

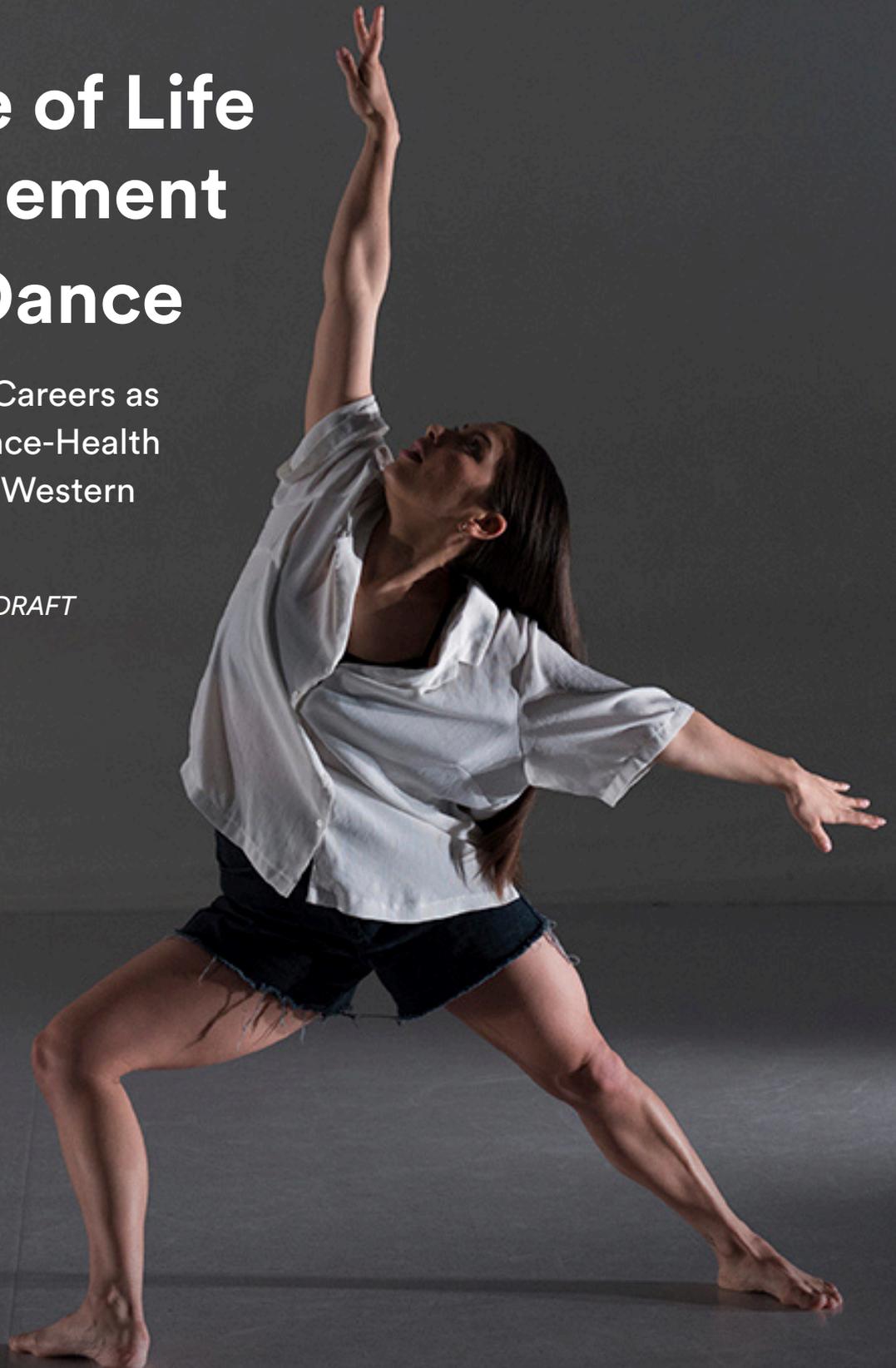
30 October 2025
(Final Draft)

auSDANCE
WA

Whole of Life Engagement with Dance

Training and Careers as
Qualified Dance-Health
Specialists in Western
Australia

CONSULTATION DRAFT



Dance and Allied Health Curriculum Pathways Mapping

Authors

Lead Author:

GARY HODGE (Ausdance WA Chair)

Contributing Author:

DR. MARIA GAMBLE (Dance and Health Education Lecturer, Edith Cowan University; and Ausdance WA Board Member)

Acknowledgements

Ausdance WA thanks the following individuals who assisted through consultation in the development of this discussion paper. Their pioneering work in Western Australia has successfully integrated dance as both an art form and as a valid complementary therapy. (Note: Dance leaders listed in alphabetical order. See pages 7-9 for more detailed Dance-Health Leaders' profiles).

SAMANTHA CARSON Lecturer Foundation Skills South, South Metropolitan TAFE
Advanced Diploma of Teaching Dance (Australian Ballet School), Rhythm Works Integrated Dance Program (global dance program for people with disability). Certificate IV in Training and Assessment, Certificate III in Individual Care Disability. (Currently completing Cert III.)

DR SHONA ERSKINE Psychologist
MPsych(Industrial/Organisational Psychology)/PhD, Bachelor of Arts (Honours) Psychology, Bachelor of Dance.

SCOTT EWEN Founder and Director Onyx Movement™
Bachelor of Arts (Dance WAAPA) ECU, Diploma of Nursing, Certificate IV Fitness (Master Trainer), Certificate III Emergency Response & Rescue, Diploma of Remedial Massage and Yoga Teacher Qualification.

PAIGE GORDON Founding Director & Lead Teacher Lifespan Dance
BA (Dance WAAPA) ECU, DipPA BEd, Dