crítico-reflexiva, separadamente para cada trabalho, uma breve *introdução, desenvolvimento e conclusão*. Na Introdução será apresentado a metodologia utilizada e os principais resultados. No desenvolvimento serão discutidos os principais achados com a literatura atual, e por fim, na conclusão serão apresentadas as principais conclusões dos autores.

O primeiro trabalho buscou desenvolver processos de formação no contexto da Educação Permanente em Saúde (EPS), com professores e estudantes. Utilizou-se a Metodologia de Análises de Imagens em oficinas participativas (MOURA-VIEIRA, ALVES-HOPF, e HOEFEL, 2021a). O segundo trabalho buscou conhecer as percepções dos professores da educação básica da Espanha e do Brasil, sobre o impacto da COVID-19 na educação, bem como os efeitos da COVID-19 na prática diária destes, e a importância de processos de formação continuada/permanente para o trabalho docente. Foi utilizada entrevistas semiestruturadas para posterior análise de conteúdo (MOURA-VIEIRA, HOEFEL e COLLADO, 2021b), e o terceiro trabalho caracterizou-se como uma revisão integrativa, acerca do uso das metodologias ativas, em tempos de pandemia. Neste trabalho, foi apresentado o construto teórico-conceitual da Metodologia Articuladora em interação com os princípios da Educação Permanente em Saúde, como estratégia potencial na formação continuada/permanente de profissionais da educação e saúde (MOURA-VIEIRA, ALVES-HOPF, COLLADO e HOEFEL, 2021c).

Na sessão Conclusão, as principais recomendações serão apresentadas, por meio de uma discussão crítico-reflexiva com as questões de pesquisa e a literatura atual, de forma a motivar a elaboração de trabalhos futuros e a promover um conhecimento transdisciplinar. Pois o conhecimento transdisciplinar é primordial nas comunicações científicas, principalmente, quando essas comunicações envolvem as interações humanas recheadas de complexidade e incertezas no ato de ensinar e aprender.

## RESULTADOS E DISCUSSÃO

### Germinando Saúde Mental no Espaço Educacional

O artigo “Articulating Methodology: Germinating mental health in the educational space in pandemic times”, publicado no *International Journal of Development Research* em 2021, aborda a complexidade da qual o mundo se encontra em decorrência da pandemia causada pelo SARS-CoV-2, revelando que além das necessidades funcionais, necessitamos de apoio emocional. Além disso, esse trabalho traz para a cena a educação como um dos setores que exige atenção, visto o aumento da violência durante o isolamento social com a atual pandemia e revela a necessidade de promover a saúde mental dos professores e estudantes dada a complexidade que envolve o trabalho docente.

O Objetivo do artigo foi desenvolver processos formativos no contexto da Educação Permanente em Saúde, na perspectiva da transversalidade do processo saúde-doença, visando potencializar os saberes, autoestima, motivação e promoção à saúde de professores e estudantes.

Foi utilizado a Metodologia de Análise de Imagens nas oficinas com professores e estudantes, em uma escola em Brasília - Brasil, e a partir desta e da práxis das autoras foi desenvolvida a Metodologia Articuladora, pautada em dispositivos pedagógicos-dialógicos, intercultural, intersetorial, princípios da EPS e neurociência cognitiva.

No decorrer das oficinas foram exploradas as potencialidades e fragilidades de professores/as e estudantes para a prevenção da violência e promoção da cultura de paz nos espaços escolares, estas incorporadas de crenças, adoecimento e diversidades de saberes e encantos. As atividades foram desenvolvidas em duas etapas: 1. Com professores (Mapa da Violência; Uso de imagens e Pactuação e Planejamento), e 2. Com os estudantes (Apresentação Sociodemográfica, Percepções e Sonhos; Mapa de Afetos e Emoções; Uso de Imagens e Construção de Escola dos Sonhos).

Nesse estudo observamos elementos importantes nos relatos dos participantes acerca da violência nos espaços escolares, de lazes, e de moradias. Além disso, as proposições dos professores e estudantes foram mapeadas, com o objetivo de pactuar e desenvolver ações para a prevenção da violência e promoção da cultura de paz nos espaços escolares. Nos diálogos estabelecidos entre os participantes, foi possível

identificar sugestões trazidas pelos estudantes para a construção de uma Escola dos Sonhos.

Em contexto geral, foi observado que na percepção dos estudantes, a escola é vista tanto como espaço de relação afetiva, como de violência. Foi encontrado diferentes dimensões de violência que se manifestaram em vários espaços, dentre eles o escolar.

Segundo Henry (2000), a violência quando é apenas definida como o uso da força em direção ao outro, resultando apenas em danos físicos, ela omite alguns elementos críticos, chamado por ele de prejuízos. Esses prejuízos não incluem a dor emocional e psicológica, tende a se concentrar no interpessoal visível e interacionista, ignorando a violência dos processos sociais/sistêmicos, e excluindo a violência simbólica de dominação.

Nos achados, também foi revelado, que mesmo antes da Pandemia, a violência vem impactando as estruturas políticas, econômicas e sociais no Brasil, conforme reafirmado em alguns relatos dos participantes, “*Quando o mundo inteiro se une para o desarmamento e uma cultura de paz, o Brasil vem com essa falácia, de legalização de uso de armas (Participante H)*”, e “*A militarização na escola é outra coisa, não dá para aceitar (Participante I)*”.

Para reverter esse quadro, consideramos primordial um trabalho amplo em esfera Federal, Estadual e Municipal, que contemplem as mais diversas dimensões. Visto que, as instâncias governamentais e o trabalho cooperativo têm um papel essencial no sentido de fomentar a implementação das legislações que apoiem os direitos humanos nas escolas para a aprendizagem sustentável e o desenvolvimento nacional.

O estudo também mostrou que a aplicabilidade das Metodologias de Imagem e Articuladora podem ser dispositivos de Educação Permanente em Saúde voltados para a formação de professores, de forma a impactar a prática dos professores para o desenvolvimento de escolas/espços saudáveis, de trocas de saberes e afetos, motivação pessoal e coletiva, criando laços entre gestores, profissionais e ambiente social, via competências adquiridas e inteligência amorosa.

Os afetos e emoções de estudantes e professores é um campo que deve ser explorado, pois, a identificação de afetos e emoções que estão relacionados ao crescimento pessoal e profissional fornecerá subsídios suficientes para uma compreensão mais profunda do indivíduo.

Assim, reafirmamos que é necessário processos de formação permanente voltados para os professores, para o empoderamento e para o desenvolvimento de uma razão

sensível (MAFFESOLI,1987) e amorosa, pautada pela indissociabilidade entre formação, gestão, atenção e participação, em diálogo com as novas necessidades apresentadas durante e pós-pandemia, por meio de um processo político e social de desacomodação e questionamentos.

### **Deserto Digital: Repercussões da COVID-19 na Educação (Espanha e Brasil)**

O Artigo denominado “El desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil”, foi escrito no auge da pandemia e publicado na Revista Electrónica Interuniversitaria de Formación del Profesorado, em 2021. Este trabalho de campo abriu um leque de possibilidades para a internacionalização do conhecimento.

O objetivo do trabalho foi buscar conhecer a percepção de professores da educação básica da Espanha e do Brasil, sobre as repercussões da COVID-19 na educação e na prática diária destes professores. Trata-se de um trabalho de campo exploratório descritivo, com abordagem qualitativa. Foi utilizado como instrumento de pesquisa entrevistas individuais semiestruturadas, aplicadas a 12 professores da educação básica do Brasil e da Espanha.

O trabalho abordou o impacto que a pandemia está causando no setor educacional do Brasil e da Espanha, ele faz uma análise das medidas de combate a COVID-19 adotadas pelos governos de ambos os países, a qual ocorreu de forma bastante distinta. Espanha adotou uma série de medidas, em âmbito nacional, com o objetivo de proteger a saúde e a segurança dos cidadãos, e conter o avanço da doença e fortalecer o sistema público de saúde.

Entre elas, a suspensão das aulas presenciais nas primeiras medidas de isolamento social. Quando houve o retorno das aulas presenciais no ano letivo 2020/2021, iniciado em setembro de 2020, as aulas começaram com medidas restritivas que tornaram a prática educativa mais desafiadora, tais como: distância mínima, uso de máscaras, revezamento de turmas, medidas de higiene que incluem limpeza/higienização da sala de aula duas vezes no turno escolar e lavagem de mãos, entre outros. Além disso, discorre sobre a forma de fazer e pensar a educação mediada pelas tecnologias digitais, que surgiu com uma força repentina e nunca experimentada, como ocorreu, no ano de 2020.

No Brasil, ao contrário da Espanha, o Governo Federal não adotou uma diretriz consistente para diminuir a curva da epidemia e proteger a saúde e a segurança dos cidadãos e mesmo em relação às atividades escolares. O presidente Jair Bolsonaro



reafirmou sua política neoliberal no contexto da pandemia e relativizou a ameaça do vírus, criticou as medidas de confinamento social e sempre defendeu a manutenção de todas as atividades econômicas e sociais, inclusive, das escolas, sem adotar nenhum plano nacional de combate a COVID-19.

Os resultados evidenciaram que, por um lado, a educação se tornou mais complexa, novos desafios se somaram aos já existentes e que a incorporação abrupta das tecnologias digitais causou grande sofrimento aos professores, devido à falta de formação dos mesmos, falta de condições mínimas de trabalho, surgimento de novas demandas profissionais e psicológicas. Por outro lado, a atual pandemia destacou ainda mais a importância da educação e de seu papel no contexto do desenvolvimento social, econômico e cultural para uma sociedade sustentável. Boff (2020) dialoga com essa visão quando adverte que devemos nos reinventar como seres humanos.

As categorias que emergiram com a análise dos dados foram: *Categoria 1 - O Deserto Digital*; *Categoria 2 - Educação: Potencialidades e Necessidades*. Essas categorias favoreceram uma abordagem em diálogo com as falas dos professores entrevistados. Foram dados nomes fictícios aos professores/as de acordo com a cidade de atuação.

Na *Categoria 1 - “Deserto Digital”*, é destacado que com o isolamento social, o equipamento escolar foi o primeiro espaço a suspender as atividades presenciais, por conta da COVID-19. Com isso, as tecnologias tornaram-se os principais dispositivos destinados a manter a conexão educacional, mudando completamente a rotina escolar. Os professores foram jogados para a frente do computador e levaram às salas de aula para dentro de casa, triplicando o trabalho.

Esse cenário fez com que professores/as trocassem os quadros e as carteiras escolares pelas telas e pelos aplicativos digitais. Além disso, aprender em tempo recorde a usar ferramentas digitais para ensinar, foi o primeiro desafio, depois tiveram que aprender a lidar com as limitações impostas pelo distanciamento dos corpos e tiveram que enfrentar as telas dos computadores muitas vezes sem rostos, câmeras desligadas, a ausência da ausência.

Pois, conforme os entrevistados, “a gente nunca sabe se os estudantes estão participando, e fica sempre aquela sensação de que eles não estão participando” (Independência). Os professores se viram imersos em um verdadeiro deserto digital, “Estar em sala de aula hoje é como gritar no deserto e ninguém te escuta” (Valencia). Neste contexto, muitos professores tiveram que superar seus medos, sua timidez, suas

inseguranças para cruzar o espaço digital, rompendo não só as barreiras tecnológicas, mas também psicológicas, “Sinto que estou numa prisão mental” (Brasília).

*Na Categoria 2 - Educação: Potencialidades e Necessidades*, foi observado que a escola e a educação escolar não são mais as mesmas, mesmo depois do retorno às aulas presenciais. O contexto educacional se tornou mais complexo, outros desafios se somaram aos já existentes. Muitos professores se sentem exaustos e ansiosos, mesmo após o retorno às aulas, *“Com a máscara a questão auditiva é complicada, porque o fonema é formado a partir da boca (por exemplo, na palavra moto), o auditivo e o visual são necessários para compreender mais facilmente o som das palavras/sílabas” (Barcelona)*. Se por um lado, a nova realidade educacional se evidencia pelo distanciamento dos corpos, causados pelas medidas de proteção contra a disseminação do SARS-CoV-2, como o uso das máscaras, isolamento social e aulas não presenciais, por outro lado, a tecnologia digital tornou-se uma realidade no contexto educacional, mas com lacunas, principalmente no acesso e na falta de letramento digital de professores e estudantes, que exige um processo de cogestão onde processos sejam balizados na voz e na escuta qualificada, *“É como gritar no deserto e ninguém te escuta, não se pode trabalhar sem ficar doente” (Valencia)*.

O trabalho de campo destacou que a nova realidade educacional se evidencia pelo distanciamento dos corpos e pela distância dos processos de ensino e aprendizagem entre as gerações analógica e a tecnológica. Além disso, ele evidenciou que é imprescindível o desenvolvimento de processos formativos voltados para os professores/as, guiados pela indissociabilidade entre formação, gestão, cuidado, e participação (CECCIM; FEUERWERKER, 2004).

Novas abordagens didático-pedagógicas são essenciais em diálogo com as novas necessidades. Essas abordagens devem incorporar estratégias de motivação e de empoderamento para a promoção da saúde destes atores, para favorecer a motivação no trabalho, apropriação de conhecimento e amorosidade na prática docente, conforme alerta Morin (2015, p. 6), *“hoje somos condenados ao conhecimento cego, porque apesar da multiplicação de informação e do conhecimento sobre tudo, só entendemos fragmentos separados”*.

### ***Metodologia Articuladora: Um Dispositivo Potencializador para a Educação Permanente em Saúde***

O trabalho intitulado de “Articulating Methodology: A Potentiator Device on Permanent Health Education” foi apresentado no Congresso de nome “19th International Conference on Education and Information Systems, Technologies and Applications, <https://www.iis.org/bestpapers.asp?year=2021>”, e publicado no Journal on Systemics, Cybernetics and Informatics (JSCI). Neste trabalho foi sistematizado os conceitos da MA com os princípios da EPS e com os resultados de uma revisão integrativa, para incentivar o desenvolvimento de mecanismos de formação de profissionais da educação e saúde, em direção ao desenvolvimento sustentável, motivação e internacionalização do conhecimento, em tempos de pandemia.

O presente trabalho foi realizado em três etapas:

Etapa I - Foi construída em cima das experiências e vivências da principal autora em diálogo com os outros autores, em forma de uma narrativa em primeira pessoa. Foi possível perceber que os conflitos, incertezas e inquietações dialogadas, culminou na experimentação de metodologias ativas, aptas a captar uma sensibilidade diferenciada para a preparação de materiais educativos e para a exploração do conceito de Educação Permanente em Saúde para um trabalho prazeroso e humanizado. A partir dessas reflexões foi possível a exploração e experimentação de novos conceitos e construtos teóricos que serviram de pilar para a estruturação da Metodologia Articuladora.

Etapa II - A Metodologia Articuladora foi estruturada pela incorporação de alguns princípios: *Amorosidade; Interculturalidade; Humanização; Internacionalização do Conhecimento; e Intersetorialidade*; e pelo uso de alguns pressupostos teóricos e metodológicos: *Círculo de Cultura Paulo Freire* (FREIRE, 2014) - O Círculo de Cultura Paulo Freire é uma estratégia dialógica que gera um movimento crítico de pessoas; *Metodologia da Problematização* (BERBEL, 2011) - Através da Metodologia da Problematização, busca-se o desenvolvimento de competências e a sistematização das experiências dos participantes, em um movimento de reflexão-ação-reflexão-ação; *Análise de Imagens* (HOEFEL, 2016) - A Análise de Imagem permite através do uso de imagens a interpretação e síntese de construtos teóricos; *Método de Vera F. Birkenbihl* (BIRKENBIHL, 2013) - Com o Método Birkenbihl, busca-se desenvolver os processos de aprendizagem e incorporação do conhecimento através de estratégias que facilitem a

aprendizagem. A Metodologia Articuladora é aplicada em momentos sistemáticos, transversais e complementares (Figura 1).

**Figura 1.** Esquema de Desenvolvimento das Atividades da Metodologia Articuladora.



Fonte: MOURA-VIEIRA, M.E. et al, 2021.

Etapa III - Na revisão integrativa foi observado, que dos 13 artigos selecionados, alguns deles apresentaram inovações tecnológicas e metodológicas diferenciadas para o desenvolvimento de atividades educativas, tais como: Aprendizagem Virtual Participativa com tecnologias da informação e comunicação (ARRUDA & SIQUEIRA, 2020); Animated Infographic em Educação Permanente em Saúde (DORNELLES et. al., 2020), dentre outros. Com os achados desta revisão integrativa, foi possível identificar importantes elementos que podem ser adicionados às atividades da Metodologia Articuladora, visto que, esses elementos podem ser aplicados com o uso de dispositivos virtuais e um planejamento de atividades esquemáticas.

Neste sentido, foi possível sistematizar os conceitos da MA com os princípios da EPS. Embora, considera-se que a EPS tenha sido, a princípio, um modelo educacional voltado para os profissionais da saúde, entendemos que a EPS deve ser, também, incorporada nos processos de formação dos profissionais da educação, visto a riqueza que seus princípios podem oferecer para a promoção da saúde nas escolas e para a articulação das ações intersetoriais.

Pois, segundo Cardoso e Colaboradores (2017), “as escolas apresentam um importante papel como coindutoras da política de Educação Permanente em Saúde no país e de sua capacidade de mobilização de diferentes agentes sociais (p. 1489).”

Entretanto, algumas barreiras/obstáculos devem ser superados para uma implementação eficiente e eficaz das ações de EPS. Segundo Carotta & Colaboradores (2009), as principais barreiras oriundas das estratégias e ações de Educação Permanente em Saúde, se esbarram na (i) pouca compreensão dos profissionais em aplicar os conceitos da EPS na prática, (ii) em uma agenda de trabalho intensa, que dificulta os encontros da equipe para reflexão e tomada de decisão, e (iii) na pouca participação dos profissionais médicos e usuários nas estratégias e ações.

Como estratégia de superação destas barreiras/obstáculos, a Metodologia Articuladora pode potencializar as estratégias e ações de EPS em serviço, pois ela possibilita que tanto profissionais da educação como da saúde adquiram habilidades emocionais para se tornarem multiplicadores de práticas didático-pedagógicas saudáveis e comprometidas com a realidade local.

## **CONCLUSÕES**

Os governos do Brasil e Espanha lidaram com a pandemia de forma distintas. Enquanto o governo espanhol adotou várias medidas restritivas, incluso isolamento social obrigatório e fechamento de escolas em nível nacional para conter a disseminação da COVID-19, o governo brasileiro adotou uma postura negacionista e relativizou a ameaça do vírus, criticou as medidas de confinamento social e sempre defendeu a manutenção de todas as atividades econômicas e sociais, inclusive as escolas, sem adotar nenhum plano nacional de combate a COVID-19.

Foi muito difícil para os professores da Espanha e do Brasil lidarem com os computadores e com as aulas virtuais. Muitos tiveram que superar seus medos, sua timidez, suas inseguranças para cruzar o espaço digital, rompendo não somente as barreiras tecnológicas, mas também as psicológicas. Eles estão vivendo um momento totalmente novo em sua vida profissional, de um momento para o outro, eles tiveram que se adaptar para continuar dando suas aulas em seu espaço privado, em suas casas, geralmente sem a infraestrutura ideal e sem a ajuda do Estado. Além disso, a falta de estrutura das escolas e as más condições de acesso às atividades à distância por alunos de

diferentes contextos sociais, levaram ao agravamento das desigualdades e o aumento da exclusão da educação, pelos mais vulnerabilizados em ambos os países.

Tantos os professores, como os estudantes, apontam a necessidade de práticas promotoras de cultura de paz e prevenção da violência no espaço escolar. Para tal, é necessário transformar o espaço escolar em coletivos de aprendizagens, onde o respeito às diferenças seja a tônica das relações diárias. Para isso, é necessário que a equipe escolar passe por processos de Educação Permanente em Saúde, pautado pela indissociabilidade entre formação, gestão, atenção e participação, para o empoderamento, apropriação de linguagem crítica-reflexiva, dialógica e amorosa.

Nesse sentido, as metodologias ativas têm um papel primordial no desenvolvimento de processos formativos, uma vez que elas possibilitam a participação ativa dos sujeitos, papel esse reafirmado nos trabalhos discutidos nesta síntese. Torna-se imprescindível o uso de novas abordagens metodológicas reflexivas e que contemplem a dimensão humana como um todo para a mudança de paradigma verticalizado, tanto na educação como na saúde.

Nessa perspectiva, a Metodologia Articuladora vem a colaborar com essas mudanças de paradigma, considerando seus princípios e construtos teóricos para um ensinar e aprender mais prazeroso e sistematizados com os princípios da Educação Permanente em Saúde, onde a escuta seja qualificada e os sujeitos compreendam seu papel de corresponsável no exercício da cidadania e para o trabalho intersetorial. Futuros estudos devem complementar as questões abordadas, considerando os espaços educacionais, a formação continuada/permanente dos profissionais da educação e saúde, o respeito às diferenças, as peculiaridades locais e as novas demandas impostas pela pandemia.

## **REFERÊNCIAS BIBLIOGRÁFICAS**

ARRUDA, J.S.; SIQUEIRA, L.M.R. C. Metodologias Ativas, Ensino Híbrido e os Artefatos Digitais: sala de aula em tempos de pandemia. **Práticas Educativas, Memórias e Oralidades - Revista Pemo**, v.3, n.1, e314292, 2020.

BERBEL, N.A.N. As metodologias ativas e a promoção da autonomia de estudantes. **Semina Ciências Sociais e Humanas**, v.32, n.1, p. 25-40, 2011.

BIRKENBIHL, V.F. Stroh im Kopf? Vom GehirnBesitzer zum Gehirnbenutzer. **Mvg**, München, 2013.

BOFF, L. **Conferencia: Pensando en nuestra Abya Yala en tiempos de pandemia.**, 2020.

CARDOSO, M.L.M. et al. A Política Nacional de Educação Permanente em Saúde nas Escolas de Saúde Pública: reflexões a partir da prática. **Ciência & Saúde Coletiva [online]**, v.22, n.5, p. 1489-1500, 2017.

CAROTTA, F.; KAWAMURA, D.; e SALAZAR, J. Educação permanente em saúde: uma estratégia de gestão para pensar, refletir e construir práticas educativas e processos de trabalhos. **Saúde e Sociedade [online]**, v.18, suppl.1, p. 48-51, 2009.

CECCIM, R.B.; FEUERWERKER, L.C.M. O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social. **Physis**, v.14, n.1, p. 41-65, 2004.

DORNELLES, L.L. et al. Development of an animated infographic on Permanent Health Education. **Revista Latino-Americana de Enfermagem**, v.28, e3311, 2020.

FREIRE, P. Pedagogia da autonomia: saberes necessários à prática educativa. 25ª ed. **Paz e Terra**, São Paulo, 2014.

HENRY, S. What is school violence? An integrated definition. **Annals American Academy of Political and Social Science**, v.567, p.16-29; 2000.

HOEFEL, M.G.L. **Projeto Vidas Paralelas: relações entre a imagem, a estética e a política.** Relatório de Pesquisa de Pós-Doutorado, Universidade de Brasília, 2016.

KLEIN, P. D; BOSCOLO, P. Trends in research on writing as a learning activity. **Journal of Writing Research**, v.7,n.3, p. 311-350, 2016.

MAFFESOLI, M. O Tempo das Tribos: o declínio do individualismo nas sociedades de massa. **Forense Universitária**, Rio de Janeiro, 2014.

MATOS, T. "**Síntese**". Brasil Escola, 2021.

MORGADO, J.C. Transformações educativas em tempos de pandemia: do confinamento social ao isolamento curricular. **Práxis Educativa**, v.15, e2016197, p. 1-10; 2020.

MORIN, E. Introdução ao Pensamento Complexo. **Porto Alegre: Sulina, 2015.**

MORIN, E. Lições da pandemia: o despertar para as grandes verdades humanas. **Fronteiras do Pensamento**, 2020.

MOURA-VIEIRA, M.E. et al. Articulating Methodology: A Potentiator Device on Permanent Health Education. **Proceedings of the 15th International Multi-Conference on Society, Cybernetics, and Informatics (IMSCI 2021)**, Single Volume, p. 121-126, 2021, ISBN: 978-1-950492-58-9 (Print).

MOURA-VIEIRA, M.E.; ALVES-HOPF, S.; e HOEFEL, M.G.L. Articulating Methodology: Seeding Mental Health in the Educational Space in Pandemic Times. **International Journal of Development Research**, v.11, n.9, p. 50104-50109, 2021a.

MOURA-VIEIRA, M.E.; HOEFEL, M.G.L.; e COLLADO, J.T.R. El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil. **Revista Electrónica Interuniversitaria de Formación del Profesorado**, v.24, n.2, p. 181-191, 2021b.

MOURA-VIEIRA, M.E. et al. Articulating Methodology: A Potentiator Device on Permanent Health Education. **Journal of Systemics, Cybernetics and Informatics**, v.19, n.5, p. 15-23, 2021c.

OCKERNBURG, L., WEIJEN, D.; e RIJJAARSDAM, G. **Journal of Writing Research**, v.10, n3, p. 401-428, 2019.

## **AGRADECIMENTOS**

Gostaríamos de agradecer aos revisores pela colaboração científica dada para a estruturação da versão final dos artigos e Ninna de Moura Abreu pela revisão gramatical desta síntese.



#### **4.6 Artículo 6: “Articulating Methodology: A Potentiator Device on Permanent Health Education”**

*Autores: Maria Edna Moura Vieira, Simone Alves-Hopf, José Thomas Réal Collado, Maria da Graça Luderitz Hoefel. (Publicado en julio de 2021 en el Journal on Systemics, Cybernetics and Informatics (JSCI), según Apéndice G).*

#### **ABSTRACT**

Even prior to the SARS-CoV-2 pandemic, education presented some gaps in the didactic-pedagogical field. Due to the constant reinvention of didactic-pedagogical practices, it is of paramount importance to integrate active methodologies in educational spaces for improving the processes of action-reflection-action-reflection. We present an Articulating Methodology (AM), as a potentiator device, for intersectoral work between the health and education sectors. The goal of this paper is to systematize Articulating Methodology concepts with Permanent Health Education (PHE) principles. This is an exploratory study carried out in three steps: describing the authors' experiences; bibliographic research; and integrative review for a discussion about the contextualization of the active methodologies. We identified important elements that can be added to the AM using technology information. As conclusion, we highlight that it is essential the importance of the teacher's role in the educational process. Nonetheless, it is necessary to develop such a sensitive reason for a more humanized practice. The AM stands out in this process, through the creation of Proactive Agendas, as well as ethical and moral principles, which reinforce social participation, didactic pedagogical development, and technological information use, allowing the grown up of the narratives that emerge from the participants' experiences/voices/listening.

**Keywords:** Active Methodology, Permanent Health Education, Educative Dimension, Health Dimension, Informatics.

#### **1. INTRODUCTION**

Education on the world stage, even before the pandemic caused by SARS-CoV-2, had been facing needs and challenges that had not been overcome throughout decades

of effort. The pandemic event has increased those gaps, exposing the need for initiatives that foster projects and actions with innovative strategies that enhance learning in such a manner that participants are immersed in an inclusive, free, and universal educational experience. Considering these projects and actions ought to contribute to the role of the individual in the context of political, social, economic, and cultural development of a sustainable society.

According to Boff (2020) "COVID-19 is the consequence of humanity 's lack of education, it is a problem of education and from now on education cannot be the same" [1]. It is thus important to rethink the training of both health and education professionals, aligning actions to the promotion of individual and collective health, and encompassing the dimensions of intersectoriality, interculturality, subjectivity, as well as the internationalization of knowledge, through positive language and reflective articulation. These actions can promote a continuous and intense flow of deterritorialization and inventions, as a way of interacting with the principles of Permanent Health Education (PHE): Teaching, Management, Service and Social Participation [2]. Saviani (2010) corroborates this view by stating that educational work is the act of producing, directly and intentionally in each singular individual, the humanity produced historically and collectively by the human group [3].

In this sense, any learning space should be considered a space for health promotion, with a comprehensive view, for the systematization of knowledge and affections, rendering the education generated in these spaces, to be the very materialization of the meaning of life, deriving mainly from the lessons learned during the current pandemic. Thus, integrating active methodologies in educational spaces becomes imperative, since didactic-pedagogical practices are constantly reinvented, in an action-reflection-action-reflection process.

In addition, we must consider new challenges posed by the pandemic. According to Moura-Vieira and Colleagues (2021), schooling will not be the same, even with the return of face-to-face classes [4]. The educational context has become even more complex, other challenges have been added to the existing ones, such as working conditions that have worsened a lot. According to these authors, "many teachers had to adapt to new technologies, to the distance from bodies caused by social isolation and by the use of protective equipment, such as the mask, which makes it difficult for students to teach, bond and learn". Teachers also had to "overcome their fears and difficulties in

relation to the technologies and awe of being infected in the face-to-face classes, all in a situation of precarious work” [4].

This serves to reaffirm the need to integrate active methodologies in educational spaces, as way to contribute to overcoming fears and losses caused by COVID-19. In addition, it is essential to reaffirm the importance of the teacher's role as the protagonist of educational conduct as well as the need to develop a "sensitive reason" for a more humanized teaching practice. The processes of teacher training and of the training itself must be an ethical, aesthetic, and political commitment of governments and society, and must be guided by the inseparability of training, management, care, participation [5], interculturality, intersectoriality, inclusion, internationalization of knowledge and the school's educational political project [4].

In this paper, we present the Articulating Methodology (AM) as a potentiator device for the intersectoral work between Health and Education. Articulating Methodology allows, through a situational diagnosis, for the identification/mapping of personal labor skills, territorial screening, well as for the discovery of potentialities of health and education professionals around a phenomenon. In the research one meant to systematize the concepts of the AM with PHE principles and results of an integrative review and encourage the development of PHE mechanisms, incorporating innovative methodologies for the promotion of health and education professionals towards sustainable development, empowerment and motivation of target groups, and internationalization of knowledge.

## **2. METHOD**

This paper is part of a Doctoral Dissertation of the main author, elaborated in the co-guardianship regime between the University of Valencia/Spain and the University of Brasilia/Brazil, still in progress. It is a qualitative, exploratory, and participatory study, in which the experiences of authors were part of the context investigated. According to Novóá (1988) “The formation inevitably is a work of reflection about the life pathway” [6]. The study was conducted in three steps, which were systematized to interact with the Permanent Health Education principles.

❖ Step I: Given that theory and practice complement each other in a process of action-reflectionaction-reflection, some author's prior experiences were of paramount importance in building this paper. Moreover, prior experience was

fundamental for the elaboration of the Articulating Methodology, which has its starting point in the concerns of Professor and Historian Moura Vieira, experiences in the educational environment being considered. Using such method, the author's personal and professional memories were rescued to allow for the rescuing of facts and events that converged towards the elaboration of the AM.

❖ Step II: A bibliographic research was conducted in dialogue with Permanent Health Education. As bibliographic research, we used the main works of some authors, who served as pillars for the structuring of the AM. The choice of these works aimed to contextualize the methods and instruments that structured the Articulating Methodology. Using the works of those authors rendered it possible to establish future assumptions and perspectives for the development of this methodology in accordance with Permanent Health Education principles. The addressed concepts had their theoretical foundation in the Circle of Culture [7], Problematization Methodology/Arch of Magueres [8], Image Analysis [9], Birkenbihl Method [10, 11], and Brazilian Policy of Permanent Health Education [12].

❖ Step III: An integrative review was carried out for a detailed discussion about the contextualization of active methodologies and those methods used during the current pandemic. As a methodological strategy for integrative review conduction, we followed six stages as described in a previous study [13]. For the integrative review, two independent authors (SAH & MEMV) searched on databases: Virtual Health Library (VHL), and Science Direct, using the keywords: active methodology AND permanent health education AND COVID-19/SARSCoV-2 in Portuguese/English. The articles included for analysis were selected based on the reading of the abstracts; only full texts in English and Portuguese published between January 2020 - February 2021 were analyzed. The exclusion criterion used meant articles of bibliographic and systematic reviews, as well those that did not meet the inclusion criteria, were not admitted for analysis.

It was possible to identify active methodologies, methods, and instruments used in didactic-pedagogical processes during the current pandemic of SARS-CoV-2 by means of integrative review [14]. The use of integrative review was not intended to exhaust the analyses about the active methodologies existing in the educational universe. Rather,

integrative review was a source of methods and instruments that might be added to Articulating Methodology and strengthen its concept of transversality, when we propose to investigate complex phenomena in the political, economic, social and health sciences. By taking these steps, we seek to contemplate the following research questions:

- 1) Which aspects of teaching practice favor motivation and pleasurable work?
- 2) What active methodologies are being used during the current pandemic?
- 3) What are the theoretical contributions of methods applied in AM that can favor training, management, attention, and participation?
- 4) Which potential aspects from Articulating Methodology to Permanent Health Education?

The research questions and results are parallelly systematized and discussed with Articulating Methodology concepts in the following 3 sections.

### **3. RESULTS AND DISCUSSION**

#### **Author's prior experiences**

Since I started working as a teacher 20 years ago, I have never felt fully prepared to deal with the totality of social, cultural, political contexts that the act of educating is permeated by. Therefore, I began to observe and to reflect on the complaints of teachers regarding students' learning difficulties, and their relation to the educational methods adopted in educational environments. At that moment, I realized that students' conflicts, uncertainties, and concerns resembled some of mine.

Thus, I began to experiment with several different pedagogical methods and approaches, such as the Freirean Culture Circle, Problematization Methodology, among others, according to the stage and modality of teaching and to seek new understandings of the world to improve my pedagogical practice meaning to contribute to a most pleasurable and humanized working experience.

Carrying such concerns, such regard, such desires, affectations, and possibilities of inventing new ways of acting, I decided to take on some training and tutoring "Permanent Health Education on Movement" in 2014. From that experience, I came to believe that, via PHE, a co-managed construction and the reinvention of work is possible. I also began learning from Merhy and Ceccim (who investigate Permanent Health Education in Brazil).

Thus, I found myself fully involved with PHE, which I perceived as a kind of body-theory-action that I let take me back to the words of Grande Sertão Veredas by Brazilian author called Guimarães Rosa, for it captured the tone of my affectations. "[...] Sertão is the size of the world. Sertão: it's inside us." "Is it dangerous to be alive or not? It's too dangerous. Because we don't know yet. Because learning-to-live is true life. The Sertão produces me, then swallows me, then spits me out of the hot mouth." [15].

The journey through Sertão, the Brazilian hinterland, is potentially never ending. It opens so many pathways and involves so many crossroads, that people are simply outlived by it. Sertão, as much as the formation of the human being, is as vast as life itself. As vast as Sertão is the importance of teachers going through educational/formative processes permanently, either through formal proposals of education, in daily work relationships, or through their insertion in the sociocultural world through inclusive and pleasurable methodologies. This has been our perspective all along.

In 2018, I met Image Analysis Methodology [9], then, I used it in a formative process involving teachers and having violence as a theme, by invitation of the author herself. As I was developing my doctorate, "my flying amphibian" was totally activated [15]. I began to experiment across other methods and methodologies throughout the workshop, applying Alves-Hopf dialogically, about the emergence of new variables, needs, potentialities and mapped affectations.

By such movement, we idealize and structure the Articulating Methodology, emerging from the dimensions of health and education that have surfaced through the process as well as through our personal and professional experiences. By this movement of experimentation, dynamic and reflective we developed the Articulating Methodology, which means to fill the gaps found during my teaching career, so much made of concerns and curiosities. This Methodology integrated by various methods based on scientific evidence. Such methods complement one another in cross-sectional dimensions not exhausted by conventional educational guidelines, as will be detailed below.

### **Articulating Methodology: contextualization and its potentialities in educational practice**

The Articulating Methodology (AM) arose from the need to fill gaps found in the didactic-pedagogical praxis of the authors. From a perspective of exchanging knowledge and experiences between education and health, AM was constructed by the combination

of other methodologies and methods based on scientific evidence. Conceived by Edna Moura and Alves-Hopf in 2018, AM is a set of qualitative methods articulated and structured to support dimensions of health and education. Dimensions that encompass neurocognitive, emotional/affective, political, economic, social, and environmental aspects.

AM emphasizes the realities of individuals in terms of their origins and *raison d'être*, through dialectical approaches, exchange of experiences, knowledge, and affections, providing a personal, and professional mapping towards the limits between knowledge and emotions, allowing for the construction of a new work experience connected to local reality and to the creation of propositions based on the needs and potentialities of the phenomenon being studied.

The training process provided by AM is transversal by some principles and concepts, such as i) Amority - by the conception of the expansion of dialogue in care relationships and educational action by the incorporation of emotional exchanges and sensitivity, allowing affection to become a structuring element of the search for health, ii) Interculturality - for valuing diversity, intercultural communication, and otherness, iii) Humanization - as a principle of comprehensive health care and the organization of healthy and welcoming workspaces, making clear the importance of the inseparable bond that unites care and management, iv) Internationalization of knowledge/exchange of knowledge - by the interconnection between scientific and popular knowledge in dialogue with involved and the reality of the territory, v) Intersectoriality - by the articulated planning of health and education policies. As a starting point, the Articulating Methodology was based on some scientific methodologies and methods, such as:

Paulo Freire Culture Circle [7] - Dialogical strategy that generates a critical movement of people, knowledge, and reflection for socio-educational transformation. In a learning format in which a moderator organizes herself with participants. This dialogical strategy considers important principles of Paulo Freire's pedagogy, such as student and educator, who are considered distinct subjects, building their views in a respectful and transversal dialogue with different disciplines connected to the local reality.

Problematization Methodology [8] - Through the Methodology of Problematization and the Arc of Charles Maguerez, we aim to provide the development of skills and the systematization of participants' experiences and knowledge, from the perspective of human rationalities and problem-solving taking the form of reflection-actionreflection-action.

Image Analysis [9] - Using images and maps, it is possible to map/identify potentialities and vulnerabilities in the context to be investigated. The Image allows for the rescue of memories and facts that help us a better understanding of a certain phenomenon from the participant's point of view, enabling the construction of theories and problem resolutions plausible to the local reality.

Vera F. Birkenbihl Method [10, 11] - This Method enhances learning processes, considering some aspects of neurocognition and neuroscience, such as: creating situations of memory retrieval in the conscious and subconscious; stimulating, through visualization and association techniques, the construction and transfer of knowledge among the subjects involved; promoting relationships of affectivity, human development, and social transformation.

The organizational structure of AM is divided into systematic and complementary based on the building of an Action Service Project (Proactive Agenda), which according to the authors' conception is considered the reinvention and organization of pedagogical practices in action. It is possible to apply this methodology both in face-to-face and virtual formats. The following moments can be summed up:

**Moment 01** - Situational Diagnosis: Mapping of personal, professional, and affective experiences, experienced by the subjects involved. Identification of empowering and vulnerable aspects, as well as political, economic, social, and environmental determinants.

**Moment 02** - Pleasurable Learning Processes: Application of Association and Visualization Techniques that promote a dynamic and interactive dialogue, considering the discussion and reflection on the empowering or vulnerability aspects or determinants, mapped in the situational diagnosis.

**Moment 03** - Promotion of Self-Care: Collective, artistic, and cultural experiences, based on the participants' stories and knowledge. Dissemination of healthy practices with the use of Complementary Integrative Practices in Health for promoting healthcare.

**Moment 04** - Construction of a Proactive Agenda: Invitation to the actors to reflect on themselves, about the other and on the relationships, they establish in their personal and work lives, intending to solve problems based on learning, in a harmonic movement between theory and practice (praxis).

In 2019, Articulating Methodology was applied in a workshop format to immigrant women living in Valencia/Spain, promoted by the Asociación Por Ti Mujeres, with very positive results. The activities aimed to promote a space for dialogue and



exchange of experiences that would allow immigrant women to know their abilities, cooperative, creative, and participatory skills, stimulating the capacity of creation and empowerment of these women, as can be seen in one of the reports: “I leave quiet, more energized, I felt that I needed a space like this, to vent, express everything that sometimes I cannot or do not have with whom to share with (Valencia/Spain, 2019)”.

Positive aspects were also observed during the workshop “Oficina de Formação e Cultura Digital” in 2018 Brasilia/Brazil. “I am grateful for the opportunity, and I am more critical to my personal growth and willing to seek to fulfill myself more professionally because fear and error still hold me back. I am enthusiastic (Brasilia/Brazil, 2018)”.

The main instruments AM uses are cultural circle; open and closed questionnaires; mind maps; photographs, ABC list, poetry, music, Arco de Magueres, among others. These instruments allow not only for the acquisition of information on participants but also the evaluation of the methodology itself, and methods used, because the participants evaluate the actions when they arrive, during the activities and when they leave, as can be seen in the above report.

### Integrative review

The search scheme and the results of the integrative review are presented in the **Figure 1 and 2**. Of the total of 66 articles found, thirteen were selected to compose our analysis.

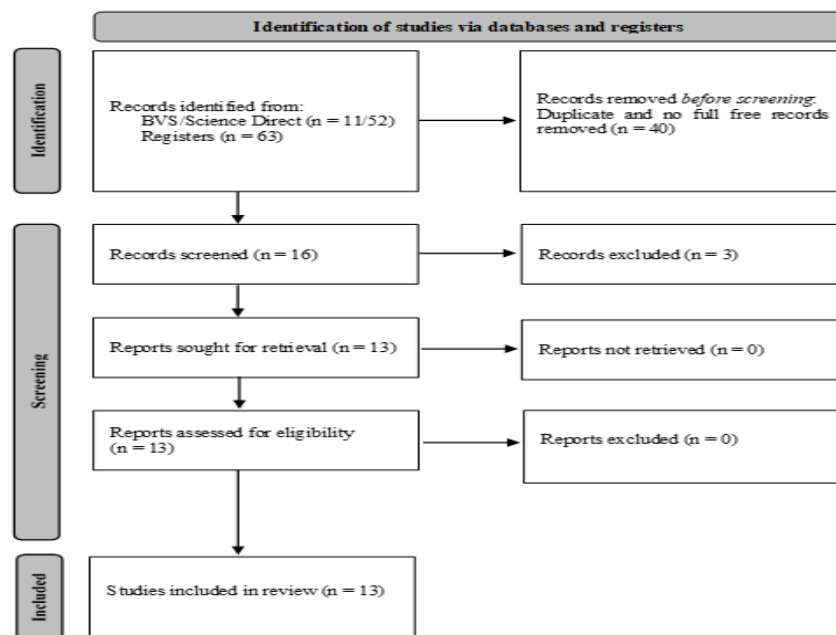


Figure 1: Representation of the selection process of the Articulating Methodology paper using Prisma 2020 Flow Diagram. BVS = Biblioteca Virtual de Saúde.

The authors presented various methodologies used to promote didactic-pedagogical actions in different fields, such as health [17, 18, 19, 20, 21, 24, 25], education [22, 23, 26, 27], and economy [28]. Most of the methodologies and methods used were based on active-participatory methodologies that employ information technology, an essential device in the context of social isolation. In some studies, it was possible to observe innovative and differentiated methodologies such as Participatory virtual teaching [23], Animated infographic based on concepts and assumptions of PHE [17], Cooperative Learning [19], Virtual Group Discussion (sVGD) [24], Learning by videos on YouTube [21], Phase-study plan cycles (PDSA) [25], Gatified active learning teaching [26], Active and virtual learning [27], AURA (Active Usage of Resilience Assets) [28].

The studies showed that these methodologies and methods presented important results that strongly consolidate the use of active methodologies to motivate the active participation of the target population [24], facilitating collaborative learning processes [17, 19], promoting interaction and listening [18], participant satisfaction [25], and the use of virtual tools [21, 22, 26, 27].

Given this review, we were able to verify important elements that can be added to Articulating Methodology, such as the use of virtual devices and activity planning schemes, using information technologies. Thus, these technologies can be used during the development of activities in Articulating Methodology, further strengthening its operational structure, since AM provides a movement of action in service, in which education and health professionals acquire emotional skills to become multipliers of healthy didactic-pedagogical practices and committed to the locality.

### **Articulating Methodology in connection with permanent health education**

There is something to be learnt during the current pandemic crisis, we must take a closer look at education and health. It is necessary a plural and integral look, considering multiple dimensions for transforming of the educational space. In the perspective of plural and integral education, it is necessary to place the educator's work at the center of theoretical, political, and methodological debates and reflections. To that end, it is imperative that teachers training processes do encompass the context of human development and the comprehensiveness of the subject, from the perspective of Paulo Freire (1996) [7].

Autor/Year	Objective	Methodology
Arruda & Siqueira 2021	Present an educational and sustainable practice adopted in times of Covid 19, by students and professor of the Accounting course.	Participatory Virtual Teaching with Information and Communication Technologies (ICT).
Bezerra et. al. 2020	Report the experience of students of health courses in the development of a case and its application in the form of a Problem-Based Learning	Problem-Based Learning
Domeles et. al. 2020	Develop an animated infographic on the concept of Permanent Health Education, according to the National Policy, and its main differences compared to both continuing education and health education.	Animated infographic on Permanent Health Education
Fernandes et. al. 2020	Plan, develop, implement and evaluate a management specialization course in oncology using blended learning.	Combined learning methodology
Ivanov 2021	Apresentar um quadro que se consolida diferentes ângulos de resiliência eficiente e torna a utilização de capacidades de resiliência para a criação de Valor.	AURA (Active Usage of Resilience Assets) Framework
Kaur et. al. 2021	Innovate the way of conducting the discussion in virtual group (sVGD) and evaluate the perception of graduate students about its effectiveness compared to conventional VGD and virtual GD.	Virtual Group Discussion (sVGD)
Luu et. al. 2020	Analyze the quality of videos on YouTube as an educational tool in learning how to perform a neck dissection, one of the key indicator cases for trainees in otolaryngology	Videos YouTube Learning
Mojdenbakhsh et. al. 2021	Convert at least 50% of all outpatient clinical meetings to telemedicine within one week of the initial intervention. Obtain feedback from patients about this new type of encounter and determine the potential interpersonal impact on patient care.	Using action-study plan (PDSA) cycles, the initial intervention to telemedicine was agreed at a meeting of physicians GynOnc.
Murillo-Zamorano et. al. 2021	Present a successful classroom proposal in higher education to better understand its influence in terms of knowledge, skills, and engagement	Gamification and active learning (experimental group) and non-gamified active learning teaching condition (control group)
Ripoll et. al. 2021	Share the experience of adapting the Engineering course, part of the Biotechnology program of the Francisco de Vitoria University (Madrid, Spain), to remote learning.	Biochemical Cooperative Learning
Sales et. al. 2021	Through the "Mental Box" promote the activities of teaching and university extension in the period of the pandemic incited by COVID-19	Information and Knowledge Technologies (TICs) and active
Sanchez et. al. 2021	Introduce a postgraduate course in Exploration as a basis for active and virtual learning	Deep-Sea Deep-Sea Exploration with a basis for active and virtual learning
Segovia & Gutiérrez 2020	Evaluate the effects on the body composition of schoolchildren in a game based on interval training program (GB-HIIT) taught during physical education.	TheSport Education Model: high intensity interval training (GB-HIIT) programme

Figure 2: Available Papers to Integrative Review Analysis

Human development is a process of expanding the range of personal options, so it is closely related to work. The positive relationship between human development and work is reciprocal. Health, Education and Development are interconnected, as there is no development process without due attention to health and knowledge. Likewise, the

development of workers is not unrelated to updating their own work. Work and workers constitute an inseparable dyad [16].

In the education and health sectors, the processes require extensive communication, tuning and correspondence with social needs, comprehensiveness, inclusion, internationalization of knowledge and political pedagogical projects.

In addition, in the context of education professionals, given the scenario of socio-cultural vulnerability of their target audience, aggravated by COVID-19, it appears that the organizational structure of educational spaces, derived from current educational policies and their ways of functioning, do not offer sufficient possibilities for the reconstruction of dynamics, processes, participatory methodologies and forms of democratic management that are reaffirmed in practice.

In this context, the concept of Permanent Health Education can collaborate to the growth up of the education and health professionals. Permanent Health Education is defined as learning at work, in which learning, and teaching are incorporated into the daily life of organizations and the work process and proposes that the education processes of health workers are based on problematization practice itself.

Although the concept of permanent health education is a principle aimed at health workers, we understand that PHE aims to discuss the work and, from this work, seek to transform the institutional space into a space for problematization, reflection, dialogue and building consensus, exchanges, and co-production. It is based on the concept of critical education, meaningful learning, and the valorization of work as a source of knowledge, it can thus also be applied to education.

It is important to point out PHE is much more than a pedagogical or methodological concept, according to Ceccim & Feuerwerker (2004) [5] it has proposed a political process of disaccommodation and questioning that seeks to transform reality. These theoretical concepts make us envision a new scenario for education, as a response to the current needs imposed by the pandemic. For example, the need to equip teachers to develop the "sensitive reason", guided by the indissociability between training, management, care, and participation, in dialogue with new needs.

In this perspective, the Articulating Methodology can establish a relationship with the PHE principles. Moreover, AM offers this possibility, if we consider its methodological, didactic-pedagogical, and political aspects with the creation of Proactive Agendas that reinforce the participation and educational, political, and social

transformation, where the tone of narratives and propositions are emerged from the experiences, voices and listening of the participants.

#### **4. CONCLUSION**

With the emergence of COVID-19, education on the world stage is no longer the same, it has become more complex. Furthermore, other challenges have been added to existing ones due to the working conditions that have worsened greatly. The affective aspects and the constitution of bonds become great concerns nowadays since the distancing of bodies caused by social isolation has hindered the learning of students and the constitution of a bond between teachers and students.

Fears and uncertainties compose the currently presented scenario of the educational context, which require measures, actions, and projects concerning the joint education of teachers and health professionals. We highlight the transversality of PHE principles and concepts, which take into consideration the integral health of those actors. In such a perspective, Articulating Methodology can enhance the actions in service, in which's accordance education and health professionals acquire emotional skills to become multipliers of healthy didactic-pedagogical practices committed to local reality.

In this scenario, findings of the integrative review were not exhaustive, on the contrary, further experimental research remains necessary about the active methodologies. However, we have been able to correlate the potential of Articulating Methodology with the findings of this integrative review.

In this review was observed that the active methodologies seek to move from the verticalized, whence the teachers teach them students, to the horizontalized model, whither involved actors build the knowledge in actively and participatively way. On the other hand, we have noted that methodologies employed need to include in their activities fundamental aspects defended by Articulating Methodology, such as amority, interculturality, humanization, internationalization of the knowledge, and intersectoriality of the health and education sectors for a comprehensive understanding of real needs and potentialities of the individuums, considering its multiple dimensions.

We highlight that both the role of the teacher and the need to develop a "sensitive reason" for a more humanized educational practice to be essential in the act of educating. In this sense, Articulating Methodology, as a didactic-pedagogical device for Permanent Health Education, collaborate to education and health sectors, through the creation of

Proactive Agendas aimed to reinforce the participation, health promotion, educational and social transformation, considering the Information Technology as an essential support to inclusion and access of the actors, in order to improve the tone of narratives and propositions, emerging from the experiences, voices, and listening of the participants.

## 5. REFERENCES

- [1] L. Boff. **Conferencia: Pensando en nuestra Abya Yala en tiempos de pandemia**. [Vídeo]. YouTube. <https://www.youtube.com/watch?v=kQ5g9kNCnAc>, 2020.
- [2] R.B. Ceccim, & E.E. Merhy. Um agir micropolítico e pedagógico intenso: a humanização entre laços e perspectivas, **Interface - Comunicação, Saúde, Educ.**, Vol.13, No. 1, 2009, pp.531-42.
- [3] D. Saviani. **Interlocuções pedagógicas: conversa com Paulo Freire e Adriano Nogueira e 30 entrevistas sobre educação**, Campinas: Autores Associados, 2010.
- [4] M.E. Moura-Vieira, M.G.L. Hoefel, & J.T.R. Collado. El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil, **Revista Electrónica Interuniversitaria de Formación del Profesorado**, Vol. 24, No. 2, 2021, pp.181-191.
- [5] R.B. Ceccim, & L.C.M. Feuerwecker. O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social, **Physis**, Vol. 14, No. 1, 2004, pp. 41-65.
- [6] F. Ferrarotti. **Sobre a autonomia do método biográfico**, In: Novóia, António; Finger, Matthias (Orgs.) **O método (auto)biográfico e a formação**, Lisboa: Ministério da Saúde. Departamento de Recursos Humanos da Saúde/Centro de Formação e Aperfeiçoamento Profissional, 1988, p. 17-34.
- [7] P. Freire. **Pedagogia da autonomia: saberes necessários à prática educativa**, São Paulo: Paz e Terra, 1996.
- [8] N.A.N. Berbel. As metodologias ativas e a promoção da autonomia de estudantes. **Semina Ciências Sociais e Humanas**, Vol. 32, No. 1, 2011, pp. 25-40.
- [9] M.G.L. Hoefel. **Projeto Vidas Paralelas: relações entre a imagem, a estética e a política**, Relatório de Pesquisa de Pós-Doutorado, Universidade de Brasília, 2016.
- [10] V.F. Birkenbihl. **Birkenbihl Denkwerkzeuge**, München: Mvg, 2007.
- [11] V.F. Birkenbihl. **Stroh im Kopf? Vom GehirnBesitzer zum Gehirn-Benutzer**, München: MvgVerlag, 2007.
- [12] Brasil. Ministério da Saúde. **Política Nacional de Educação Permanente em Saúde**, Portaria GM/MS nº 1.996/2007.

- [13] L.L.R, Botelho, et. al. O Método da Revisão Integrativa nos Estudos Organizacionais, **Gestão e Sociedade**, Vol. 5, No.11, 2011, pp. 121.
- [14] J.G. Rosa. **Grande Sertão Veredas e o Diabo na Rua no Meio do Redemoinho**, Rio de Janeiro: Companhia das Letras, 2019.
- [15] E.E. Merhy. Educação Permanente em Movimento - uma política de reconhecimento e cooperação, ativando os encontros do cotidiano no mundo do trabalho em saúde, questões para os gestores, trabalhadores e quem mais quiser se ver nisso. **Saúde em Redes**, 2015, pp. 07-14.
- [16] I.N.M. Bezerra, et. al. A utilização da aprendizagem baseada em problema (abp) na formação em saúde:um relato de experiência. **Revista Ciência Plural**, Vol. 6, No. 1, 2020, pp. 102-118.
- [17] L.L. Dornelles, et. al. Development of an animated infographic on Permanent Health Education, **Revista Latino-Americana de Enfermagem**, Vol. 28, 2020, pp. e3311.
- [18] R.A.M.L. Fernandes, et. al. Development, implementation, and evaluation of a management specialization course in oncology using blended learning, **BMC Medical Education**, Vol. 20, No. 37, 2020.
- [19] V. Ripoll, et. al. WITHDRAWN: Teaching Chemical Engineering to Biotechnology students in the time of COVID-19: Assessment of the adaptation to digitalization, **Education for Chemical Engineers**, Vol. 34, 2021, pp. 94-105.
- [20] P.C.S.L., Sales et. al. Inovações pedagógicas no panorama da COVID-19: um relato do projeto “Caixa Mental”, **Research, Society and Development**, Vol. 10, No 2, 2021, pp. e51510212799.
- [21] N.N. Luu et. al. Assessment of YouTube as an Educational Tool in Teaching Key Indicator Cases in Otolaryngology During the COVID-19 Pandemic and Beyond: Neck Dissection, **Journal of Surgical Education**, Vol. 78, Issue 1, 2021, pp.214-231.
- [22] Y. Segovia & D. Gutiérrez. Effect of a game-based high intensity interval training program on body composition in primary education: comparison of the Sport Education model and traditional methodology, **Journal of Physical Education and Sport® (JPES)**, Vol.20 (2), Art. 113, 2020, pp. 791- 799.
- [23] J.S. Arruda & L.M.R.C., Siqueira. Metodologias Ativas, Ensino Híbrido e os Artefatos Digitais: sala de aula em tempos de pandemia, Práticas Educativas, Memórias e Oralidades - **Revista Pemo**, Vol. 3, No. 1, 2020, pp. e314292.
- [24] S. Kuar, et. al. Adaptive strategies to conduct participant-centric structured virtual group discussions for postgraduate students in the wake of the COVID19 pandemic, **Advances in Physiology Education**, Vol. 45, 2021, pp. 37-43.

[25] R.P. Mojdehbakhsh, et. al. A quality improvement pathway to rapidly increase telemedicine services in a gynecologic oncology clinic during the COVID-19 pandemic with patient satisfaction scores and environmental impact, **Gynecologic Oncology Reports**, Vol. 36, 2021, pp. 100708.

[26] L.R. Murillo-Zamorano, et. al. Gamification and active learning in higher education: is it possible to match digital society, academia, and students' interests? **International Journal of Educational Technology in Higher Education**, Vol. 18, No. 15, 2021.

[27] J.A. Sánchez, et. al. Role-Playing to Foster ‘Deep-Sea Exploration’ Through Active and Virtual Learning: A Class-Design for Colombian Higher Education. Current, **The Journal of Marine Education**, Vol. 34, No 3, 2020, pp.9–17.

[28] D. Ivanov. "Lean resilience: AURA (Active Usage of Resilience Assets) framework for post-COVID-19 supply chain management", **The International Journal of Logistics Management**, Vol. ahead-ofprint, No. ahead-of-print, 2021.



#### **4.7. Artículo 7: “Articulating Methodology – Weaving a Trans-Disciplinary Knowledge”**

*Autores: Maria Edna Moura Vieira, Simone Alves-Hopf, José Thomas Réal Collado, Maria da Graça Luderitz Hoefel. Aceptado para su publicación en diciembre de 2021, em el Journal on Systemics, Cybernetics and Informatics (JSCI), según Apéndice G).*

#### **ABSTRACT**

Background: With the emergence of the SARS-CoV-2 pandemic, the educational context became more complex, and other challenges were added to the already-existing ones. The way of doing and thinking about education mediated by digital technologies emerged suddenly. It put our view of the world into question because the world has changed, we are no longer the same, and the need for humanitarian health and transdisciplinary education has expanded in all contexts. The new educational reality is evidenced by the social distancing and the teaching and learning processes, requiring prepared teachers and committed to the act of educating. The current pandemic exposed some needs that foster policies, projects and actions with innovative strategies, which enhance learning, so that participants are immersed in an inclusive, trans-disciplinary, dialogic, free and universal education, with a view to unraveling the complexity of social interactions. The new reality aspires to generate a transforming awareness of society, in which people recognize themselves as part of the problems, but above all as part of the solutions. In the education and health sectors, it is essential to reconstruct dynamics, processes, participatory methodologies, and forms of democratic management, which are reaffirmed in the daily practice of educators and health professionals. Objective: Systematize the concepts of the Articulating Methodology (AM) with the Permanent Health Education principles in a perspective that promotes transdisciplinarity, multiple identities, knowledge exchanges and singularities that configure the subjects involved in the education and learning act. Method: This is a descriptive-exploratory study carried out in three stages: description of the authors' personal and professional experiences; conducting of bibliographic research;

conducting of an integrative review for a broad discussion on the contextualization of active methodologies in the education and health sectors. Results: We identified important elements in the bibliographic and integrative review that can be added to the Articulating Methodology. In addition, we note that information technology can facilitate trans-disciplinary, as well as a fast, effective and inclusive communication, as long as some dimensions brought by the Articulating Methodology (e.g. lovingness, humanization, intersectoriality, for example, articulation of education and health sectors), interculturality and internationalization of knowledge. Conclusion: We emphasize that it is essential to reaffirm the importance of the role of the educator in the construction of knowledge, whether in the education and health sectors, however, it is necessary to develop a “sensitive reason” for a more humanized practice filled with meanings, emotions and motivation. The applicability of AM, as a device that enhances Permanent Health Education, reinforces dialogue, exchanges of experiences, trans-disciplinary, intersectoral and intercultural actions. In addition, Articulating Methodology, through Proactive Agendas, encourages social participation, the use of information technologies and the creation of bridges between policy maker, managers, inter-disciplinary professionals and social environment, allowing the tone of the narratives and propositions to emerge from the experiences, voices and intercommunication of the participants, thus, enabling a direct impact on the practice of educators and health professionals.

**Keywords:** Active Methodology, Permanent Health Education, Education, Health, Informatics, Trans-Disciplinary.

## **1. Introduction**

Education on the world context, before the pandemic caused by SARS-CoV-2, presented challenges that had not been overcome for decades (e.g. gaps in the organizational structure and permanent education processes of the teachers and health professionals). The pandemic has only increased these gaps, but also exposing the challenges that require public policies and methodological approaches with innovative strategies forward to learning and formation enhancing, putting the subjects in an inclusive, dialogic, inter/transdisciplinary, emancipatory, accessible education. In a broader view of pedagogical practice, these policies and methodological approaches must

collaborate with individual, collective, political, social, economic and cultural development for a sustainable society.

With the current pandemic, we are facing a situation that requires collaboration and sharing among educators (Morgado, 2020). Morin (2020) warns of the need of a new education in the pandemic and post-pandemic world, highlighting the importance of topics such as students dealing with their fears, anxieties, and uncertainties in light of the new post-pandemic society. At the same time, this author points to the importance of a new educational order, a new gift, where education is the engine and the main device to overcome our anxieties and uncertainties.

Before, we thought there was certain progress (e.g. progress in education and student feelings of fear and anxiety) and now the future is uncertain. Therefore, to bear, to face uncertainty is not to sink into agony, to know that it is necessary, in a way, to participate with the other, in something in common, because the only answer for those who have the distress of dying is love and life in common. (Morin, 2020, *Fronteiras de Pensamento*).

According to Boff (2020), COVID-19 is the consequence of humanity's lack of knowledge transfer, in this instance the education should be reinvented, for example, Students and educators are facing uncertainties and fears in light of the pandemic. This author also warns that we must reinvent ourselves as human beings.

The best place and the best way to recreate new relationships and a new projection of what it is to be human, male and female, is education, because education focuses on people. Teachers have the extraordinary mission of redesigning another type of inhabitant of Planet Earth. (Boff, 2020, *Master Class*).

Saviani (2010) corroborates the view of Boff (2020), that “educational work is the act of producing, directly and intentionally, in each individual, the humanity produced historically and collectively” (Saviani, 2010, p.13). Furthermore, Morin reaffirms the need for educating for the understanding of human beings in their complexity.

Educating to understand mathematics or any other discipline is one thing. Educating for human understanding is another, that is precisely the spiritual mission of education, to teach understanding among people as conditions and guarantee of the intellectual and moral solidarity of humanity. (Morin, 2001, p.81).

In this perspective, it is essential that education and science, in general, leave fragmented practices behind, and move towards an upgrade (Morin, 2015), where the act of teaching and learning is bathed by connecting knowledge, practices, communication, and information in an inter- and transdisciplinary way.

Freire (1996) corroborates the authors above, when defending an education that seeks to explore reality and form critical consciences as a path to the emancipation of the oppressed. For Freire (1983, p. 9), “commitment, typical of human existence, only exists in the engagement with reality, whose waters truly committed men get wet and drenched. Only then, the commitment is true”.

We consider that the diversity of subjects and objects in search of connections makes the classroom a complex phenomenon in all aspects; even so, this environment is ideal for starting the process of changing mentalities/attitudes/ideologies shared among subjects. However, the fragmentation of knowledge in these educational spaces is implicitly and explicitly present, considering that they present itself as a mesh or a plot. It is enough to observe its traditional structure of time division into disciplines disconnected from each other and with reality, considering these subjects are taught only for content memorization.

It is noteworthy that content memorization is necessary in some fields of knowledge, such as medicine. However, it can be pleasurable when the student is faced with clinical cases experienced in the outpatient and hospital reality. Therefore, it is important to think of education as an interdisciplinary network that works forward to transdisciplinary communication, connecting the individual and collective perspective with each other and with reality, so that the educator and the student acquire a new attitude towards reality and needs, for a liberating pedagogical practice of meeting the love, beauty, hope and utopia of Paulo Freire.

It is imperative to rethink all level of education through participatory didactic-pedagogical approaches (e.g. active methodologies, learning facilitation, etc.), which should be fostered for health and education professionals. This formation should be aligned with health promotion, encompassing the dimensions of intersectoriality, interculturality, subjectivity, and internationalization of knowledge, through positive, dialogic, transdisciplinary and critical-reflective language. As didactic-pedagogical approaches, the active methodologies can contribute to enhance the learning process in the school and academic fields.

However, it is imperative to foment a continuous and intense flow of deterritorialization and dislocation (Ceccim & Merhy, 2009), since participatory didactic-pedagogical approaches must meet the principles of Permanent Health Education (PHE), such as training, management, service, and social participation. PHE is a pedagogical concept used “to express the relationship between teaching and actions and services,

articulating teaching and health care” (Andrade, Meirelles & Lanzoni, 2011, p. 374) in association with its principles of Policy of Education Permanent in Health (Brasil, 2007).

Here, we reiterate the need of participatory approaches, especially at a time of isolated knowledge, as it promotes connections, exchanges, learning, autonomy, and the creation of learning collectives for daily practice. Bringing to the educational spaces, not only academic, but also school, it is needed to foster transdisciplinarity, to tread a path for the reconnection of beings and knowledge, making knowledge relevant and contextualized, in a process of translating critical reflections (Gadotti, 2003; Morin, 2015).

In this perspective, the learning space must be considered as a promoted health environment and systematization of knowledge and affections, making the education generated in these spaces the very materialization of the meaning of life, learned from COVID-19 (Moura-Vieira, Hoefel, & Collado, 2021).

It is imperative to reduce the learning losses that have occurred in the last two years of the pandemic for eliminating inequalities resulting from life differences of each one and to maintain the opportunities for advancement for all. In this instance, integrating active methodologies become essential in educational environment, for example, didactic-pedagogical practices must constantly reinvent themselves, in a process of action-reflection-action-reflection.

Therefore, in this article, we will describe the Articulating Methodology (AM), as a training device, for the intersectoral work between education and health. Articulating Methodology is a didactic-pedagogical approach that improves the teaching and learning process, using different methodologies and participatory methods, whose will be described in the further sections of this article.

The AM enables, through a situational diagnosis, the identification/mapping of personal, work, territorial experiences/views, as well as the potential of the subjects involved, for the construction of transdisciplinary knowledge. In view of this, the main goal of this article is to systematize the concepts and theoretical assumptions of the Articulating Methodology with the principles of Permanent Health Education, in a perspective that promotes transdisciplinarity, multiple identities, exchanges of knowledge and singularities between the subjects involved in the act of teaching and learning.

## 2. Methodology

This article is characterized as a theoretical-conceptual extension of a qualitative, exploratory, and participatory investigation, which considered three systematic and complementary steps: *Step I - Description of the Authors' Experiences*; *Step II - Literature Review and Conceptualization of the Articulating Methodology (AM)*; *Step III - Integrative Review of Active Methodologies* (Details in Moura-Vieira, Alves-Hopf, Collado, & Hoefel, 2021).

*Step I:* In this step, we describe in narrative form, in the first person, the theoretical-practical experiences of the main author, taking her concerns as a starting point. This narrative is complemented in an action-reflection-action-reflection process of the main author's lived experiences with other authors to establish an inter- and transdisciplinary connection between the authors, culminating in this research work.

*Step II:* For the Literature Review, we use some publication of some authors/thinkers who served as the basis for the conceptual structuring of the Articulating Methodology. The discussed concepts for structuring AM have their theoretical foundation in the Paulo Freire Culture Circle (Freire, 1996), in the Problematization Methodology/Maguerez's Arch (Berbel, 2011), Image Analysis Methodology (Hoefel, 2016), and Method of Vera Birkenbihl (Birkenbihl, 2007a, 2007b).

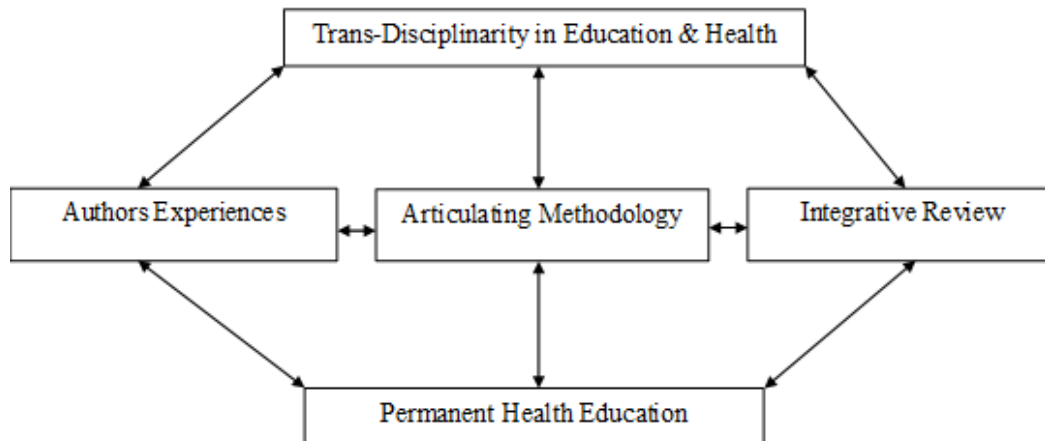
*Step III:* The Integrative Review, as a research method that summarizes the past of empirical or theoretical literature for a comprehensive understanding of the phenomenon studied (Botelho, Cunha, & Macedo, 2011), putt to the previous steps important findings for a detailed discussion about the contextualization of active methodologies used in times of pandemic. For such contextualization, the Integrative Review is carried out in stages: Identification of the theme and research question; Establishment of inclusion/exclusion criteria; Identification of pre-selected studies; Categorization of pre-selected studies; Analysis and Interpretation of studies; and Synthesis of findings (Botelho, et. al., 2011).

Through these systematic and complementary steps, it was possible to carry out a broad exploration of the theoretical concept of transdisciplinarity in the construction of knowledge and in the inter- and transdisciplinary communication between education and

health. Such conceptual exploration was enriched with the authors' personal and professional experiences, the results of the literature and integrative review, and the systematization of the theoretical concepts of the Articulating Methodology with the principles of PHE.

We also emphasize that the exploration of the concept of transdisciplinarity has not been exhausted in this article, however, we consider that transdisciplinarity needs to be thematized here, as it is primordial in scientific communications, especially when these communications involve human interactions filled with complexity and uncertainties, considering the act of teaching and learning. Figure 1 represents the conceptual interactions that will be discussed below.

The relationship between Trans-Disciplinarity and Permanent Health Education was presented indirectly, because as at first, PHE was intended to join only two areas of knowledge (health and education). Furthermore, we understand that this relationship goes beyond the proposal previous; in this instance, we try to schematize this relationship with our methodological approach to establish a bridge between these concepts with the intention of strengthening this relationship.



**Figure 1:** Conceptual Relationship between Trans-Disciplinary Communication, Articulating Methodology and Permanent Health Education in the Construction of Knowledge.

### 3. Results and Discussion

#### 3.1 Main Author's Experiences: A Narrative Filled with Encounters

In chronological sequence, a first-person narrative about the experiences and views of the main author of this paper is presented to share her historical pathway full of

emotions and motivation, which culminated in the creation of the Articulating Methodology as a transdisciplinary communication strategy in the process of teaching and learning.

Since I started working as a teacher about 20 years ago, I have never felt fully prepared to deal with the totality of social, cultural, and political contexts that the act of educating is permeated with. At the same time, I was also working with the development and implementation of public policies within the scope of the Ministry of Health in Brazil, which gave me the basis for an intersectoral, intercultural and interdisciplinary vision. On the one hand, I started to observe and reflect on teachers' complaints regarding the students' learning difficulties, and, of these, in relation to the educational methods adopted in the educational environment. On the other hand, I observed the complaints of health professionals about the disagreements and consensus on health policies, projects and actions aimed at humanized practices and equity.

With my accumulated experience, I perceived situations and consequences provoked from the conflicts and controversies arising from different political, social, and cultural interests, in the scope of the health and education sectors and in the workplace relationships.

In this movement, it is possible that the conflicts, uncertainties, and concerns of this audience were like mine. Thus, in the educational sector, I started to experiment with different pedagogical methods and approaches (e.g. Freirean Culture Circle, Problematization Methodology, etc.) according to the stage and modality of teaching and the search for new understandings of the world to improve my pedagogical practice and to contribute with a more pleasurable and humanized work. In the health sector, I started to bring my pedagogical, dialogical, emancipatory and transdisciplinary understanding, acquired in my educational experience, into health policy discussions, in a perspective of significant contribution to these policies and to a more democratic and equitable society project.

It was with these concerns, with this look, desires, affectations, and possibilities of inventing new ways of acting, that I decided to participate in training and tutoring, in 2014, in the Permanent Health Education (PHE) in Motion course. From this experience, I came to believe that, via PHE, it was possible to co-manage construction and reinvent work, and to visualize PHE also focused on the training processes of teachers. Furthermore, I started to drink from the fountain of Emerson Merhy and Ricardo Ceccim (i.e. they are the creators of Permanent Education in Health in Brazil). Thus, I found



myself involved with PHE from the big toe to the last strand of hair, in a kind of body-theory-action, which I let myself take to the backlands of Brazilian author Guimarães Rosa. This author has captured the tone of my affections.

[...] the Sertão is the size of the world. Sertão: it's inside us. Living - isn't it? It's very dangerous. Because we still don't know. Because learning to live is what living really is. produces me, then swallowed me, then spat me out of the hot mouth. (Rosa, 2019, p. 19)

I reaffirm that the path in the Sertão is not over. It opened so many paths and crossroads, and people are never finished. The Sertão is the size of people, the formation of human beings is the size of life. From this perspective, the importance of teachers going through educational/training processes on a permanent basis is noticeable, either through formal education proposals, in daily work relationships, or through their insertion in the sociocultural world through inclusive and pleasurable methodologies.

In 2018, I started my doctorate in a co-tutorship regime, when I met Collado who contributed to my internationalization of knowledge, as he brought me a perspective of another culture and another area of knowledge. In addition, in the same year, I met the Image Analysis Methodology (Hoefel, 2016), when I used it in a training process with teachers, with the theme of violence, at the invitation of Hoefel. It is noteworthy that I had been participating in research groups, since 2013, on indigenous, worker and immigrant health, coordinated by Hoefel. My experience in these research groups allowed me to approach other themes, and with the intercultural vision, and different realities and needs, always fostered by a view of a more holistic and humanizing collective health and full of meanings, from Hoefel.

I took advantage of this work to start my doctoral field research. And as my "flying amphibian" was in full swing, I began to cross-examine other methodologies and methods during the workshops, in dialogue with Alves-Hopf, based on the emergence of new variables, needs, potentials and affectations mapped during these workshops. The look of Alves-Hopf, who worked in the field of research "working memory, neurostimulation and neuroimaging" in this period, was of fundamental importance for the encounter with dimensions that consider the relationships of complexity in the teaching-learning process.

Thus, we build the Articulating Methodology, which emerged from the dimensions of health/education and personal and professional experiences' authors. It was in this context of reflexive experimentation, that we developed the Articulating Methodology, which tries to fill in the gaps found during my teaching career, full of concerns and curiosities. These methods complement each other in transversal

dimensions and are not limited to conventional educational guidelines, which will be detailed in the following.

### **3.2. Articulating Methodology: Contextualization for Transdisciplinary Communication**

The Articulating Methodology (AM) was created in 2018 based on the needs found in the didactic-pedagogical pathway of the authors. From a perspective of exchanging knowledge and experiences between education and health, the Articulating Methodology is structured by the joining of methods and methodologies based on scientific evidence.

The main theoretical and methodological assumptions of AM encompass dimensions that consider the complex relationships between human and the environment in which he is inserted. To understand this complexity, it is primordial to understand some neurocognitive, emotional/affective, political, economic, social, and environmental contexts. For this and other reasons, the AM highlights the realities of individuals in terms of their origins and reason for being, through participatory dialogue, exchange of experiences, knowledge, and affections, providing a personal and professional mapping of the individual, which allows the construction of knowledge in connection with the local reality. Some principles were incorporated into the AM to facilitate the development of actions and strengthen the interrelationships between those involved. These principles are:

- i) Lovingness* - This principle deals to expand the understanding of human beings and their emotions. This principle enables an educational action that provides emotional exchanges and awareness of those involved during the education process, allowing the building of an affection relationship based on respect, ethics and morals;
- ii) Interculturality* - This principle deals to value diversity, cultural identity and intercultural knowledge, respecting the ways of thinking and acting of subjects in a dialogic, respectful and democratic process. Furthermore, interculturality “also presupposes openness to ethnic, cultural and linguistic differences, positive acceptance of diversity, mutual respect, the building of new modes of social relationship and greater democracy” (Lopez-Hurtado, 2007, p. 21- 22).
- iii) Humanization* - This is a principle of comprehensive health care. With it, it is possible to organize workspaces for a healthy and welcoming practice, making

clear the importance of the inseparable bond that unites care and management in education and health;

- iv) *Internationalization of Knowledge* - This principle deals to create an interconnection between scientific and popular knowledge among different areas, without, however, establishing real and abstract national boundaries between the forms of knowledge, whether academic or popular. It is noteworthy that the concept of internationalization of knowledge encompasses the development and growth of integrated educational systems and university relations beyond the nation (Marginson & Rhoades, 2002).
- v) *Intersectoriality* - This principle adds a broad understanding of the planning, management and structuring of actions, which must be thought of in an articulated, transversal manner and focused on local needs.

Embedded with these principles mentioned above, the AM is structured with theoretical and methodological assumptions from some authors and thinkers, which reinforce human interactions with the collective and with the environment. Such theoretical assumptions are described below.

***Paulo Freire Culture Circle*** (Freire, 1996) - The Paulo Freire Culture Circle is a dialogic strategy that generates a critical movement of people, knowledge and reflection for socio-educational transformation. The activities are organized in such a way that the moderator is organized with the participants in the shape of a large circle, which allows for dialogue and the exchange of knowledge. This dialogic strategy considers important principles of Paulo Freire's pedagogy, such as, for example, there is no transmission of vertical knowledge, passed from moderator to participant, but the moderator and participants are considered distinct individuals, who build their opinions in a way transversal, thus enabling a transdisciplinary communication to “beyond oneself and beyond the other”;

***Problematization Methodology*** (Berbel, 2011) - Through Problematization Methodology and Arch Magueres's, the aim is to develop skills and systematize the participants' experiences for a transdisciplinary construction of knowledge, from the perspective of human rationalities, in an action-reflection-action movement. The Problematization Methodology follows a sequence in the form of a circle, which begins with *theorizing the theme*, going through the *survey of hypotheses, propositions of*

*solutions, application in reality, observation of reality, survey of key points, and starts again in a new theorization* (Berbel, 2011);

**Image Analysis** (Hoefel, 2016) - Image Analysis allows the interpretation and synthesis of theoretical constructs using images. Using of images, photographs and maps, it is possible to map/identify the potentials, needs and vulnerabilities present in human interrelationships. Images, photographs and maps allow the rescue of memories and facts that help us to understand a given phenomenon from a subjective and collective point of view, thus enabling the building of objective theories that are plausible to the local reality and the individual's experiences;

**Vera F. Birkenbihl Method** (Birkenbihl, 2007a, 2007b) - With the Vera Birkenbihl method, the aim is to develop the processes of learning and incorporation of knowledge through strategies that facilitate learning. These strategies consider aspects of psychology, neuroscience and neurocognition. During the execution of activities in this method, situations are created, via visualization and association techniques, which seek to recover the participant's memory, both conscious and subconscious memories. These memories help us to understand the subject from the point of view of their emotions, motivation and uniqueness.

With the advances in Information Technology, we emphasize that AM can be applied, both in face-to-face and virtual format. As for the application time of AM activities, it varies, as this will depend on the topic to be approached/investigated/explored and may last for days or weeks. As organizational structure, the Articulating Methodology is applied in systematic, transversal, and complementary moments. These moments are described below.

*Moment 01 - Situational Diagnosis:* At this moment, we carried out a mapping of the personal, affective, and professional experiences experienced by the subjects. Through this moment, it is possible to identify emotional, motivational aspects, as well as needs, potentials and vulnerabilities incorporated in individual, collective and environmental relationships;

*Moment 02 - Pleasurable Learning Processes:* At this moment, we used association and visualization techniques that promote a dynamic and interactive dialogue between those involved, considering the discussion and reflection on the construction of inter- and transdisciplinary knowledge, based on dialogue and critical reflection;

*Moment 03 - Promotion of Self-Care:* At this moment, we seek to promote collective, artistic, and cultural interaction, for an exchange of knowledge and knowledge based on the stories of the participants. With playful activities and the use of Complementary Integrative Practices in Health, it is possible to promote health and encourage the practice of healthy habits;

*Moment 04 - Construction of a Proactive Agenda:* At this moment, we encourage participants to reflect on themselves, on the other, and on interpersonal and collective relationships, so that the action project is continuous and does not end with the end of the activities experienced during the application of the Articulating Methodology. This continuity must be the engine that drives people, in a harmonious movement between theory and practice for an intersectoral planning of actions, daily work agreements, and social transformation. In addition, Proactive Agendas enable the reinvention and organization of didactic-pedagogical practices that must be continuous in an Action Project in Service.

From this perspective, we reaffirm that AM has an enormous potential in the development of learning strategies and actions, as it enables strategies and actions to be aimed at social transformation. The strategies of AM and actions go beyond a single sector, a single discipline, and a single vision, it seeks a direction that branches out into different knowledge and experiences. It is worth stating that the study of human relationships is in fact very complex, especially when we observe emotional and motivational aspects in the act of teaching and learning. These aspects no longer find sufficient explanation in isolated disciplines and knowledge, but in the junction of knowledge, which transdisciplinarity can bring, in its essence. Thus, the Articulating Methodology seeks to strengthen this essence, considering human and the environment, in which he is inserted, as inseparable elements.

### **3.3 Integrative Review: Active Methodologies in the Act of Teaching and Learning**

The search scheme of the Integrative Review is presented in Figures 2. From a total of 66 articles found, 13 were selected to compose our analysis, interpretation, and synthesis.

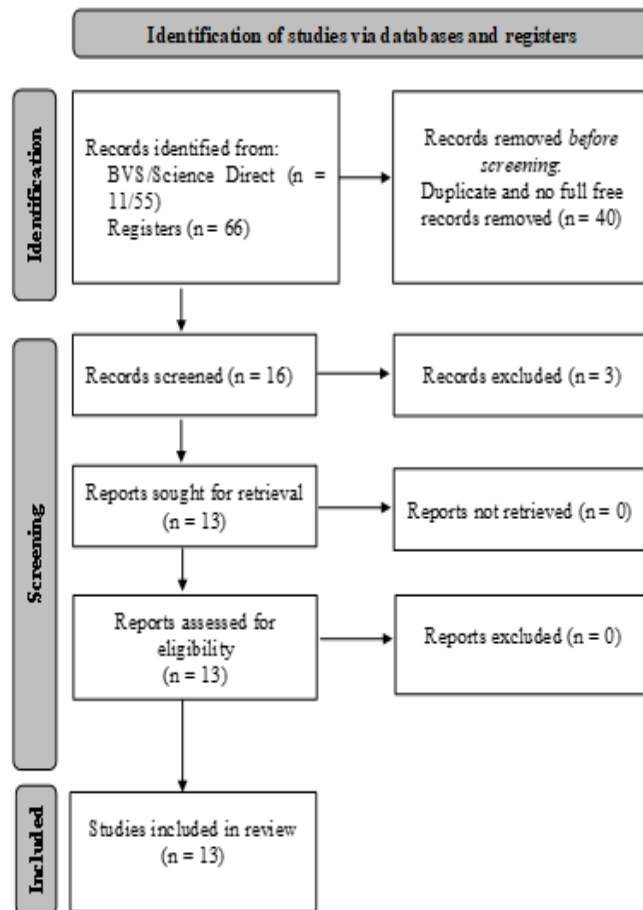


Figure 2: Representation of the selection process of the Articulating Methodology paper using Prisma 2020 Flow Diagram (Page et. al., 2020). Inclusion Criteria<sup>2</sup>

In some studies, it was possible to observe technological innovations and different methodologies, such as, for example, Participative Virtual Teaching with Information and Communication Technologies (Arruda & Siqueira, 2021), Animated Infographic on Permanent Health Education (Dorneles et. al., 2020), Cooperative Learning (Ripoll, et. al., 2021), Virtual Group Discussion (Kuar et. al., 2021), YouTube Videos Learning (Luu, et. al., 2021), Using action-study plan (PDSA) Cycles (Mojdehbakhsh, et al. al., 2021), Gamification and Active Learning (Murillo-Zamorano, et. al. 2021), Information and Knowledge Learning (Sánchez, et. al. 2020), and Active Usage of Resilience Assets (Ivanov, 2021)

<sup>2</sup> [1] For the integrative review, two independent authors (SAH & MEMV) searched on databases: Virtual Health Library (VHL), and ScienceDirect, using the keywords: active methodology AND permanent health education AND COVID-19/SARS-CoV-2 in Portuguese/English languages. The articles included for analysis were selected based on the reading of the abstracts; only full texts in English/Portuguese published between January 2020 - February 2021 were analyzed. Articles of bibliographic and systematic reviews, as well those that did not meet the inclusion criteria, were not admitted for analysis.

The studies showed that the approaches used showed important results that strongly consolidate the use of active methodologies to motivate the participation of the target audience (Kuar et. al., 2021); facilitate collaborative learning processes (Dorneles et. al., 2020; Ripoll, et. al., 2021); identify studies through databases and records of interaction and listening (Fernandes, et. al., 2020); promote participant satisfaction (Mojdehbakhsh, et. al., 2021); and encourage the use of virtual tools (Luu, et. al., 2021; Segovia & Gutiérrez, 2021; Mojdehbakhsh, et. al., 2021; Sánchez, et. al., 2020).

With the findings of this Integrative Review, we identified important elements (e.g. active participation, organization and interaction techniques, gamification, etc.) that can be added to the Articulating Methodology. These elements can be applied with the use of virtual devices and a planning of schematic activities, using different information technology devices and tools found in this research.

We emphasize that the integration of these virtual tools can strengthen the operational structure of the Articulating Methodology, since AM can also be applied in a virtual format. However, it is necessary to develop technological skills in education and health professionals, as observed in a survey, where teachers were interviewed, carried out by Moura-Vieira, Hoefel and Collado (2021). The results of this research showed that the abrupt incorporation of digital technologies, during the pandemic period of 2020-2021, caused great suffering to teachers, due to their lack of digital literacy and minimal working conditions.

We must not forget that in the preparation of these professionals, emotional, affective and motivational aspects must be considered, so that these professionals become multipliers of dialogical, healthy teaching-pedagogical practices, committed to interpersonal, collective, and above all, changes for a sustainable society. A summary of the analyzed articles, you can see in the Table 1.

**Table 1:** Available Papers to Integrative Review Analysis

AUTOR/YEAR/ JOURNAL	OBJECTIVE	METHODOLOGY	RESULTS
Arruda & Siqueira 2021. <i>Práticas Educativas, Memórias Oralidades - Revista Pemo</i>	Present an educational sustainable practice adopted in times of COVID-19 by students and teachers (Accounting Science).	Participatory Virtual Teaching with Information and Communication Technologies (ICT).	Importance of teachers training and autonomy of students.

Bezerra et. al. 2020. <a href="#">Revista Plural</a> <a href="#">Ciência</a>	Report the experience of students of health courses in the development of a case and its application in the form of a Problem-Based Learning	Problem-Based Learning	The development of a case using the methodologies that integrate Problem-Based Learning provided those involved with the experimentation of a creative process, rich, centered on knowledge.
Dorneles et. al. 2020. <a href="#">Revista Latino-Americana de Enfermagem</a>	Develop an animated infographic on the concept of Permanent Health Education, according to the National Policy, and its main differences compared to both continuing education and health education.	Animated Infographic on Permanent Health Education	The animated infographic represents the daily work scenario and encourages reflection by the health care workers.
Fernandes et. al. 2020. <a href="#">BMC Medical Education</a>	Plan, develop, implement, and evaluate a management specialization course in oncology using blended learning.	Combined Learning Methodology	The educational intervention proved satisfactory as evaluated using the first three levels of Kirkpatrick's evaluation model, confirming that blended learning can be used as a teaching approach in continued education at postgraduate level, with excellent levels of client satisfaction.
Ivanov 2021. <a href="#">International Journal of Logistics Management</a>	Present a chart that consolidates different angles of efficient resilience and turns to the use of resilience capacities for the creation of Value.	(AURA) Active Usage of Resilience Assets Framework	The outcomes of our study can be used by supply chain and operations managers to improve efficiency and effectiveness by turning resilience from passive, cost-driving assets into a value creating, inclusive decision-making paradigm.
Kaur et. al. 2021. <a href="#">Advances in Physiology Education</a>	Innovate the way of conducting the discussion in virtual group (sVGD) and evaluate the perception of graduate students about its effectiveness compared to conventional VGD and virtual GD.	Virtual Group Discussion (sVGD)	Pre-GD feedback revealed that the live session was preferred over virtual for the conduct of GD, whereas both live GD and sVGD were perceived to be more effective than VGD in the post-GD feedback.
Luu et. al. 2021. <a href="#">Journal of Surgical Education</a>	Analyze the quality of videos on YouTube as an educational tool in learning how to perform a neck dissection, one of the key indicator cases for trainees in otolaryngology	Videos YouTube Learning	Free-to-access video repositories, such as YouTube, have become increasingly popular. They lack consistent quality and as such, global efforts should be taken to improve the breadth and depth of educational video content in otolaryngology.
Mojdenbakhsh et. al. 2021. <a href="#">Gynecol Oncol Rep.</a>	Convert at least 50% of all outpatients' clinical meetings to telemedicine within one week of the initial intervention. Obtain feedback from patients about this new type of encounter and determine the potential interpersonal impact on patient care.	Using action-study plan (PDSA) cycles, the initial intervention was agreed at a meeting of physicians GynOnc.	A GynOnc clinic can rapidly implement telemedicine systems. With multidisciplinary team planning and standardized note templates, transitioning 50% of encounters to telemedicine and achieving high rates of consent documentation were accomplished in four weeks. This increase in telemedicine represented a measurable decrease in the amount of CO2 emissions.
Murillo-Zamorano et. al. 2021. <a href="#">International Journal of Educational Technology in Higher Education</a>	Present a successful classroom proposal in higher education to better understand its influence in terms of knowledge, skills, and engagement	Gamification and Active Learning (experimental group) and a Non-gamified Active Learning Teaching Condition (control group)	The generation of a co-creative and empowered gameful experience that supports students' overall value creation yields to satisfactory active learning setups without any loss of academic achievement and allowing to develop a series of skills especially relevant for twenty-first century professionals.



Ripoll et. al. 2021. <a href="#">Education for Chemical Engineers</a>	Share the experience of adapting the Biochemical Engineering course, part of the Biotechnology program of the Francisco de Vitoria University (Madrid, Spain), to remote learning.	Cooperative Learning	Learning outcomes: Abstracting to extract relevant information from a practical case using the proper mathematical methods; Being able to obtain information from a practical case for the application of the principles of Biochemical Engineering; Discussion among classmates about the results and repercussions of a practical case. Finding a correct solution to a practical case.
Sales et. al. 2021. <a href="#">Research, Society and Development</a>	Through the "Caixa Mental " promote the activities of teaching and university extension in the period of the pandemic incited by COVID-19	Information and Knowledge Technologies (TICs) and Active Methodologies at the Caixa Mental Project	"Caixa Mental" project brings to light the discovery of pedagogical innovations and production of material technology in the current panorama of COVID-19, using ICTs in line with active methodologies.
Sanchez et. al. 2021. <a href="#">The Journal of Marine Education</a>	Introduce a postgraduate course in Deep-Sea Exploration as a basis for active and virtual learning	Deep-Sea Exploration with a Basis for Active and Virtual Learning	The course methodology exposes students to the deep-sea community through challenges such as grant proposal writing (Researcher), business idea innovation tanks (Entrepreneur), and novel discovery annotations on deep-sea exploration cruises streamed live via telepresence (Explorer).
Segovia & Gutiérrez 2020. <a href="#">Journal of Physical Education and Sport</a>	Evaluate the effects on the body composition of schoolchildren in a game based on high intensity interval training program (GB-HIIT) taught during physical education.	The Sport Education Model: High Intensity Interval Training (GB-HIIT) Program	In conclusion, GB-HIIT appears to be effective in countering effects on schoolchildren's body composition.

### 3.4 Articulating Methodology in Connection with Permanente Health Education

If there's one thing this pandemic is teaching us, it's that we should take a closer look at the education and health sector. A plural and integral look with multiple dimensions, to transform the educational space into a space for dialogue and health promotion.

From the perspective of plural and integral education, it is necessary to place the educator's work at the center of debates and theoretical, ethical, aesthetic, political and methodological reflections. For this, it is imperative that the processes of teacher education encompass the context of human development and the integrality of the subject, from the perspective of Freire's pedagogy emancipatory, transdisciplinary, and loving education.

Human development is a process of expanding ranges (personal, social, economic, political) and is closely related to work. The positive relationship between human development and work is reciprocal. Health, Education and Human Development are

interlinked, as there is no development process without proper attention to health and knowledge.

Likewise, the development of workers is connected to their own work. Work and workers constitute an inseparable dyad (Ceccim & Merhy, 2015). In the education and health sectors, the processes require broad communication, harmony and correspondence with social needs, integrality, inclusion, internationalization of knowledge and with the pedagogical political projects.

In addition, in the context of education professionals, given the sociocultural vulnerability of their target audience, and aggravated by COVID-19, it appears that the organizational structure of educational spaces derived from current educational policies and their modes of operation do not offer sufficient possibilities for the reconstruction of dynamics, processes, participatory methodologies and forms of democratic management that are reaffirmed in practice.

In this context, the concept of PHE is defined as learning at work, in which learning and teaching are incorporated into the routines of organizations and into the work process. It proposes that the educational processes of health workers be carried out from the problematization of their own practice.

We understand that the PHE aims to discuss work and based on this work and seeks to transform the institutional space into a space for questioning, reflection, dialogue and construction of consensus, exchanges and co-production. It is based on the conception of critical education, meaningful learning and the appreciation of work as a source of knowledge.

It is important to point out that PHE is understood as more than a pedagogical or methodological concept according to Ceccim and Feuerwerker (2004). The PHE proposes a political process of dislocation and questioning that seeks to transform reality at work. In this sense, PHE was an educational model aimed at health professionals, moreover, we understand that PHE should also be incorporated into the training processes of education professionals.

PHE makes us glimpse a new scenario for education, as a response to the current needs imposed by the pandemic. For example, this could include the need to equip teachers to develop a "sensitive reason" (Maffesoli, 1987), guided by the inseparability of training, management, care, and participation, in dialogue with new needs.

In this instance, the Articulating Methodology offers this possibility if we consider its methodological and didactic-pedagogical aspects with the creation of Proactive

Agendas that reinforce participation, intersectoral work and educational and social transformation. AM establishes a friendly, complementary and transversal relationship with the PHE principles. We highlight that AM incorporates emotional, affective, transdisciplinary and motivational aspects into its practices, which meet interpersonal and collective changes.

#### **4. Conclusion**

With the current pandemic, education is no longer the same; it has become more complex, various challenges have been added to the already-existing ones (lack of infrastructure, lack of digital literacy for health and education professionals, lack of permanent health education processes), aggravating the working conditions of the educators.

The formation and affective aspects of educators become a concern, due to social distancing caused by social isolation, which has hindered the docent practice and establishing bonds and students' learning.

The current educational scenario presents fears and uncertainties, which requires policies, methodological approaches, projects and action for the training of education and health professionals, which are transversal by the PHE principles and AM concepts, from the perspective of transdisciplinary communication.

Furthermore, it is important, in educational and health spaces, to foster transdisciplinarity, participatory, intercultural, and dialogic approaches to follow a path for the reconnection of beings and knowledge.

In this sense, the Articulating Methodology can improve the in-service action and emotional skills of education and health professionals, where the professionals become multipliers of dialogical didactic-pedagogical practices, committed to the local reality and sustainable practices.

In this context, with the integrative review, we do not exhaust the findings about active methodologies; on the contrary, new experimental research is needed. However, we correlated of the findings of integrative review with the potentials of Articulating Methodology.

It should be noted that we observed the existence of several active methodologies that works in the perspective, moving from the vertical to the horizontal model in education, where actors build knowledge in an active and participatory way. On the other

hand, we noted that the methodologies used need to include in their activities important aspects that AM defends, such as lovingness, interculturality, humanization, transdisciplinarity, internationalization of knowledge and intersectionality to understand the multiple dimensions of human existence.

It is imperative to train educators for the act of teaching and learning for the development of a "sensitive reason" (Maffesoli, 1987). Moreover, it is also important that the governments and policy makers offer logistic, administrative and didactic-pedagogic support for these educators to move forward to a more effective, quality education and humanized practice.

Finally, we concluded that Permanent Health Education stands out in this process, for promoting dialogue, where the tone of the narratives and propositions emerge from the experiences, voices and intercommunication of the participants.

## **5. Acknowledgement**

The authors acknowledge the non-anonym peer reviewers Prof. Dr. Denise Osório Severo of the Department of Public Health at the University of Brasília, Brazil and Prof. Dr. Ieda Vargas Dias at the University of Brasília, Brazil for their proofreading of this initial published paper.

We would also like to thank the Beta-readers: Dr. Jana M. Thomas Coffman from Missouri Southern State University in the Modern Languages Department, USA; Nayanny de Sousa Fernandes, PhD., Engineer at the University of Ceara, Brazil; Grit Hutter, PhD., Medical Writer in the field of Oncology at the Gesellschaft fuer Medizinische Information GmbH, Munich, Germany; and Mauro Leonardo de Brito Albuquerque Cunha, MSc., Bachelor of Laws and Technology Information at the University of Montréal, Canada, for their collaboration toward transdisciplinary communication and improvement of the final version manuscript.

## **6. References**

Andrade, S.R., Meirelles, B.H.S., & Lanzoni, G.M.M. (2011). Educação Permanente em Saúde: atribuições e deliberações à luz da Política Nacional e do Pacto de Gestão. *O mundo da saúde*, 35(4), 373-381.

- Arruda, J.S. & Siqueira, L.M.R de C. (2020). Metodologias Ativas, Ensino Híbrido e os Artefatos Digitais: sala de aula em tempos de pandemia. *Práticas Educativas, Memórias e Oralidades - Revista Pemo*, 3(1), e314292.
- Berbel, N.A.N. (2011). As metodologias ativas e a promoção da autonomia de estudantes. *Semina Ciência Sociais e Humanas*, 32(1), 25-40.
- Bezerra, I.N.M., et. al. (2020). A utilização da aprendizagem baseada em problema (abp) na formação em saúde: um relato de experiência. *Revista Ciência Plural*, 6(1), 102-118.
- Birkenbihl, V.F. (2007a). *Birkenbihl Denkwerkzeuge*. Mvg, München.
- Birkenbihl, V.F. (2007b). *Stroh im Kopf? Vom GehirnBesitzer zum Gehirn-Benutzer*. Mvg, München.
- Boff, L. (2020). *Conferencia: Pensando en nuestra Abya Yala en tiempos de pandemia*. [Vídeo]. YouTube. Access in <https://www.youtube.com/watch?v=kQ5g9kNCnAc>.
- Botelho, L.L.R, Cunha, C.C.A., & Macedo, M. (2011). O Método da Revisão Integrativa nos Estudos Organizacionais. *Gestão e Sociedade*, 5(11), 121.
- Brasil. (2007). Portaria No. 1.996, de 20 de agosto de 2007. Dispõe sobre as diretrizes para a implementação da Política Nacional de Educação Permanente em Saúde e dá outras providências. Diário Oficial da União. Brasília, n. 162, 22 ago. Seção 1.
- Ceccim, R.B., & Feuerwerker, L.C.M. (2004). O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social. *Physis*, 14(1), 41-65.
- Ceccim, R.B., & Merhy, E.E. (2009). Um agir micropolítico e pedagógico intenso: a humanização entre laços e perspectivas. *Interface - Comunicação, Saúde & Educação*, 13 (1), 531-42.
- Dornelles, L.L., et. al. (2020). Development of an animated infographic on Permanent Health Education. *Revista Latino-Americana de Enfermagem*, 28, e3311.
- Fernandes, R.A.M.L., et. al. (2020). Development, implementation, and evaluation of a management specialization course in oncology using blended learning. *BMC Medical Education*, 20(37).

Ferrarotti, F. (1988). *Sobre a autonomia do método biográfico*, In: Novóia, António; Finger, Matthias (Orgs.) O método (auto)biográfico e a formação, Lisboa: Ministério da Saúde. Departamento de Recursos Humanos da Saúde/Centro de Formação e Aperfeiçoamento Profissional, 17-34.

Freire, P. (1983). *Educação e Mudança*. Tradução: Moacir Gadotti. Paz e Terra, Rio de Janeiro.

Freire, P. (1996). *Pedagogia da autonomia: saberes necessários à prática educativa*. Paz e Terra, São Paulo.

Gadotti, M. (2003). *Boniteza de um sonho: ensinar e aprender com sentido*. Feevale, Porto Alegre.

Hoefel, M.G.L. (2016). *Projeto Vidas Paralelas: relações entre a imagem, a estética e a política*. Relatório de Pesquisa de Pós-Doutorado, Universidade de Brasília.

Ivanov, D. (2021). "Lean resilience: AURA (Active Usage of Resilience Assets) framework for post-COVID-19 supply chain management". *The International Journal of Logistics Management*, ahead-of-print, No. ahead-of-print.

Kuar, S. et. al. (2021). Adaptive strategies to conduct participant-centric structured virtual group discussions for postgraduate students in the wake of the COVID19 pandemic. *Advances in Physiology Education*, 45, 37–43.

Lopez-Hurtado, L.E. (2007). *Trece claves para entender la interculturalidad en la educación latinoamericana*. In: PRATS, E. (Coord.). Multiculturalismo y educación para la equidad. Octaedro-OEI, Barcelona, 13-44.

Luu, N.N., et. al. (2021). Assessment of YouTube as an Educational Tool in Teaching Key Indicator Cases in Otolaryngology During the COVID-19 Pandemic and Beyond: Neck Dissection. *Journal of Surgical Education*, 78, Issue 1, 214-231.

Maffesoli, M.O. (1987). *Tempo das Tribos: o declínio do individualismo nas sociedades de massa*. Forense Universitária, Rio de Janeiro.

Marginson, S., & Rhoades, G. (2002). Beyond national states, markets, and systems of higher education: A glonacal agency heuristic. *Higher Education*. Kluwer Academic Publishers. Printed in the Netherlands, 43.

Matos, T. (2001). "Síntese". Brasil Escola. Access in <https://brasilecola.uol.com.br/redacao/sintese.htm>.

Merhy, E.E. (2015). Educação Permanente em Movimento - uma política de reconhecimento e cooperação, ativando os encontros do cotidiano no mundo do trabalho em saúde, questões para os gestores, trabalhadores e quem mais quiser se ver nisso. *Saúde em Redes*, 07-14.

Morgado, J.C. (2020). Transformações educativas em tempos de pandemia: do confinamento social ao isolamento curricular. *Práxis Educativa*, 15, 1-10.

Mojdehbakhsh, R.P., et. al. (2021). A quality improvement pathway to rapidly increase telemedicine services in a gynecologic oncology clinic during the COVID-19 pandemic with patient satisfaction scores and environmental impact. *Gynecologic Oncology Reports*, 36, 100708.

Morin, E. (2001). *Os sete saberes necessários à educação do futuro*. 2. ed., Cortez, São Paulo.

Morin, E. (2015). *Introdução ao pensamento complexo*. 5. ed., Sulina, Porto Alegre.

Morin, E. (2020). *Lições da pandemia: o despertar para as grandes verdades humanas*. Fronteiras do Pensamento. Access in <https://www.fronteiras.com/artigos/licoes-da-pandemiao-despertar-para-as-grandes-verdades-humanas>.

Moura-Vieira, M.E., Alves-Hopf, S., Collado, J.T.R., & Hoefel, M.G.L. (2021). Articulating Methodology: A Potentiator Device on Permanente Health Education. *Journal of Systemics, Cybernetics and Informatics*, 19(5), 15-23.

Moura-Vieira, M.E., Hoefel, M.G.L., & Collado, J.T.R. (2021). El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 24 (2), 181-191.

Murillo-Zamorano, L.R., et. al. (2021). Gamification and active learning in higher education: is it possible to match digital society, academia, and students' interests? *International Journal of Educational Technology in Higher Education*, 18(15).

Page, M.J., McKenzie, J.E, Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., et al. (2020). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372(71).

Ripoll, V., et. al. (2021). WITHDRAWN: Teaching Chemical Engineering to Biotechnology students in the time of COVID-19: Assessment of the adaptation to digitalization. *Education for Chemical Engineers*, 34, 94-105.

Rosa, J.G. (2019). *Grande Sertão Veredas e o Diabo na Rua no Meio do Redemoinho*. Companhia das Letras, Rio de Janeiro.

Sales, P.C.S.L., et. al. (2021). Inovações pedagógicas no panorama da COVID-19: um relato do projeto “Caixa Mental”. *Research, Society and Development*, 10(2), e51510212799.

Sánchez, J.A, et. al. (2020). Role-Playing to Foster ‘Deep-Sea Exploration’ Through Active and Virtual Learning: A Class-Design for Colombian Higher Education. *Current, The Journal of Marine Education*, 34(3), 9–17.

Saviani, D. (2010). *Interlocuções pedagógicas: conversa com Paulo Freire e Adriano Nogueira e 30 entrevistas sobre educação*. Autores Associados, Campinas.

Segovia, Y. & Gutiérrez, D. (2020). Effect of a game-based high intensity interval training program on body composition in primary education: comparison of the Sport Education model and traditional methodology. *Journal of Physical Education and Sport® (JPES)*, 20(2), Art. 113, 791- 799.



#### **4.8. Artículo 8: “*Century Encounters: Freire & Morin in Dialogue with Permanent Health Education*”**

*Autores: Maria Edna Moura Vieira, Simone Alves-Hopf, José Thomas Réal Collado, Maria da Graça Luderitz Hoefel. Aceptado para su publicación en diciembre de 2021, em el Journal on Systemics, Cybernetics and Informatics (JSCI), según Apêndice H).*

#### **ABSTRACT**

*Background:* The year 2021 was a singular year, full of challenges for humanity and filled with dualities. If, on the one hand, it was a year to celebrate the centenaries of Paulo Freire, educator, thinker and pedagogue of affections, who left an incalculable legacy for humanity, and of Edgar Morin, anthropologist, sociologist and philosopher, considered a planetary humanist and the architect of human complexity. On the other hand, the pandemic, caused by SARS-CoV-2, has called into question our view of the world, as the world has changed, we are no longer the same, and the need for health and education humanitarian and transdisciplinary has expanded in all contexts. *The objective* of this work is to build bridges of dialogues and connections, where the humanization of practices constitutes a fundamental condition for co-responsible education and health, reverberating in social relations that produce human sociability, and guided by the principles and dimensions of Permanent Health Education (PHE), promoting the knowledge, self-esteem, motivation and health promotion of teachers, students and health professionals, in prol of building an awareness-raising, liberating education and comprehensive health. *Method:* The investigative path is characterized as a qualitative, participatory and exploratory methodology, and was followed by paths permeated with concepts, aimed at a liberating and humanitarian pedagogical practice, in dialogue with Paulo Freire and Edgar Morin. We carried out a documentary content analysis of 10 works by Edgar Morin, 12 works by Paulo Freire, in dialogue with the National Policy on Permanent Health Education (PNEPS - Ordinance number 198/2004. Ordinance number 1996/2007. Ordinance number 1858/2020). *Results:* It was possible to notice that: a) The Proposal for Permanent Health Education dialogues with the ideas of Freire and Morin,

when it brings in its conceptual principles the dimensions of popular education, the protagonism of the subject, co-responsible management, and the reinvention of work in action; b) The authors Freire and Morin bring in their works important aspects about transdisciplinarity, interdisciplinarity and human complexity for a humanitarian and liberating education. *Conclusion:* It is essential that education is considered an ethical, aesthetic and political commitment of governments and society. Since it must be guided by a liberating, integral, loving, and gentle education. However, we emphasize that it is necessary to integrate other principles (Lovingness, Interculturality, Intersectoriality, Transdisciplinarity, Internationalization of Knowledge, Humanization, Inclusion) to the existing ones, such as those proposed by PHE (Training, Management, Attention, Participation), thus enhancing, in-service actions, both in the education and health sectors.

**Keywords:** Education. Complexity. Health. Permanent Health Education. Transdisciplinary.

## 1. INTRODUCTION

The year 2021 has become a unique year, full of challenges for humanity and filled with dualities. On the one hand, it was the year to celebrate the centenaries of Paulo Freire, educator, thinker and pedagogue of affections and liberation, who left an incalculable legacy for humanity and Edgar Morin, anthropologist, sociologist and philosopher, considered a humanist planetarium and the architect of human complexity. Tireless, Morin shares, to this day, his lived and experienced world and his complex thought of reconnecting fragments of knowledge. On the other hand, the pandemic, caused by SARS-CoV-2, has called into question our view of the world, as the world has changed, we are no longer the same, and the need for comprehensive health and education, moreover, humanitarian and transdisciplinary has expanded in all contexts.

Health systems in the world context have been in high demand since 2020 with the COVID-19 pandemic, and even failing to respond to all the needs presented, it has shown the world the importance of public policies for comprehensive and universal health care. In addition, it is necessary to think about strengthening systems and a post-pandemic agenda to meet the repressed health demands.

From the perspective of health workers, it is the worst-case scenario. Their work acts as a vector in the transmission of the virus in society, which is why many health professionals had to isolate themselves to protect their loved ones: family members, close people and the daily support network [1]. In addition, the systems, in some countries, have gone or are starting to function at their maximum capacity or close to it, causing work to be carried out in situations of scarcity and without adequate working conditions, facilitating contamination between teams and generating suffering, losses, frustrations and mental illness.

In the educational scenario, both teachers and students will have to deal with lived experiences that may have left several negative impacts, not only on learning, but on socio-emotional development caused by social isolation, losses and distancing from the bodies. In this sense, in addition to functional needs, teachers and students need emotional support, whether in face-to-face, virtual or hybrid classes [2].

The current moment, according to Morin “is a festival of uncertainty triggered by the SARS-CoV-2 pandemic, is one of the challenges of complexity”[3]. For him, complexity is what is woven together, which intertwines, which interconnects what was disconnected, in order to unite what had been fragmented and separated by a traditional paradigm. Furthermore, we believe that the pandemic is closely related to the “progress” of humanity.

... in the physical, biological, sociological and anthropological universe, there is a complex problem of progress... it is necessary to make progress in the idea of progress, which must stop being a linear, simple, safe and irreversible notion and become complex and problematic. The notion of progress must include self-criticism and reflexivity. ( p. 87) [4].

Freire corroborates with Morin [4], when he recognizes the historical character of certainties.

The historicity of knowledge, its nature as a process in permanent becoming. It means recognizing knowledge as a social production, which results from action and reflection, from curiosity in a constant movement of search. (p.8) [5].

In this sense, we cannot forget that education in a general context is challenged by the social context arising from its beginnings. Therefore, there is a need to think about teacher training processes that add the integration of other principles/concepts (Lovingness, Complexity, Interculturality, Intersectoriality, Transdisciplinarity, Internationalization of Knowledge, Humanization, Inclusion) to existing ones, such as those proposed by Permanent Health Education (Training, Management, Attention,

Participation), thus enhancing in-service actions, both in the educational and health sectors.

In this perspective, improving the quality of education becomes necessary, and for that, it implies the ongoing training of teachers in the logic of Permanent Health Education (PHE), according to Freire [5]: “Permanent training is based on the practice of analyzing the practice. It is by thinking about their practice, naturally with the presence of highly qualified personnel, that it is possible to perceive embedded in the practice a theory not yet perceived, little perceived or already perceived but little assumed (p. 37) [5].”

For Gomes and Merhy [6], some authors propose Permanent Health Education, as another way to develop the learning process, to help workers deal with the affective dimensions that are related to their professional routine, in which the different dimensions of health work are taken as an object for the collective process of reflection.

In this sense, our investigative path led us to follow paths permeated with concepts/principles aimed at a liberating, loving and humanitarian pedagogical practice, in dialogue with Paulo Freire and Edgar Morin. Thus, we intend to build bridges of dialogue and connections, where the humanization of practices is a fundamental condition for co-responsible education and health, reverberating in social relations that produce human sociability, and guided by the principles and dimensions of Permanent Health Education (PHE).

## **2. METHODOLOGICAL APPROACH**

This article is characterized by a methodological-investigative path of qualitative, participatory and exploratory nature. This path was followed by a path permeated by concepts and principles, which were aimed at a liberating, loving and humanitarian pedagogical practice in dialogue with the works of Paulo Freire and Edgar Morin, and the Policy on Permanent Health Education.

A documentary and exploratory analysis of 10 literary works by Edgar Morin, 12 works by Paulo Freire, and the National Policy for Permanent Health Education (PNEPS - Ordinance numbers: 198/2004; 1996/2007; 1858/2020) [7, 8, 9]. For the choice of the analyzed works, we considered the so-called “best sellers” by the authors (Freire & Morin), for example, *Pedagogy of the Oppressed* and *The Method* collection, respectively. The other works are extensions of the critical-reflective thoughts that the authors addressed in their best sellers.

A content analysis of the documents (works and ordinances) was carried out, reestablishing a priori two categories. According to Moraes [24], the categories, when constructed a priori, start from a theoretical foundation that meets the classification criteria in advance, being based on research questions elaborated by the researcher.

In this perspective, based on the following research questions, we built two categories that will be presented below:

Category 1 - The Proposal for Permanent Health Education in dialogue with the ideas of Freire and Morin.

- ❖ If the National Policy Permanent Health Education and PHE Quadrilateral (Training, Management, Care, Participation) proposed by Ceccim and Feuerwerker [25] dialogue with the works of Freire and Morin;
- ❖ If the Permanent Health Education Model, as it is structured (Training, Management, Attention, Participation), meets the pedagogical needs of the current educational context, imposed by the pandemic? Or will it be necessary to integrate other dimensions? And what dimensions would these be?

Category 2: Freire and Morin, in dialogue with transdisciplinarity, interdisciplinarity and human complexity for a lovingness, liberating, emancipatory and humanitarian education.

- ❖ What do we understand about Freire and Morin's perspective/optics, by transdisciplinarity, interdisciplinarity and human complexity?
- ❖ What theoretical-conceptual contribution does Freire and Morin defend to address the current educational and health needs imposed by the pandemic?

**Table 1:** Summary of Works and Content Analysis.

<b>Paulo Freire</b>	<b>Work Summary</b>	<b>Excerpt</b>
Pedagogy of the Oppressed [10]	The work is divided into 4 chapters and deals with the dialectical relationship between the oppressors and the oppressed, observing the (traditional) banking concept of education as an instrument of oppression, as it supports and maintains the status of society, keeping power in the hands of the powerful. It also proposes a new form of	<i>“Nobody educates anybody, nobody educates himself, men educate each other, mediated by the world” (p. 44). “In the “banking” view of education, “knowing” is a donation from those who think they are wise to those who think they know nothing. A donation that is based on one of the instrumental manifestations of the ideology of oppression – the absolutization of</i>

	relationship between teacher and student and brings man as an inconclusive being, aware of his inconclusiveness and his permanent movement in search of being more. It is based on Freire's own experience.	<i>ignorance, which constitutes what we call the alienation of ignorance, according to which it is always found in the other” (p.30). “No one sets anyone free, no one sets himself free: men set themselves free in communion” (p. 33).</i>
Pedagogy of Hope [11]	In this work he brings a reflection on the Pedagogy of the Oppressed, it is a conversation, a meeting with it, with its experiences, criticism, poetics, philosophical, ethical and humanistic views raised by Pedagogy.	<i>“The Pedagogy of Hope: a reunion with the pedagogy of the oppressed is such a book, written with anger, with love, without which there is no hope. A defense of tolerance, which is not to be confused with connivance, of radicalism; a critique of sectarianism, an understanding of progressive postmodernity and a rejection of the conservative, neoliberal one (p. 6).”</i>
Autonomy Pedagogy [12]	This work is divided into 3 chapters, in which the following are discussed: teaching as methodical, research, respect for students' knowledge, criticality, aesthetics and ethics; the transfer of knowledge; and teaching as a human specificity.	<i>“...education, human specificity, as an act of intervention in the world. It must be made clear that the concept of intervention is not being used with any semantic restrictions (p.56)”</i> .
Tolerance Pedagogy [13]	The book Pedagogy of Tolerance is a collection of reflections and dialogues by Freire, organized by Ana Maria Araújo Freire. This collection is divided into 8 parts, it brings reflections on nationals, as Freire called Brazilian indigenous peoples, and Africanness, cultural action, citizenship, and teaching-learning.	<i>“It is interesting to observe the position of the dominator... in front of the dominated. One of the fundamental characteristics of the domination process... is the need that the dominator has to culturally invade the dominated. Therefore, cultural invasion is fundamental because it thinks about power.... It is fundamental to the dominator: to crush the cultural identity of the dominated (p.23)”</i> .
Pedagogy of Commitment (Latin America and Popular Education) [14]	The work brings together transcripts of interviews, conferences and discussions, in which Paulo Freire participated. The book is divided into 6 parts, where the author discusses education in different countries (e.g. Argentina, Chile, Brazil, Paraguay, Nicaragua, Uruguay).	What is the educational utopia possible in Latin America today? “The possible utopia not only in Latin America, but also in the world, is the reinvention of societies in the sense of making them more human, less ugly. In the sense of transforming ugliness into beauty. The possible utopia is to work to make our society more visible, more respected around the world, for all social classes (p.35)”.
Indignation Pedagogy [15]	This work is a collection of letters, documents and other manuscripts written by Paulo Freire between 1921-1997, which were put together by his wife after his death. In excerpts from the documents Freire reports important historical facts that marked them, reaffirming the role of the critical and reflective subject in the world.	<i>“I am one of those who demand of themselves the fulfillment of tasks, including making some of them possible, when they are said to be unfeasible. As an educator, but also as someone who engages in the critical and permanent exercise of thinking about their own practice in order to theorize it, this is what I have been doing throughout my professional experience (p.24)”</i> .

Teacher Yes, Aunt No [16]	This work consists of 10 letters in which Freire discusses teaching practices and the role of educators in the training of students. In this book, Freire presents 11 lessons that teachers should consider in their educational practices.	<i>"...the issue of the identity of the subjects of education, educators and students, it seems to me that it implies, from the beginning of such exercise, to emphasize that, deep down, cultural identity, an expression commonly used by us, cannot intend to exhaust the totality of the meaning of the phenomenon whose concept is identity (p.67)".</i>
Letter from Paulo Freire to Teachers [17]	In this letter, Freire dialogues with continuing education in the teacher training process, clarifying the roles, duties and ethical commitment they have with their target audience.	<i>"The ethical, political and professional responsibility of the teacher puts him/her in the duty to prepare, to qualify, to graduate even before starting their teaching activity (p.259)".</i>
The Importance of the Act of Reading [18]	In this book, the author discusses the role of reading in the processes of political emancipation, and in the recognition of the subject as unfinished.	<i>"The reading of the world precedes the reading of the word, hence the subsequent reading of the word cannot do without the continuity of the reading of that one. Language and reality are dynamically linked (p.9)".</i>
Politics and Education [5]	In this book, Freire addresses in the form of chapters: the continuing education of teachers; diversity; popular culture; popular participation; politics and ethics.	<i>"I obviously feel in a post-modern-progressive position and it is as such that I will discuss permanent education and educational cities (p.11)."</i>
Education as a Practice of Freedom [19]	This work was originally written in the exile of Paulo Freire, in 1965. In the book, Freire reports on the pedagogical experience he carried out, before the 1964 coup – the method of teaching young people and adults to read in northeastern Brazil. He also writes about the setback of mass education defended in the military dictatorship.	<i>"Hence this critical transitivity is characteristic of authentic democratic regimes and corresponds to highly permeable, interrogative, restless and dialogic ways of life, as opposed to the 'mute', quiet and discursive ways of life, of rigid and militarily authoritarian phases, as we unfortunately live today, in the setback that we are suffering and that the groups that usurp power intend to present as a re-encounter with democracy (p.60)".</i>
Cultural Action for Freedom [20]	In this book, Paulo Freire approaches the most different aspects of Brazilian reality from the perspective of someone who fought for a profound and critical change in the world. It summarizes texts written between the period 1968-1974.	<i>"Studying is really hard work. It requires from those who do it a critical, systematic posture. It requires an intellectual discipline that is not gained by not being practiced. This is precisely what banking education does not encourage. On the contrary, its keynote is fundamentally to kill the curiosity, the investigative spirit, the creativity in the students (p.8)".</i>
<b>Edgar Morin</b>	<b>Work Summary</b>	<b>Excerpt</b>
Method 1 (The Nature of Nature), 2 (The Life of Life), 3 (The Knowledge of Knowledge),	In this collection of 6 volumes, Morin extraordinarily discusses the methodological process of investigation, covering everything from the subject, the method to ethics. In the First Book "The Method–The Nature of Nature", he proposes a new look at the meaning of order/disorder in the world. In the second	<i>"... a science of man postulates a science of nature, which, in turn, postulates a science of man: now, logically, this relationship of mutual dependence sends each of these propositions one to the other and reciprocally, in an infernal cycle where none can take a body. (Nature of Nature, p. 21)."</i>

4 (Ideas), 5 (The Humanity of Humanity), 6 (Ethics) [21]	<p>“The Method–The Life of Life”, he addresses ecological issues and the complexity of the subject. In the third “The Method–The Knowledge of Knowledge”, he deals with the construction of knowledge. In the Fourth “The Method – Ideas”, the author discusses the cognitive capacity of human beings. In the Fifth “The Method – The Humanity of Humanity”, the author goes deeper into the subject. And in the last “The Method – Ethics”, Morin discusses the dualities experienced by the ethical and moral issues that surround man.</p>	<p>“Natural integration allows us to understand natural selection (<i>A Vida da Vida</i>, p. 76)”.  “Science is not just an accumulation of true truths. Let's say more, continuing Popper: it is an ever-open field where not only theories but also the principles of explanation, that is, worldviews and metaphysical postulates, are at odds. (<i>The Knowledge of Knowledge</i>. 20)”.  “Complex anthropology recognizes the human subject in its egocentric/altruistic duality, allowing you to understand the original source of solidarity and responsibility. Therefore, complex thinking leads to an ethics of responsibility (recognition of the relatively autonomous subject) and solidarity (thinking that trusts)” (<i>Ethics</i>, p. 34)”.</p>
Science with Conscience [4]	<p>This work is divided into two Parts: Science and Consciousness: it addresses a view that science is not just an accumulation of true truths (it is always being revisited, it is not an absolute truth), and Complex Thinking: Complexity is addressed in three fundamental basic principles that are brain operators present in human beings: Hologrammatic (considering the whole and the part), Recursive (Action-Cause-Action...), and Dialogic (reception of contradictions) and for the understanding of complex thinking Morin, trace eight avenues.</p>	<p>“Scientific knowledge is not a reflection of the laws of nature. It brings with it a universe of theories, ideas, paradigms, which leads us, on the one hand, to the bioanthropological conditions of knowledge (because there is no mind without a brain), on the other hand, to cultural, social and historical roots of theories. (p. 21) “Since complexity has only been treated marginally, or by marginal authors like myself, it necessarily raises fundamental misunderstandings. (p. 137)” “...the whole is in the part that is in the whole (p. 148)”.</p>
Letter of Transdisciplinarity[22]	<p>The Letter of Transdisciplinarity was written by Lima de Freitas, Edgar Morin and Basarab Nicolescu, and adopted at the First World Congress on Transdisciplinarity, Convento de Arrábida, Portugal, 2-6 November 1994. In this letter, considerations and articles for clarification of the term Transdisciplinarity, in the form of a discourse.</p>	<p>“Considering that the current proliferation of academic disciplines leads to an exponential growth of knowledge that makes any global view of the human being impossible (p. 1).”  “The transdisciplinary vision is resolutely open insofar as it goes beyond the realm of the exact sciences through its dialogue and its reconciliation... (p.2)”.</p>
The Festival of Uncertainty [3]	<p>In this work, Morin makes a reflective dialogue between the challenges presented with the emergence of the pandemic, caused by SARS-CoV-2, humanity, with the challenges of human complexity and the uncertainties produced in the universe. The main topics presented in this article are: challenge of complexity, power and uncertainties of science, generalized mega crisis, and towards a generalized humanism.</p>	<p>“The crisis should, above all, open our minds ... reduced to the immediate, the secondary and the frivolous, to the essential: the importance of love and friendship for our personal flourishing, for the community and for the solidarity of our “selves” in us. “ours”, for the destiny of Humanity, within which each one of us is a mere particle (p.9)”.</p>



The Challenge of Complexity [23]	In this work, Morin briefly discusses the main issues addressed in the Work "Science with Consciousness", addressing themes about order/disorder, singularity/completeness, absolute/non-absolute knowledge, and the misunderstandings that prevent understanding of the term complexity.	<i>"Complexity is difficult; when you experience an inner conflict, that conflict can be tragic; it is no accident that great minds have bordered on madness, and I am thinking of Pascal, of Holderlin, of Nietzsche, of Artaud. You have to live with this complexity, with this conflict, trying not to succumb and not be discouraged. The complexity imperative, in this sense, is a strategic use of what I call dialogic. (p.10)".</i>
<b>PNEPS</b>	<b>Work Summary</b>	<b>Excerpt</b>
Ordinance 198/2004 [7]	It establishes the National Policy on Permanent Education in Health as a strategy of the Unified Health System for the training and development of workers for the sector, and other measures.	<i>"Considering the agreement of the Ministry of Health's proposal "Allocation and Effective Transfer of Financial Resources from the Federal Government to the Projects of Permanent Health Education Poles in accordance with the Support Lines of the National Policy for Permanent Health Education" by the Tripartite Inter-Management Committee , on October 23, 2003; Resolve to Institute the National Policy on Continuing Health Education as a strategy of the Unified Health System for the training and development of workers for the sector (p.2)".</i>
Ordinance 1996/2007 [8]	It provides for the guidelines for the implementation of the National Policy on Permanent Education in Health.	<i>"Definir novas diretrizes e estratégias para a implementação da Política Nacional de Educação Permanente em Saúde, adequando-a às diretrizes operacionais e ao regulamento do Pacto pela Saúde (p.2)."</i>
Ordinance 1858/2020 [9]	It institutes the pilot project of the Health Education Mapping System (SIMAPES), to facilitate the collection, analysis and availability of information relevant to health education in Brazil.	<i>"It institutes the pilot project of the Health Education Mapping System (SIMAPES), to enable the collection, analysis and availability of information relevant to health education in Brazil (p.1)".</i>

**PNEPS** =National Policy on Permanent Health Education. The presentation of works in the table does not follow a chronological sequence of publication and the referenced years correspond to volumes published in Portuguese (Brazil). The choice of selected excerpts for the table are related to the research questions and elaborated categories.

### 3. RESULTS & DISCUSSION

In the following, we will present the main results of the content analysis of the works of Morin, Freire and the National Policy for Permanent Health Education in the form of contextualized dialogues connected with the research questions proposed in this work.

### **Category 1 - The Proposal for Permanent Health Education in Dialogue with the Ideas of Paulo Freire and Edgar Morin**

Permanent Health Education was instituted in Brazil in 2004 as a Public Policy (National Policy for Permanent Health Education/PNEPS) by the Ministry of Health forward to the demands of the Unified Health System (SUS).

PNEPS represents a milestone for training and work in health in Brazil. The concept of PHE is defined in the PNEPS [7, 8, 9] as learning at work, in which learning and teaching are incorporated into the daily lives of organizations and into the work process, and it proposes that workers' education processes from the problematization of the practice itself.

Permanent Health Education, as a public policy elaborated and agreed upon by a set of actors, happens all the time in the world of work, both in management and in the processes of exchange and learning.

In this perspective, Morin and Freire dialogue with PHE, when they consider the context of human complexity in the world of work, where the exchange of knowledge, not only technical and scientific, but also of ethical dimensions of life.

Scientific knowledge is man's quest for understanding the laws of nature. "It brings with it a universe of theories, ideas, paradigms, which leads us, on the one hand, to the bio anthropological conditions of knowledge (because there is no mind without a brain), on the other hand, to cultural and social roots, history of theories (p. 21) [4]".

For Freire (p.51) [15], the relationship of the conscious man in the world is connected with "thinking, speaking, feeling, perceiving, giving a destination to hands freed from the almost exclusive support of the body". Thus, extending this relationship to work, we understand that she is in a process of affectation and reinvention all the time.

In this sense, we understand that Permanent Health Education aims to discuss the work and, based on this work, seek to transform the institutional space into a space for questioning, reflection, dialogue and construction of consensus, exchanges and co-production. PHE is based on the conception of critical education, meaningful learning and the appreciation of work as a source of knowledge.

It is important to point out that PHE is much more than a pedagogical or methodological concept, its founding structure is praxis, proposing a political process of "discomfort and questioning (p.11) [26]". This dislocation and this questioning, we would say, would encourage the expansion of dialogue in work relations and educational action

by incorporating emotional exchanges and sensitivity, allowing to go beyond dialogue based only on logically organized and planned knowledge and arguments, towards a dialogue from encounters and connections and in the utopia of “being more” [10] to a loving and pleasurable professional practice, that is, in a “new softness (p. 341)” [27].

In addition, PHE is intrinsically permeated by various education models, such as Continuing Education, or as an offshoot of Popular Education, as pointed out by Ceccim, “for many educators, PHE configures an offshoot of Popular Education or Youth and Adult Education (p.162) [28]”.

Permanent Health Education can correspond to Education in Service, when this places the relevance of contents, instruments and resources for technical training submitted to a project of institutional changes or change in the political orientation of the actions provided in a given time and place. It can correspond to Continuing Education, when this belongs to the objective construction of institutional frameworks and the investiture of careers by service at a specific time and place. It can also correspond to the Formal Education of Professionals, when this is widely porous to the multiplicities of the reality of professional experiences and is placed in an alliance of integrated projects between the sector/world of work and the sector/world of education. (p. 162) [28].

Youth and Adult Education and Popular Education complement each other. In Freire's conception [5], the concept of Adult Education moves towards Popular Education, becoming more comprehensive, where educators and popular groups reflect their daily life and their militancy process, which would be the educational practice recognizing itself as a practice of politics.

To advance from theory to practice, Ceccim and Feuerwerker [25] propose, as a way of operationalizing the concept of Permanent Health Education, the Training Quadrangle, which is the articulation between training, management, care and participation. Ceccim [28] highlights that through this Quadrangle there can be a change in the traditionalist conception of health education, the search for integrality and the inclusion of users as active subjects in health practices.

In this context, it is noteworthy that with the pandemic caused by SARS-CoV-2, the world was faced with losses, changes and lessons learned. The way of doing and thinking about education mediated by digital technologies suddenly emerged. “Social isolation has clearly affected our ability to plan for the future and to think about new aspirations [29]”, in the educational context, the situation demands attention, as the moment requires the capacity for collaboration and sharing [30].

In this sense, Morin [31] alerts to the importance of education in the pandemic and post-pandemic world, where education is the engine and the main device to deal with

the anxieties and uncertainties of children and young people, so strongly emerged from the pandemic.

Before, we thought there was certain progress and now the future is an anguish. Therefore, to bear, to face uncertainty is not to sink into anguish, to know that it is necessary, in a way, to participate with the other, in something in common, because the only answer for those who have the anguish of dying is love and life in common [31].

Freire [10] dialogues with Morin [31] when defending an education that seeks to unveil reality and form critical consciences, as a path to the emancipation of the oppressed.

It is necessary that we have the resistance that preserves us alive, the understanding of the future as problems and the vocation to be more as an expression of human nature in the process of being. (p. 31) [10].

In this perspective, we see the need for the training processes, both for teachers and health professionals, to be an ethical, aesthetic and political commitment of governments and society.

For this, a theoretical and methodological reflection on work in the context of human development and human rights is necessary, in order to provoke a rethinking of the role of education workers training, from the perspective of individual and collective development, through of a reflective articulation, of encounters and building a universe of educational processes in action.

In our understanding, Permanent Health Education, in addition to being a pedagogical concept, advances towards promoting a strategically organic model of continuing education in health. This model of continuing education in health must consider a mutual relationship and exchanges between the part and the whole, present in the dimensions man-world, theory-practice, scientific-popular, educator-student, professional-manager, doctor-patient, etc., not establishing a duality between these dimensions, but establishing dialogical, loving, affective, political, aesthetic and ethical relationships.

In addition, new principles/concepts must be incorporated into permanent health education processes, such as: Intersectoriality as a political commitment of the State between the education and health sectors; Interculturality and Inclusion as a basic principle for respecting and valuing diversity, intercultural communication, otherness, as well as educational inclusion in order to welcome and give opportunities for participation to all individuals; Internationalization of Knowledge as a way to interconnect fragments of scientific and popular knowledge/knowledge in educational spaces; Humanization as a form of comprehensive health care for the authors involved and the organization of

healthy and welcoming work spaces, making clear the importance of the inseparable relationship between care and management [29].

**Category 2: Freire and Morin in dialogue with transdisciplinarity, interdisciplinarity and human complexity for a lovingness, liberating, emancipatory and humanitarian education.**

The current scenario is one of uncertainties and challenges, and requires, more than ever, contextualized interdimensional and transdisciplinary dynamics (e.g. strategies, projects, actions, active methodologies, etc.) in both education and health sectors.

According to Morin and Collaborators [22], transdisciplinarity is only considered transdisciplinarity when:

It makes new data emerge from the confrontation of the disciplines that articulate them with each other, offering us a vision of nature and reality, and does not seek mastery over the various other disciplines, but the opening of all of them to what crosses and surpasses them ( p.3) [22].

Freire [13] corroborates the context presented above, when he states that learning and teaching is dialectical and not a mere transference of knowledge. For this author, teaching and learning constitute a relationship of connected knowledge production, not separating theory from practice, considering that knowledge is not something absolute, on the contrary, it constitutes a process of action-reflection-action.

Thus, transdisciplinarity contemplates the dynamics mentioned above, since the current educational context marked by isolated disciplines, "makes any global view of the human being impossible (p.1) [22]", a view that contemplates environmental aspects , cultural, economic, political, social, ethical, aesthetic, and spiritual. Transdisciplinarity thus requires projects and actions that promote articulated and connected intersectoral public policies to achieve a sustainable society, so necessary in times of pandemic/crisis.

Epistemologically, the word "interdisciplinarity" is of Latin origin and means (inter "between", discipline "instruction, teaching, order, area of knowledge"). Thus, interdisciplinarity describes the cooperative use and further development of approaches/ways of thinking in different fields of knowledge. In this perspective, we understand that interdisciplinarity is the junction/interconnection of two or more disciplines for a certain purpose. It implies the reconnection of disciplines or fragmented knowledge, in a dynamic process of context and multiple learning.

Freire [10] dialogues with the affirmation above, when he argues that interdisciplinarity is a methodological process, a matter of practice, and a prerequisite for a social vision of reality. This vision, which in our conception, is only possible with interdisciplinary work.

Morin alerts in his works to the importance of reconnecting fragmented knowledge, without discarding, however, the achievements achieved by interdisciplinarity/disciplines. For Morin [4], we, cognitive and conscious human beings, are given the extraordinary role of reconnecting knowledge, disciplines and knowledge, since only in this way, we can overcome the mutilating fragmentation, which impedes the understanding of the problems of the complex world.

In this context, complexity is a central theme to understand the new challenges posed by the pandemic in education and health. The issue of complexity, in Morin's view [4], remains marginal to this day, as complexity is still seen as “a recipe”, rather than being considered “a challenge and an incitement to think”. Furthermore, for Morin [4] “the problem of complexity is not that of being complete, but rather of the incompleteness of knowledge (p.138)”. Therefore, this would be the meaning of complexity, an escape from methodological and scientific rules against the uncertain and non-absolute.

Freire [15] dialogues with Morin, when he defends “the development of a democratic mentality, coherence, purity, of denying the ideological discourse of the impossibility of changing the world or the ideological discourse of the infeasibility of the possible, of the act of resisting and not weakening, and the methodization of curiosity (p.149)”.

In this perspective, the current context demands for the educational scenario new connections of understanding of human complexity and transdisciplinarity. Since we must take a closer look at education. A plural and integral look, including political, social, economic and cultural dimensions. Furthermore, we must not forget that man is a species-individual-society, in a process of mutual entanglement, which will only be understood by the interconnected and transdisciplinary knowledge that a liberating, emancipatory and humanitarian education is capable of promoting.

## **5. FINAL CONSIDERATION**

In this work, it was observed that the current exploration is increasingly complex and the need for an educational practice, based on transdisciplinarity, interdisciplinarity,

liberating, emancipatory, humanitarian and filled with love and enjoyment practices, is necessary.

We observe that education and health professionals are experiencing moments of great suffering and mental illness, needing comprehensive care, qualified listening, and permanent training processes, which take into account the needs of services and their target of action, in a dialogic process and intersectoral co-management.

Permanent Health Education emerges as a guide for outlining intersectoral and dialogic training processes for pleasurable, loving and joyful work. However, we must overcome the obstacles that are present in the current model of PHE in force today (e.g., lack of understanding of the term of PHE by professionals; poor adherence to activities by medical professionals and the community, among others).

As a Public Policy, Permanent Health Education needs to advance its model for the educational sector, establishing bridges and co-responsible dialogues, in a process of intersectoral management and mutual support.

However, we need to recognize the existing models and equipment, adopted in each sector, and the potential of each model, in order to meet the current complexity and build paths for a transdisciplinary education that takes into account human complexity.

In this sense, Permanent Health Education as it is structured and organically focused on the health sector, needs to expand its range, in dialogue and partnership with the Education sector. For this, it is necessary to incorporate new pedagogical principles/concepts that serve the educational sector, such as Lovingness, Intersectoriality-Ebene, Inclusion, Interculturality, Internationalization of Knowledge and Humanization, so that only in this way, we can advance in a liberating, loving and humanitarian practice, in a process of permanent education.

## 6. REFERENCES

- [1] I. M. Almeida. Proteção da Saúde dos Trabalhadores da Saúde em Tempos de COVID-19 e Respostas à pandemia, **Revista Brasileira de Saúde Ocupacional**, Vol. 45. 2020.
- [2] E.M. Moura-Vieira. M.G.L. Hoefel & J.T.R. Collado, El “desierto digital”: Repercusiones de la COVID-19 en la Educación en España y Brasil. **Revista Electrónica Interuniversitaria de Formación del Profesorado**, Vol. 24, No. 2, 2021, pp. 181-191.
- [3] E. Morin, **O Festival de Incertezas**, Rio de Janeiro: Espiral, Vol. 4, 2020.

- [4] E. Morin, **Ciência com Consciência**. Rio de Janeiro: CIP-Brasil. Catalogação-na-fonte Sindicato Nacional dos Editores de Livros, 2005.
- [5] P. Freire, **Política e Educação**. São Paulo, Cortez, 2001.
- [6] L.B. Gomes. E.E. Merhy, Subjectivity, Spirituality, Management and State in Popular Health Education: A Discussion based on the Work of Eymard Mourão Vasconcelos. **Interface: Comunicação Saúde Educação**, Vol. 18, No. 51, 2014, pp. 1269-1282.
- [7] Brasil, **Ministério da Saúde. Portaria nº 198/GM/2004**. Institui a Política Nacional de Educação Permanente em Saúde.
- [8] Brasil, **Ministério da Saúde. Portaria nº 1996/2007**. Dispõe sobre as diretrizes para a implementação da Política Nacional de Educação Permanente em Saúde.
- [9] Brasil, **Ministério da Saúde. Portaria nº 1858/2020**. Institui o projeto piloto do Sistema de Mapeamento em Educação na Saúde (SIMAPES), para viabilizar a coleta, análise e disponibilização de informações pertinentes à educação em saúde no Brasil.
- [10] P. Freire, **Pedagogia do Oprimido**. Rio de Janeiro: Paz e Terra, 2014.
- [11] P. Freire, **Pedagogia da Esperança**. Rio de Janeiro: Paz e Terra, 1997.
- [12] P. Freire, **Pedagogia da autonomia: saberes necessários à Prática Educativa**. São Paulo: Paz e Terra, 1996.
- [13] P. Freire, **Pedagogia da Tolerância**, Rio de Janeiro: Paz & terra, 2017.
- [14] P. Freire. **Pedagogia do Compromisso**. Rio de Janeiro-RJ, Paz e Terra, 2018.
- [15] P. Freire, **Pedagogia da Indignação: Cartas Pedagógicas e Outros Escritos**. São Paulo: Editora UNESP, 2000.
- [16] P. Freire. **Professora, Sim, Tia Não - Cartas a quem Ousa Ensinar**. Rio de Janeiro, RJ – 24ª edição, 2015.
- [17] P. Freire. **Carta aos Professores**. Rio de Janeiro, RJ – 24ª edição, 2015.
- [18] P. Freire. **A importância do ato de ler: em três artigos que se completam**. São Paulo. Autores Associados, Cortez, 1989.
- [19] P. Freire, **Educação como Prática da Liberdade**. (29a ed). Rio de Janeiro: Paz e Terra, 1967.
- [20] P. Freire, **Ação Cultural para a Liberdade**. São Paulo: Paz e Terra, 1981.
- [21] E. Morin, **O Método: Coleção**. Rio de Janeiro: Editora Sulina, 2005.



- [22] E. Morin, B. Nicolescu & L. Freitas, "**Carta da Transdisciplinaridade**", Portugal: Convento da Arrábida, 1994).
- [23] E. Morin, **Os Desafios da Complexidade**. Rio de Janeiro: Editora Bertrand Brasil, 2001.
- [24] R. Moraes, **Análise de Conteúdo**. Revista Educação, Vol. 22, No. 37, 1999, pp. 7-32.
- [25] R.B. Ceccim & L.C.M. Feuerwerker, O Quadrilátero da Formação para a Área da Saúde: Ensino, Gestão, Atenção e Controle Social. **PHYSIS: Revista de Saúde Coletiva**, Vol.14, 2004.
- [26] R.B. Ceccim. A.A. FERLA, **Educação Permanente em Saúde**. Dicionário da Educação Profissional em Saúde. Fundação Oswaldo Cruz. Escola Politécnica de Saúde Joaquim Venâncio, 2009.
- [27] F. Guattari & S. Ronlnix. **Micropolítica: Cartografia do Desejo**. Petrópolis: Editora Vozes, 1996.
- [28] R.B. Ceccim, Educação Permanente em Saúde: Desafio Ambicioso e Necessário. **Interface: Comunicação Saúde Educação**, Vol. 9, No.16, 2005, pp.161-77.
- [29] M.E. Moura-Vieira, S. Alves-Hopf. J.T.R. Collado & M.G.L. Hoefel, Articulating Methodology: A Potentiator Device on Permanente Health Education. **Journal of Systemics, Cybernetics and Informatics**, Vol. 19, No. 5, 2021, pp. 15-23.
- [30] J.C. Morgado, Transformações educativas em Tempos de Pandemia: Do Confinamento Social ao Isolamento Curricular. **Práxis Educativa**, Vol.15, 2020, pp. 1-10.
- [31] E. Morin, **Lições da Pandemia: O Despertar para as Grandes Verdades Humanas**. Disponível em <https://www.fronteiras.com/artigos/licoes-da-pandemia-o-despertar-para-as-grandes-verdades-humanas>. 2020.

## 5. CONSIDERACIONES FINALES

Con el surgimiento de la pandemia provocada por el SARS-CoV-2, el contexto educativo se vio impactado estructuralmente, reflejándose de manera espantosa en el desarrollo humano en los países. Por un lado, la educación en todos los niveles se ha vuelto más compleja, además de muertes y secuelas, el COVID-19 está dejando un agobiante legado de pérdidas en la educación. Por otro lado, se develó con fuerza la importancia de la educación en este período de crisis sanitaria y se reafirmó la importancia de su papel en el contexto social, cultural, político y económico de una sociedad.

Los profesores fueron arrojados frente a la computadora y llevaron a las clases para dentro de la casa, triplicando el trabajo. Este escenario provocó que los profesores cambiaran pizarras y sillas escolares por pantallas y aplicaciones digitales, sumergiéndose en un verdadero desierto digital. Los profesores también tuvieron que superar deficiencias en relación a las tecnologías y temores de contagiarse durante las clases presenciales, todo esto en una situación de precariedad en el trabajo.

El contexto es desafiante y para esto es importante que el Estado ofrezca las condiciones básicas para que los profesores y las instituciones educativas permanezcan, en la medida de lo posible, en contacto con los estudiantes, y dediquen especial atención a los estudiantes en situación de mayor vulnerabilidad. Al mismo tiempo, es importante adoptar medidas que garanticen la seguridad, la salud física y mental de los profesores, para que puedan desarrollar sus actividades de manera plena y placentera y puedan hacer frente a sus miedos e incertidumbres.

Además, los aspectos afectivos y la formación de vínculos se han convertido en grandes preocupaciones en los días de hoy, ya que la distancia de los cuerpos provocada por el aislamiento social y los equipos de protección, como la mascarilla, han dificultado el aprendizaje de los estudiantes y el establecimiento de vínculo entre profesores y estudiantes.

Tanto profesores como estudiantes tendrán que lidiar con experiencias vividas que pueden haber dejado varios impactos negativos, no solo en el aprendizaje, sino en el desarrollo socioemocional provocado por el aislamiento social, que provocó pérdidas, distanciamiento escolar y aumento de la violencia. Así, además de las necesidades funcionales, profesores y estudiantes necesitan apoyo emocional, ya sea en clases presenciales, virtuales o híbridas.

Además, no podemos olvidar la importancia de la escuela como red de protección de niños y adolescentes, junto a actores de otros sectores, como el de la Salud y la Asistencia Social, y la importancia del papel fundamental de los profesionales de estos sectores, para garantizar los derechos de la población en este grupo de edad.

Así, es necesario promover la salud mental de profesores y estudiantes, dada la complejidad que implica el trabajo docente en este escenario de pandemia y post pandemia y también en una nueva orden educacional, en un proceso continuo de aprendizaje, cooperación e intercambio, y así, constituir procesos paulatinos de una cultura de paz en las escuelas, tan deseada por profesores y estudiantes.

En esta perspectiva, la Educación Permanente en Salud surge como directriz para trazar procesos formativos intersectoriales y dialógicos para el trabajo agradable, amoroso y feliz. Sin embargo, es necesario superar los obstáculos que actualmente presenta el actual modelo de Educación Permanente en Salud (por ejemplo, la falta de comprensión del término EPS por parte de los profesionales; poca adhesión a las actividades por los médicos y la comunidad, falta de una efectiva intersectorialidad y cogestión, entre otros).

Como Política Pública, la Educación Permanente en Salud necesita avanzar en su modelo para el sector educativo, estableciendo puentes y diálogos corresponsables, en un proceso de gestión intersectorial y apoyo mutuo. Sin embargo, necesitamos reconocer los modelos, los equipamientos existentes, adoptados en cada sector y las potencialidades de cada modelo, para atender la complejidad actual y construir caminos para una educación transdisciplinario, que tenga en cuenta la complejidad humana.

En ese sentido, la Educación Permanente en Salud, por estar estructurada orgánicamente enfocada al sector salud, necesita ampliar su alcance, en diálogo y alianza con el sector Educación.

Para ello, es necesario incorporar nuevos principios/conceptos pedagógicos que sirvan al sector educativo, tales como: Amorosidad; intersectorialidad; Inclusión; interculturalidad; Internacionalización del Conocimiento; y Humanización, para que sólo así podamos avanzar en una práctica liberadora, amorosa y humanitaria, en un proceso de educación permanente.

En vista de esto, también es importante que los gobiernos se comprometan a proporcionar los recursos y la logística necesarias para las actividades educativas. Además, es necesario incorporar enfoques transdisciplinarios y participativos,

interculturales y dialógicos para transitar un camino de reconexión de seres y saberes en las escuelas.

En este sentido, la Metodología Articuladora (MA) construida en el proceso investigativo de este estudio puede mejorar la acción en servicio y las habilidades emocionales de los profesionales de la educación y la salud, donde los profesionales se conviertan en multiplicadores de prácticas didáctico-pedagógicas dialógicas, comprometidas con la realidad local, y prácticas sostenibles. Además, también es importante que gobiernos y administradores de políticas ofrezcan apoyo logístico, administrativo y didáctico-pedagógico para que los procesos de formación avancen hacia una educación más afectiva, de calidad y una práctica humanizada.

Sin embargo, es pertinente y necesario invertir en estudios futuros, ya que el presente estudio no pretendió agotar el debate sobre el tema, sino plantear algunas cuestiones sobre la Educación Permanente en Salud en la educación básica. Además, el contexto de investigación giró en torno a la humanización de la práctica pedagógica en diálogo con algunos autores, hecho considerado importante. Aún así, se mantiene la necesidad de realizar más estudios, para que podamos avanzar en el modelo de EPS para el sector educativo de manera intersectorial.

Finalmente, concluimos que la Educación Permanente en Salud se destaca en este proceso, por posibilitar el diálogo entre los sectores de la salud y la educación. En esta perspectiva, esta investigación no se limita a esta tesis doctoral, pretendemos avanzar en la propuesta de una Educación Permanente en Salud para la Red de Educación Básica, con el fin de ampliar el modelo EPS: (i) facilitando los procesos de formación de los profesionales de la salud y de la educación de forma transdisciplinario, participativa, emancipadora, humanitaria, amorosa y alegre; (ii) brindar una gestión corresponsable, intersectorial y colaborativa; (iii) promover la atención integral; (iv) incentivar la participación de la comunidad escolar y del público en acción, tanto en educación como en salud; y (v) la construcción de redes que faciliten el proceso de mapeo, seguimiento y evaluación de las acciones de Educación Permanente en Salud.

## REFERENCIAS

- ALMEIDA, I. M. Proteção da saúde dos trabalhadores da saúde em tempos de COVID-19 e respostas à pandemia. **Revista Brasileira de Saúde Ocupacional**, n. 45, 2020. Disponível em: <<https://doi.org/10.1590/SciELOPreprints.140>>. Acesso em: 10 fev. 2022.
- ALVARADO-PRADA, L. E.; FREITAS, T. C.; FREITAS, C. A. Formação continuada de professores: alguns conceitos, interesses, necessidades e propostas. **Revista Diálogo Educacional**, Curitiba, v. 10, n. 30, p. 367-387, maio/ago. 2010.
- AMORIM, F.V.; CALLONI, H. Sobre o conceito de amorosidade em Paulo Freire. **Conjectura: filosofia e educação**. Caxias do Sul, v. 22, n. 2, p. 380-392, maio/ago. 2017.
- BARDIN, L. **Análise de conteúdo**. São Paulo: Edições 70, 2011.
- BERBEL, N. A. N. As metodologias ativas e a promoção da autonomia de estudantes. **Semina: Ciência Sociais e Humanas**, v. 32, n. 1, p. 25-40, 2011.
- BIRKENBIHL, V. F. **Stroh im Kopf? Vom GehirnBesitzer zum Gehirn-Benutzer**. MVG: München, 2013.
- BIRKENBIHL, V. F. **Birkenbihl Denkwerkzeuge**. MVG: München, 2007.
- BONDIA J. L. Notas sobre a experiência e o saber de experiência. **Revista Brasileira de Educação**, n. 19, p. 20-28, 2002.
- BOTELHO, L. L. R.; CUNHA, C. C. A.; MACEDO, M. O Método da Revisão Integrativa nos Estudos Organizacionais. **Gestão e Sociedade**, v. 5, n. 11, p. 121, 2011.
- BRASIL. Ministério da Saúde. **Portaria nº 1.858/2020**. Institui o projeto piloto do Sistema de Mapeamento em Educação na Saúde (SIMAPES), para viabilizar a coleta, análise e disponibilização de informações pertinentes à educação em saúde no Brasil. Disponível em: <<https://doi.org/10.1590/SciELOPreprints.140>>. Acesso em: 10 fev. 2022.
- BRASIL. Ministério da Saúde. **Portaria nº 1.996/2007**. Dispõe sobre as diretrizes para a implementação da Política Nacional de Educação Permanente em Saúde. Brasília, 2007.
- BRASIL. Ministério da Saúde. **Portaria nº 198/GM/2004**. Institui a Política Nacional de Educação Permanente em Saúde. Brasília, 2004.
- BRASIL. **Constituição da República Federativa do Brasil**. Brasília, DF: Senado Federal: Centro Gráfico, 1988.
- CAROTTA, F.; KAWAMURA, D.; SALAZAR, J. Educação permanente em saúde: uma estratégia de gestão para pensar, refletir e construir práticas educativas e processos de trabalhos. **Saúde e Sociedade**, v. 18, supl. 1, p. 48-51, 2009.
- CECCIM, R. B. Educação Permanente em Saúde: descentralização e disseminação de capacidade pedagógica na saúde. **Ciência & Saúde Coletiva**. Rio de Janeiro, v. 10, n. 4, 2009.

CECCIM, R. B. Educação Permanente em Saúde: Desafio Ambicioso e Necessário. **Interface** – Comunicação, Saúde, Educação, v. 9, n.16, p. 161-77, 2005.

CECCIM, R. B. Educação Permanente em Saúde: desafio ambicioso e necessário. **Interface** – Comunicação, Saúde, Educação, v. 9, n. 16, p. 161-77, set. 2004/fev. 2005.

CECCIM, R. B.; FEUERWERKER, L. C. M. O Quadrilátero da Formação para a Área da Saúde: Ensino, Gestão, Atenção e Controle Social. **Physis: Revista de Saúde Coletiva**, Rio de Janeiro, v. 14, 2004.

CECCIM, R. B.; FERLA, A. A. **Educação Permanente em Saúde**. Dicionário da Educação Profissional em Saúde. Rio de Janeiro: Fundação Oswaldo Cruz; Escola Politécnica de Saúde Joaquim Venâncio, 2009.

CECCIM, R. B.; MERHY, E. E. Um agir micropolítico e pedagógico intenso: a humanização entre laços e perspectivas. **Interface** – Comunicação, Saúde, Educação, v. 13, supl. 1, p. 531-542, 2009.

DELEUZE, G. **Espinosa: filosofia prática**. Trad. Daniel Lins e Fabien Pascal Lins. São Paulo: Escuta, 2002.

DINIZ-PEREIRA, J. E. As licenciaturas e as novas políticas educacionais para formação docente. **Educação & Sociedade**, n. 68, p. 109-125, 1999.

DINIZ-PEREIRA, J. E.; ZEICHNER, K. M. (Orgs.). **A pesquisa na formação e no trabalho docente**. Belo Horizonte: Autêntica, 2002.

FREIRE, P. **Pedagogia do oprimido**. Rio de Janeiro: Paz e Terra, 2014.

FREIRE, P. **Política e educação: ensaios**. 5. ed. São Paulo: Cortez, 2001.

FREIRE, P. **Pedagogia da indignação: cartas pedagógicas e outros escritos**. São Paulo: Editora UNESP, 2000.

FREIRE, P. **Ação cultural para a liberdade**. 2. ed. São Paulo: Paz e Terra, 1997.

FREIRE, P. **Pedagogia da autonomia: saberes necessários à prática educativa**. São Paulo: Paz e Terra, 1996.

FREIRE, P. **Pedagogia da tolerância**. 2. ed. Rio de Janeiro: Paz e Terra, 1995.

FREIRE, P. **Pedagogia da esperança**. Rio de Janeiro: Paz e Terra, 1992.

FREIRE, P. **Pedagogia do oprimido**. 17. ed. Rio de Janeiro: Paz e Terra, 1987.

GALINHA, I.; RIBEIRO, J. Contribuição para o estudo da versão portuguesa da *Positive and Negative Affect Schedule* (PANAS): I - Abordagem teórica ao conceito de afecto. **Análise Psicológica**, v. 23, n. 2, 2005.

GOMES, L. B.; MERHY, E. E. Subjectivity, Spirituality, Management and State in Popular Health Education: A Discussion based on the Work of Eymard Mourão

Vasconcelos. **Interface** – Comunicação Saúde Educação, v. 18, n. 51, p. 1.269-1.282, 2014.

GUATTARI, F.; ROLNIK, S. **Micropolítica**: cartografia do desejo. Petrópolis: Vozes, 1996.

HOEFEL, M. G. L. **Projeto Vidas Paralelas**: relações entre a imagem, a estética e a política. Relatório de Pesquisa de Pós-Doutorado, Universidade de Brasília, 2016.

INOJOSA, R. M. Intersetorialidade e a configuração de um novo paradigma organizacional. **Revista de Administração Pública**, v. 32, n. 2, p. 35-48, 1998.

JUNQUEIRA, L. A. P. Novas formas de gestão na saúde: descentralização e intersetorialidade. **Saúde e Sociedade**, v. 6, n. 2, p. 31-46, 2005.

LOPES, M. C.; HATTGE, M. D. **Inclusão escolar**: conjunto de práticas que governam. Belo Horizonte: Autêntica, 2009.

MAFFESOLI, M. O. **Tempo das tribos**: o declínio do individualismo nas sociedades de massa. Rio de Janeiro: Forense Universitária, 1987.

MARGINSON, S.; RHOADES, G. Beyond national states, markets, and systems of higher education: A glonacal agency heuristic. **Higher Education**. Kluwer Academic Publishers. Printed in the Netherlands, n. 43, 2002.

MARX, K. **O Capital**. São Paulo: Bointempo, 2013.

MEIRELES, C. **Poesia completa**: Volume I. Rio de Janeiro: Nova Fronteira, 2001.

MERHY, E. E. EPS em movimento: depoimento Emerson Elias Merhy sobre Educação Permanente em Saúde, 2015. Disponível em: <<https://www.youtube.com/watch?v=onApG0Wgks>>. Acesso em: 10 fev. 2022.

MORAES, R. Análise de Conteúdo. **Revista Educação**, v. 22, n. 37, p. 7-32, 1999.

MORGADO, J. C. Transformações educativas em Tempos de Pandemia: Do Confinamento Social ao Isolamento Curricular. **Práxis Educativa**, v. 15, p. 1-10, 2020.

MORIN, E. **O Método**: Coleção. Rio de Janeiro: Sulina, 2005.

MORIN, E. A complexidade do Eu, 2021. Disponível em: <<http://marcosmucheroni.pro.br/blog/?p=20646#.Yf3h5upKhPY>>. Acesso em: 10 fev. 2022.

MORIN, E. **Lições da pandemia**: o despertar para as grandes verdades humanas, 2020. Disponível em: <<https://www.fronteiras.com/artigos/licoes-da-pandemiao-despertar-para-as-grandes-verdades-humanas>>. Acesso em: 10 fev. 2022.

MORIN, E. **O Festival de Incertezas**. Rio de Janeiro: Espiral, 2020.

MORIN, E. **Lições sobre a existência**, 2016. Disponível em: <<https://www.youtube.com/watch?v=-7pZsHbuswY>>. Acesso em: 10 fev. 2022.

MORIN, E. **Ciência com Consciência**. 82. ed. CIP-Brasil. Catalogação na fonte. Rio de Janeiro: Sindicato Nacional dos Editores de Livros, 2005.

MORIN, E.; NICOLESCU, B.; FREITAS, L. **Carta da Transdisciplinaridade**. Portugal: Convento da Arrábida, 1994.

MOURA-VIEIRA, E. M.; HOEFEL, M. G. L.; COLLADO, J. T. R. El “desierto digital”: Repercusiones de la COVID-19 en la Educación en España y Brasil. **Revista Electrónica Interuniversitaria de Formación del Profesorado**, v. 24, n. 2, p. 181-191, 2021.

MOURA-VIEIRA, M. E.; ALVES-HOPF, S.; COLLADO, J. T. R.; HOEFEL, M. G. L. Articulating Methodology: A Potentiator Device on Permanente Health Education. **Journal of Systemics, Cybernetics and Informatics**, v. 19, n. 5, p. 15-23, 2021.

OMS – Organização Mundial de Saúde. **Educação Continuada dos trabalhadores em saúde: princípios e diretrizes para o desenvolvimento de um sistema**. OMS, 1982.

ONU – Organização Nações Unidas. **Declaração Universal dos Direitos Humanos**. Adotada e proclamada pela Assembleia Geral das Nações Unidas (resolução 217 A III) em 10 de dezembro 1948. ONU, 1948.

OPAS – Organização Panamericana de la Salud. **Educación Contínua** - Guia para la organización de programas de educación continua para personal de salud. Washington: División de Recursos Humanos e Investigación, 1979.

PEREDA, P. M. La educación continua y su aplicación en el sector del abastecimiento de agua y saneamiento. **Educación médica y salud**, v. 16, n. 4, p. 531-551, 1982.

PIMENTA, S. G. **O estágio na formação de professores: unidade teoria e prática?** São Paulo: Cortez, 2001.

ROSA, João Guimarães. **Grande sertão: veredas**. 2. ed. Rio de Janeiro: José Olympio, 1958.

SANDERCOCK, L. Reconsidering multiculturalism: towards an intercultural project. In: WOOD, P. (Ed.). **Intercultural city reader**. Book I. Bournes Green: Comedia, 2004.

SANTIAGO, L. A. S.; BLANCH, J. P. **América Latina: entre o prescrito e o vivido no contexto escolar da Espanha**. Universitat Autònoma de Barcelona, Espanha, 2016.

SANTOS, B. S. Uma cartografia simbólica das representações sociais: o caso do Direito. **Revista Crítica de Ciências Sociais**, v. 24, p. 139-172, 1988.

SARAMAGO, J. **Os poemas possíveis**. 3. ed. Lisboa: Editorial Caminho, 1981.

SAVIANI, D. **Interlocuções pedagógicas: conversa com Paulo Freire e Adriano Nogueira e 30 entrevistas sobre educação**. Campinas: Autores Associados, 2010.

SILVA, M. I. A. et al. Educação Permanente em Saúde na Estratégia de Saúde da Família: Relato da Elaboração do Plano de Intervenção. **Revista Eletrônica Acervo Saúde**, v. 11, n. 16, e1.527, p. 1-8, 2019.



UNICEF – Fundo das Nações Unidas para a Infância. **Perdas de aprendizagem com a covid-19 podem custar a esta geração de estudantes quase US\$ 17 trilhões em ganhos durante a vida.** Relatório do Banco Mundial-Unesco-UNICEF expõe a magnitude da crise educacional. 6 dez. 2021. Disponível em: <<https://www.unicef.org/brazil/comunicados-de-imprensa/perdas-de-aprendizagem-com-covid-19-podem-custar-a-esta-geracao-de-estudantes-ganhos-durante-a-vida>>. Acesso em: 10 fev. 2022.

VEIGA, I. P. A. Inovações e projeto político pedagógico: uma relação regulatória ou emancipatória? **Caderno Cedes**, v. 23, n. 61, p. 267-281, 2003.


WATSON, D.; CLARK, L.; TELLEGEN, A. Development and validation of brief measures of positive and negative affect: the PANAS scales. **Journal of Personality and Social Psychology**, v. 54, p. 1.063-1.070, 1988.

## APÊNDICES

### ARTÍCULO 1: A PRÁTICA DOCENTE EM CENA – RELATO DE EXPERIÊNCIA

## ■ RELATOS DE EXPERIÊNCIA

### ■ A prática docente em cena

 *Maria Edna Moura Vieira \**  
*Maria do Perpétuo Socorro Goulart \*\**  
*Maria da Graça Luderitz Hoefel \*\*\**

**Resumo:** Este trabalho tem como objetivo compartilhar a prática docente de duas professoras da Rede de Ensino Básica do Distrito Federal, que atuam na modalidade de ensino Educação de Jovens e Adultos (EJA), numa linguagem dialógica de suas experiências no contexto escolar, onde os protagonistas principais ora são os estudantes ora, os professores. A escrita buscar criar um movimento, formando núcleo de sentido e conexão entre Professor, Estudante e Gestão. Ou seja, diálogos a partir da voz da experiência e saberes sobre o outro e sobre si mesmo. Vão sendo desenvolvidas cenas de vida a partir das recordações e se materializam em um convite à magia da docência escolar e em novas formas de ver e sentir a prática docente. Dá-se em forma de percurso narrativo de vida em ação e é desenvolvido sob o foco em primeira pessoa, uma vez que os fatos narrados têm a participação ativa das autoras.

**Palavras-chave:** Educação de Jovens e Adultos. Educação permanente em saúde. Construção de Brasília. Gestão escolar. Prática docente.

---

\* *Maria Edna Moura Vieira é graduada em Estudos Sociais pela União Pioneira de Integração Social- UPIS, especialista em Gestão de Políticas em Saúde, em Sistemas de Saúde e em Educação Permanente em Saúde, mestre em Processo de Desenvolvimento Humano e Saúde pela Universidade de Brasília – UnB e doutoranda em Medicina pela Universidade de Valencia-Espanha. Professora da Secretaria de Estado de Educação do Distrito Federal. Contato: ednamv\_3@hotmail.com.*

\*\* *Maria do Perpétuo Socorro Goulart. Contato: cartasparaednamoura@gmail.com.*

\*\*\* *Maria da Graça Luderitz Hoefel é graduada em Medicina pela Pontifícia Universidade Católica do Rio Grande do Sul (1983), especialista em Saúde Pública (1987), Medicina do Trabalho (1985), Políticas Públicas e Gestão Estratégica em Saúde (2006), mestre em Educação pela Universidade Federal do Rio Grande do Sul (1996), doutora em Sociologia pela Universidade Federal do Rio Grande do Sul (2003), pós-doutorado pela Universidade Federal do Ceará (2012), e pela Université Paris Descartes (2016). Professora do Departamento de Saúde Coletiva da Universidade de Brasília (UnB).*

## ARTÍCULO 2: ARTICULATING METHODOLOGY: SEEDING MENTAL HEALTH IN THE EDUCATIONAL SPACE IN PANDEMIC TIMES



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

# IJDR

International Journal of Development Research

Vol. 11, Issue, 09, pp. 50104-50109, September, 2021

<https://doi.org/10.37118/ijdr.22754.09.2021>

RESEARCH ARTICLE

OPEN ACCESS

### ARTICULATING METHODOLOGY: SEEDING MENTAL HEALTH IN THE EDUCATIONAL SPACE IN PANDEMIC TIMES

Maria Edna Moura Vieira<sup>1</sup>, Simone Alves-Hopf<sup>2</sup> and Maria da Graça Luderitz Hoefel<sup>3</sup>

<sup>1</sup>Department of Medicine, University of Valencia, Spain

<sup>2</sup>Faculty of Medicine, Friedrich-Schiller University of Jena, Germany

<sup>3</sup>Department of Public Health, University of Brasilia, Brazil

#### ARTICLE INFO

##### Article History:

Received 28<sup>th</sup> June, 2021

Received in revised form

09<sup>th</sup> July, 2021Accepted 20<sup>th</sup> August, 2021Published online 27<sup>th</sup> September, 2021

##### Key Words

Active Methodologies, Mental Health, Peace Culture Promotion, Permanent Health Education, School Violence.

##### \*Corresponding author:

Rebecca Rodrigues de Barros

#### ABSTRACT

COVID-19 pandemic resulted in losses, and lessons being learned world-wide. Isolation has impacted our planning abilities, as well as our ability to ponder about new aspirations. In the education, the situation at hand demands attention, given the rise of violence during social isolation. It is necessary to promote teachers' and students' mental well-being, given the complexity involved in teaching work. Our main goal was to develop training processes in the context of Permanent Health Education (PHE), from the perspective of the transversality of the health-disease processes, meaning to enhance knowledge, self-esteem, motivation, as well as health promotion for teachers and students. Image Analysis Methodology has been applied. From that as well as from the authors' praxis, an Articulating Methodology was developed, based on pedagogical-dialogical, intercultural, intersect oral, PHE principles and, finally, on cognitive neuroscience devices. We have explored strengths and weaknesses both in teachers and in students, meaning to prevent violence, meaning to build into learning environments for a culture of peace. This study has revealed the application of Articulating and Imaging Methodologies are able to facilitate the establishment of a PHE process, which promotes teacher training to impact their practices toward the development of healthy learning spaces, knowledge exchange, affections.

Copyright © 2021, Maria Edna Moura Vieira et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium provided the original work is properly cited.

Citation: Maria Edna Moura Vieira, Simone Alves-Hopf and Maria da Graça Luderitz Hoefel. "Articulating Methodology: Seeding Mental Health in the Educational Space in Pandemic Times", *International Journal of Development Research*, 11, (09), 50104-50109.

#### INTRODUCTION

This article emerges from the concerns of the authors. It became the trigger for its concreteness and a PhD work development from the main author, in a movement that was constituted of "Freirean Praxis" action-reflection-action-reflection. Considering that we are allcreatures of praxis, and that we may only act from the goalswe set four ourselves, which on itself creates new realities, and reinventus in a process that reverses accommodation and repositions us in our mutual encounters. "We humans [thus] find ourselves in the world, with the world and with others, as beings concretely situated in a process of mutual construction" (Freire, 1987, p. 39). The COVID-19 pandemic resulted in losses, changes and lessons being learned world-wide, rendering this 21st century a quite challenging one. Isolation has clearly impacted our planning abilities, as well as our ability to ponder about new aspirations, especially considering the increase in physical and psychological violence (Acosta, 2020).

Violent events are experienced by both teachers and students in diverse environments. It is noteworthy that violence suffered by teachers should not be excluded from the agendas, as it is a growing concern, as educational policies aimed only at students seem not to be sufficient, if the safety and well-being of teachers are not to be promoted (Yang, Qin & Ning, 2021). In addition, both teachers and students will have to deal with lived experiences caused by social isolation, losses, and scholar distancing, which may have left several negative impacts, not restricted to the learning process, but also affecting socio-emotional development. In such sense, in addition to functional needs, teachers and students shall need emotional support, whether in presential, virtual or hybrid classes. According to World Vision's report (2020), up to 85 million children and teenagers, between 2 and 17 years old, may join the victims of physical, emotional, and sexual violence during a period of social isolation.

## ARTÍCULO 3: EL “DESIERTO DIGITAL”: REPERCUSIONES DE LA COVID-19 EN LA EDUCACIÓN EN ESPAÑA Y BRASIL



Fecha de recepción: 1 de noviembre de 2020  
Fecha de aceptación: 15 de febrero de 2021

Moura-Vieira, M.E., Luderitz-Hoefel, M.G. & Réal-Collado, J.T. (2021). El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 24(2), 181-191.

DOI: <https://doi.org/10.6018/reifop.470951>

### El “desierto digital”: repercusiones de la COVID-19 en la Educación en España y Brasil

Maria Edna Moura Vieira<sup>1</sup>, Maria da Graça Luderitz Hoefel<sup>2</sup>, José Tomas Réal Collado<sup>3</sup>

<sup>1</sup>Secretaría de Estado de Educación del Distrito Federal/Brasil y Instituto de Investigación Sanitaria/INCLIVA-Valencia/ES, <sup>2</sup> Universidad de Brasíia/Brasil, <sup>3</sup> Instituto de Investigación Sanitaria/INCLIVA-Valencia/ES

#### Resumen

Con la aparición de la COVID-19, la forma de hacer y pensar la educación mediatizada por las tecnologías digitales, surgió con una fuerza repentina y nunca experimentada de la forma en que la vimos ocurrir en el año 2020. Así, la nueva realidad educativa se evidencia en la distancia de los cuerpos y la distancia en los procesos de enseñanza y aprendizaje, que ha tenido numerosos impactos en la práctica diaria de la educación. Esta investigación busca conocer las percepciones de los profesores/as de educación básica en España y Brasil, sobre las repercusiones de la COVID-19 en la educación. Se trata de una investigación descriptiva-exploratoria, con enfoque cualitativo, que realizó 12 entrevistas semiestructuradas a profesores/as de educación básica de ambos países. Los resultados indican que la incorporación abrupta de tecnologías digitales provocó un gran sufrimiento a los docentes, debido a la falta de formación para ellos, falta de condiciones mínimas de trabajo, aparición de nuevas demandas profesionales y psicológicas, así como diferencias generacionales en las relaciones con las tecnologías.

#### Palabras clave

Educación; educación básica; tecnologías digitales; COVID 19 .

---

#### Contacto:

Maria Edna Moura Vieira, [cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com), EAPE. SGAS 907, Brasíia/Brasil

# ARTÍCULO 4: DIGITAL DESERT: REALITY OF THE EDUCATION IN PANDEMIC TIMES



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

# IJDR

International Journal of Development Research

Vol. 11, Issue, 11, pp. 51873-51879, November, 2021

<https://doi.org/10.37118/ijdr.23235.11.2021>

RESEARCH ARTICLE

OPEN ACCESS

## DIGITAL DESERT: REALTY OF THE EDUCATION IN PANDEMIC TIMES

Maria Edna Moura Vieira<sup>1,\*</sup>, Simone Alves-Hopf<sup>2</sup>, José Tomas Real Collado<sup>3</sup> and Maria das Graças Luderitz Hoefel<sup>4</sup>

<sup>1</sup>PhD-Student, Department of Medicine, University of Valencia, Spain, Department of Public Health, University of Brasilia, Brazil; <sup>2</sup>Medical Student, Faculty of Medicine, Friedrich-Schiller University of Jena, Germany; <sup>3</sup>Professor, Department of Medicine, University of Valencia, Spain; <sup>4</sup>Professor, Department of Public Health, University of Brasilia, Brazil

### ARTICLE INFO

#### Article History:

Received 16<sup>th</sup> August, 2021  
Received in revised form  
12<sup>th</sup> September, 2021  
Accepted 14<sup>th</sup> October, 2021  
Published online 28<sup>th</sup> November, 2021

#### Key Words

Continuing Education,  
COVID-19, Digital Education,  
Permanent Health Education.

\* Corresponding author:  
Maria Edna Moura Vieira

### ABSTRACT

With COVID-19, the way of doing and thinking about education mediated by digital technologies suddenly emerged. The new educational reality is evidenced by the distance between the bodies and the teaching and learning processes, requiring teachers who are prepared and committed to the act of educating. This paper is a theoretical-practical study that explores professional development and teacher education in the context of the current pandemic. **Objective:** This research sought to understand the perception of basic education teachers in Spain and Brazil about the impact of COVID-19 on education. **Method:** This is descriptive-exploratory research, in which there were interviews with 12 basic education teachers from both countries. **Results:** The abrupt incorporation of digital technologies caused great suffering to teachers. The researchers observed the precariousness of work, the emergence of new professional and psychological demands, and the urgent need to adopt training processes for teachers that meet the new realities and challenges presented. **Conclusion:** Education has become more complex: working conditions have worsened; difficulties in dealing with their fears, emotions and losses; increase in educational inequality and illness. Teachers express feelings of solidarity and are aware of the importance of education.

Copyright © 2021, Maria Edna Moura Vieira et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Maria Edna Moura Vieira, Simone Alves-Hopf, José Tomas Real Collado and Maria das Graças Luderitz Hoefel. "Digital Desert: Realty of the Education in Pandemic Times", *International Journal of Development Research*, 11, (11), 51873-51879.

## INTRODUCTION

Even before the pandemic caused by SARS-CoV-2, worldwide education presented needs and challenges that people could not overcome for decades. The pandemic only increased the crises, exposing the need for initiatives that foster policies, projects, and actions with innovative strategies that enhance learning to immerse participants in an inclusive, accessible, and universal education. These policies, projects and actions must contribute to the role of the individual in the context of political, social, economic and cultural development for a sustainable society (Moura-Vieira, Alves-Hopf, Hoefel and Collado, 2021). As Morgado (2020, p. 2) emphasizes, "we are facing a situation that requires a great capacity for collaboration, sharing and innovation among the actors of the educational community". In this sense, it is essential to rethink the training of education professionals, aligning actions to the promotion of individual and collective health, and encompassing the dimensions of intersectionality, interculturality, subjectivity, and internationalization

of knowledge through a positive language and reflective articulation (Moura-Vieira, Alves-Hopf, Collado and Hoefel, 2021), in order to promote a continuous and intense flow of deterritorialization and dislocation, meeting and interaction with the principles of Permanent Education in Health (PHE): Training, Management, Service and Social Participation (Ceccim and Merhy, 2009). Thus, it is possible to favour connections, exchanges, learning, autonomy and the construction of collectives of learning and practices, in the process of translating critical reflections, into attitudes, into a way of being, an engagement, effective and resolute presence in the world (Gadotti, 2003). In this perspective, Morin (2020) warns about education's importance in the pandemic and post-pandemic world, highlighting the need for children and young people to learn how to deal with their fears, anxieties and uncertainties. The author also points to the need for a new educational order, a new gift, where education is the engine and the primary device to deal with anxieties and uncertainties. In this context, as a learning space, the school should be considered a space for health promotion, with a comprehensive view and a knowledge and affections' systematization.

## ARTÍCULO 5: OLHARES E ABORDAGENS METODOLÓGICAS EM TEMPOS DE PANDEMIA

OLHARES E ABORDAGENS METODOLÓGICAS EM TEMPOS DE PANDEMIA

### CAPÍTULO 4

## OLHARES E ABORDAGENS METODOLÓGICAS EM TEMPOS DE PANDEMIA

Maria Edna MOURA-VIEIRA<sup>1</sup>

Simone ALVES-HOPF<sup>2</sup>

José Tomás Real COLLADO<sup>3</sup>

Maria da Graça Luderitz HOEFEL<sup>4</sup>

<sup>1</sup> Doutoranda em Medicina e Saúde Coletiva, Departamento de Medicina da Universidade de Valencia, Departamento de Saúde Coletiva da Universidade de Brasília (UnB), Brasil, Espanha; <sup>2</sup> Graduanda do curso de Medicina, Faculdade de Medicina da Friedrich-Schiller Universidade Jena, Alemanha; <sup>3</sup> Orientador/Professor do Departamento de Medicina (Endocrinologia) Universidade de Valencia, Espanha; <sup>4</sup> Orientadora/Professora do Departamento de Saúde Coletiva (UnB).  
[cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com)

**RESUMO:** Com a COVID-19, a forma de fazer e pensar a educação mediada por contextos diversos emergiu de forma desafiadora. A nova realidade educacional se evidencia pelo aumento das desigualdades e pela exclusão educacional, exigindo profissionais da educação e saúde preparados e comprometidos com seu papel de agente público. **Objetivo:** Contribuir com a discussão sobre a formação dos profissionais de educação e saúde e o uso de metodologias ativas no contexto da Educação Permanente em Saúde, visando a promoção de espaços de práticas didático-pedagógicas reflexivas e libertadoras. **Método:** Trata-se de uma síntese crítica-reflexiva, participativa e exploratória, acerca de dois trabalhos de campo (Violência e Percepções dos Professores durante a Pandemia) e de uma revisão integrativa (Uso de Metodologias Ativas). **Resultados:** As escolas se apresentaram tanto como um espaço de violência, como promotora de cultura de paz; Os professores se viram imersos em um verdadeiro deserto digital, tiveram que enfrentar as telas dos computadores muitas vezes sem rostos, câmeras

## ARTÍCULO 6: ARTICULATING METHODOLOGY: A POTENTIATOR DEVICE ON PERMANENT HEALTH EDUCATION

*Proceedings of the 15th International Multi-Conference on Society, Cybernetics and Informatics (IMSCI 2021)*

### Articulating Methodology: A potentiator device on Permanent Health Education

**Maria Edna MOURA-VIEIRA**

Department of Medicine, University of Valencia  
Valencia, 46010, Spain

[cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com)

**Simone ALVES-HOPF**

Faculty of Medicine, University of Jena  
Jena, Thuringia 07570, Germany

[sfisiocardio@gmail.com](mailto:sfisiocardio@gmail.com)

**José Tomas Real CALLADO**

Department of Medicine, University of Valencia  
Valencia, 46010, Spain

[Jose.T.Real@uv.es](mailto:Jose.T.Real@uv.es)

**Maria das Graça Luderitz HOEFEL**

Department of Public Health Science, University of Brasília, Darcy Ribeiro  
Brasília, Distrito Federal 70910-000, Brazil

[eracahoefel@gmail.com](mailto:eracahoefel@gmail.com)

#### ABSTRACT

Even prior to the SARS-CoV-2 pandemic, education had faced some of the gaps and challenges that now arise as of the hour. Due to the constant reinvention of didactic-pedagogical practices it is of paramount importance to integrate active methodologies in educational spaces in a process of action-reflection-action-reflection. We present the Articulating Methodology (AM), as a potentiator device, for intersectoral workmanship between the fields of health and education. The goals are to systematize the concepts of the AM with both PHE principles and the results of an integrative review, and we also mean to encourage the development of PHE mechanisms. Method: This is an exploratory/participatory study carried out in three steps: describing the authors' experiences; bibliographic research; and integrative review for a discussion about the contextualization of the methodologies and methods. Results: we identified important elements in the integrative review that can be added to the AM using technology information and activity planning. Conclusion: It is essential to reaffirm the importance of the role of teacher's role in educating furthermore one needs to develop a sensitive reason for a more humanized practice. We highlight that AM stands out in this process, through the creation of Proactive Agendas, which reinforce social participation and use of technological information, allowing for the tone of the narratives/propositions to emerge from the participants' experiences/voices/listening.

**Keywords** Active Methodology, Permanent Health Education, Educative Dimension, Health Dimension, Informatics.

#### 1. INTRODUCTION

Education on the world stage, even before the pandemic caused by SARS-CoV-2, had been facing needs and challenges that had not been overcome throughout decades of effort. The pandemic event has increased those gaps, exposing the need for initiatives that foster projects and actions with innovative strategies that enhance learning in such a manner that participants are immersed in an inclusive, free, and universal educational experience. Considering these projects and actions ought to contribute to the role of the individual in the context of political, social, economic, and cultural development of a sustainable society.

According to Boff (2020) "COVID-19 is the consequence of humanity's lack of education, it is a problem of education and from now on education cannot be the same" [1]. It is thus important to rethink the training of both health and education professionals, aligning actions to the promotion of individual and collective health, and encompassing the dimensions of intersectorality, interculturality, subjectivity, as well as the internationalization of knowledge, through positive language and reflective articulation. These actions can promote a continuous and intense flow of deterritorialization and inventions, as a way of interacting with the principles of Permanent Health Education (PHE): Teaching, Management, Service and Social Participation [2]. Saviani (2010) corroborates this view by stating that educational work is the act of producing, directly and intentionally in each singular individual, the humanity produced historically and collectively by the human group [3].

In this sense, any learning space should be considered a space for health promotion, with a comprehensive view, for the systematization of knowledge and affections, rendering the education generated in these spaces, to be the very materialization of the meaning of life, deriving mainly from the lessons learned during the current pandemic. Thus, integrating active methodologies in educational spaces becomes imperative, since didactic-pedagogical practices are constantly reinvented, in an action-reflection-action-reflection process.

In addition, we must consider new challenges posed by the pandemic. According to Moura-Vieira and Colleagues (2021), schooling will not be the same, even with the return of face-to-face classes [4]. The educational context has become even more complex, other challenges have been added to the existing ones, such as working conditions that have worsened a lot. According to these authors, "many teachers had to adapt to new technologies, to the distance from bodies caused by social isolation and by the use of protective equipment, such as the mask, which makes it difficult for students to teach, bond and learn". Teachers also had to "overcome their fears and difficulties in relation to the technologies and awe of being infected in the face-to-face classes, all in a situation of precarious work" [4].

This serves to reaffirm the need to integrate active methodologies in educational spaces, as way to contribute to overcoming fears and losses caused by COVID-19. In addition, it is essential to reaffirm the importance of the teacher's role as the protagonist of educational conduct as well as the need to develop a "sensitive

## ARTÍCULO 7: ARTICULATING METHODOLOGY – WEAVING A TRANS-DISCIPLINARY KNOWLEDGE

Journal of Systemics, Cybernetics and Informatics (2022) 20(1), 270-295  
<https://doi.org/10.54808/JSCI.20.01.270>

### Articulating Methodology – Weaving a Trans-Disciplinary Knowledge

\*Maria Edna Moura Vieira<sup>1</sup> Simone Alves-Hopf<sup>2</sup> José Tomás Real Collado<sup>3</sup>  
 Maria da Graça Luderitz Hoefel<sup>4</sup>

<sup>1</sup>Department of Medicine, University of Valencia, Spain  
 Department of Public Health, University of Brasilia, Brazil

<sup>2</sup>Faculty of Medicine, Friedrich-Schiller University of Jena, Germany

<sup>3</sup>Department of Medicine, University of Valencia, Spain

<sup>4</sup>Department of Public Health, University of Brasilia, Brazil

<sup>1</sup>[cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com), <sup>2</sup>[sfisiocardio@gmail.com](mailto:sfisiocardio@gmail.com), <sup>3</sup>[Jose.T.Real@uv.es](mailto:Jose.T.Real@uv.es)  
<sup>4</sup>[gracahoefel@gmail.com](mailto:gracahoefel@gmail.com)

#### Abstract<sup>1</sup>

*Background: With the emergence of the SARS-CoV-2 pandemic, the educational context became more complex, and other challenges were added to the already-existing ones. The way of doing and thinking about education mediated by digital technologies emerged suddenly. It put our view of the world into question because the world has changed, we are no longer the same, and the need for humanitarian health and transdisciplinary education has expanded in all contexts. The new educational reality is evidenced by the social distancing and the teaching and learning processes, requiring prepared teachers and committed to the act of educating. The current pandemic exposed some needs that foster policies, projects and actions with innovative strategies, which enhance learning, so that participants are immersed in an inclusive, trans-disciplinary, dialogic, free and universal education, with a view to unraveling the complexity of social interactions. The new reality aspires to generate a transforming awareness of society, in which people recognize*

Ac  
 Ve z



## Articulating Methodology – Weaving a Trans-Disciplinary Knowledge

\*Maria Edna Moura Vieira<sup>1</sup> Simone Alves-Hopf<sup>2</sup> José Tomás Real Collado<sup>3</sup>  
 Maria da Graça Luderitz Hoefel<sup>4</sup>

<sup>1</sup>Department of Medicine, University of Valencia, Spain  
 Department of Public Health, University of Brasília, Brazil

<sup>2</sup>Faculty of Medicine, Friedrich-Schiller University of Jena, Germany

<sup>3</sup>Department of Medicine, University of Valencia, Spain

<sup>4</sup>Department of Public Health, University of Brasília, Brazil

<sup>1</sup>[cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com), <sup>2</sup>[sfisiocardio@gmail.com](mailto:sfisiocardio@gmail.com), <sup>3</sup>[Jose.T.Real@uv.es](mailto:Jose.T.Real@uv.es)  
<sup>4</sup>[gracahoefel@gmail.com](mailto:gracahoefel@gmail.com)

### Abstract<sup>1</sup>

*Background: With the emergence of the SARS-CoV-2 virus, the educational context became more complex, and other challenges were added to the already-existing ones. The current pandemic exposed some needs that foster policies, projects and actions with innovative strategies, which enhance learning, so that participants are immersed in an inclusive, trans-disciplinary, dialogic, free and universal education, with a view to unraveling the complexity of social interactions. The new reality aspires to generate a transforming awareness of society, in which people recognize themselves as part of the problems, but above all as part of the solutions. In the education and health sectors, it is essential to reconstruct dynamics, processes, participatory methodologies, and forms of democratic management, which are reaffirmed in the daily practice of educators and health professionals. Objective: Systematize the concepts of the Articulating Methodology (AM) with the Permanent Health Education principles in a perspective that promotes transdisciplinarity, multiple identities, knowledge exchanges and singularities that configure the subjects involved in the education and learning act. Method: This is a descriptive-exploratory study carried out in three stages: description of the authors' personal and professional experiences; conducting of bibliographic research; conducting of an integrative review for a broad discussion on the contextualization of active methodologies in the education and health sectors. Results: We identified important*

<sup>1</sup>\*Contact author: Maria Edna Moura Vieira ([cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com))

We would like to express our gratefulness to the Peer-editors Prof. Dr. Juliane Cabral Silva, an expert in the field of Biotechnology and Environmental System of Center of Biological Science at the State University of Health Sciences, and Faculty of Medicine at the University CESMAC Alagoas, Brazil, and Prof. Dr. Jacinta de Fatima Sena da Silva, collaborating researcher of the Department of Collective Health, Faculty of Health Sciences, at the University of Brasília and at the Osvaldo Cruz Foundation, Brasília, DF for their collaboration in understanding, editing and preparation of the final manuscript.

# ARTÍCULO 8: CENTURY ENCOUNTERS: FREIRE & MORIN IN DIALOGUE WITH PERMANENT HEALTH EDUCATION

*Proceedings of the 13th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2022)*

## Century Encounters: Freire & Morin in Dialogue with Permanent Health Education

**Maria Edna MOURA-VIEIRA**

Department of Medicine, University of Valencia, Spain  
[cartasparaednamoura@gmail.com](mailto:cartasparaednamoura@gmail.com)

**Simone ALVES-HOPF**

Faculty of Medicine, Friedrich-Schiller University of Jena, Germany  
[sfisiocardio@gmail.com](mailto:sfisiocardio@gmail.com)

**José Tomas Real COLLADO**

Department of Medicine, University of Valencia, Spain  
[Jose.T.Real@uv.es](mailto:Jose.T.Real@uv.es)

**Maria da Graça Luderitz HOEFEL**

Department of Public Health Science, University of Brasilia, Brazil  
[eracahoefel@gmail.com](mailto:eracahoefel@gmail.com)

### ABSTRACT<sup>1</sup>

The year 2021 was singular, full of challenges for humanity and filled with dualities. If, on the one hand, it was a year to celebrate the centenaries of Paulo Freire and Edgar Morin. On the other hand, the pandemic has called into question our view of the world, as the world has changed, we are no longer the same, and the need for health and education humanitarian and transdisciplinary has expanded. Our objective was to build bridges of dialogues and connections, guided by the principles and dimensions of Permanent Health Education (PHE). **Method:** The research is characterized as a qualitative, participatory and exploratory methodology in dialogue with Paulo Freire and Edgar Morin. We carried out a documentary content analysis of 10 works by Morin and 12 works by Freire, in dialogue with the National Policy on Permanent Health Education (PNEPS). **Results:** It was possible to notice that: a) The Proposal for PHE dialogues with the ideas of Freire and Morin; b) These authors bring in their works important aspects about transdisciplinarity, interdisciplinarity and human complexity for a humanitarian and liberating education. **Conclusion:** It is essential that education is considered an ethical, aesthetic and political commitment of governments and society.

**Keywords:** Education. Complexity. Health. Permanent Health Education. Transdisciplinary.

### 1. INTRODUCTION

The year 2021 has become a unique year, full of challenges for humanity and filled with dualities. On the one hand, it was the year to celebrate the centenaries of Paulo Freire, educator, thinker and pedagogue of affections and liberation, who left an incalculable legacy for humanity and Edgar Morin, anthropologist, sociologist and philosopher, considered a humanist planetarium and the architect of human complexity. Tireless, Morin shares, to this day, his lived and experienced world and his complex thought of reconnecting fragments of knowledge. On the other hand, the pandemic, caused by SARS-CoV-2, has called into question our view of the world, as the world has changed, we are no longer the same, and the need for

comprehensive health and education, moreover, humanitarian and transdisciplinary has expanded in all contexts.

Health systems in the world context have been in high demand since 2020 with the COVID-19 pandemic, and even failing to respond to all the needs presented, it has shown the world the importance of public policies for comprehensive and universal health care. In addition, it is necessary to think about strengthening systems and a post-pandemic agenda to meet the repressed health demands. From the perspective of health workers, it is the worst-case scenario. Their work acts as a vector in the transmission of the virus in society, which is why many health professionals had to isolate themselves to protect their loved ones: family members, close people and the daily support network [1]. In addition, the systems, in some countries, have gone or are starting to function at their maximum capacity or close to it, causing work to be carried out in situations of scarcity and without adequate working conditions, facilitating contamination between teams and generating suffering, losses, frustrations and mental illness.

In the educational scenario, both teachers and students will have to deal with lived experiences that may have left several negative impacts, not only on learning, but on socio-emotional development caused by social isolation, losses and distancing from the bodies. In this sense, in addition to functional needs, teachers and students need emotional support, whether in face-to-face, virtual or hybrid classes [2].

The current moment, according to Morin "is a festival of uncertainty triggered by the SARS-CoV-2 pandemic, is one of the challenges of complexity"[3]. For him, complexity is what is woven together, which intertwines, which interconnects what was disconnected, in order to unite what had been fragmented and separated by a traditional paradigm. Furthermore, we believe that the pandemic is closely related to the "progress" of humanity.

... in the physical, biological, sociological and anthropological universe, there is a complex problem of progress... it is necessary to make progress in the idea of progress, which must stop being a linear, simple, safe and

<sup>1</sup>The authors thank Dr. Professor Denise Severo and Professor Dr. Silveria Maria dos Santos from the University of Brasília - Brazil, as non-anonymous peer-reviewers of this manuscript.

## ANEXO 1

## SÍNTESE DOS RESULTADOS

OBJETIVO GERAL	OBJETIVOS ESPECÍFICOS	ARTIGOS	RESULTADOS ENCONTRADOS
<p>Analizar el modelo de Educación Permanente en Salud (EPS), adoptado por el Ministerio de Salud de Brasil en 2004, y si ese modelo es adecuado para los profesores de la Red de Educación Básica.</p>	<p>1. Analizar si la EPS es un Modelo de Educación a seguir en los procesos de formación de los profesionales de la educación</p>	<p>03 - 04 - 08</p>	<p>Sí, desde que si incorporen algunos principios pedagógicamente diseñados para la práctica educacional. Tales como: Intersectorialidad, Interculturalidad, Internacionalización del conocimiento; transdisciplinariedad; Amorosidad, Humanización.</p>
	<p>2. Identificar en qué medida los modelos de educación continua y educación permanente en salud satisfacen las necesidades de formación de los profesionales de la educación en el contexto actual de crisis sanitaria</p>	<p>01 - 03 - 04 - 08</p>	<p>Se identificó que los dos modelos tal como son en la práctica no dan cuenta de la complejidad de la educación actual. Es necesaria la conexión entre ambos modelos y la unión de las potencialidades existentes de ambos, en un proceso de gestión intersectorial y cooperativo.</p>
	<p>3. Reflexionar sobre las fortalezas y debilidades de los dos modelos de educación en relación con la promoción de nuevos acuerdos de gestión y dispositivos</p>	<p>02 - 03- 06 - 07 - 08</p>	<p>En el proceso de reflexión, fue posible identificar varios puntos fuertes y débiles para nuevos acuerdos de gestión y dispositivos</p>

	pedagógicos en las escuelas		pedagógicos en las escuelas.
	4. Discutir el potencial de los dos modelos de educación en cuanto a la instrumentalización de los profesores en relación con la práctica pedagógica dialógica.	Todos	Se reafirmó que los dos modelos tal como son en la práctica no dan cuenta de la complejidad de la educación actual. Existe la necesidad de una conexión entre los dos modelos y la unión del potencial existente de ambos, en un proceso de gestión intersectorial y cooperativa.
	5. Sistematizar y analizar los trabajos de Paulo Freire (12) y Edgar Morin (10) y tres ordenanzas de la Política Nacional de Educación Permanente en Salud para construir puentes de diálogo y vinculación, guiada, también, por los principios y dimensiones de la EPS	08	Morin y Freire dialogan con la EPS, al considerar el contexto de la complejidad humana en el mundo del trabajo, donde se intercambian saberes, no solo técnicos y científicos, sino también en dimensiones éticas de la vida..
	6. Desarrollar procesos de formación en el contexto de las EPS, desde la perspectiva de la transversalidad del proceso salud-enfermedad, con el objetivo de potenciar el conocimiento, la autoestima, la motivación y la promoción de la salud	02	Se realizaron Procesos de Capacitación a estudiantes y profesores sobre violencia y salud mental, presentado en el Artículo 02

	de profesores y estudiantes.		
	7. Proponer un diseño metodológico alineado con los principios de la EPS, dirigido a los profesionales de la educación, en particular a los profesores, con agregados de dimensiones pedagógicas que respondan a la necesidad de procesos formativos dialógicos, cogestionados, humanizados y con lenguaje intercultural, de manera de repercutir en la práctica pedagógica en el cotidiano de la escuela.	02 - 03	La Metodología Articuladora fue desarrollada en esta tesis como un dispositivo didáctico-pedagógico para procesos formativos de educación permanente en salud.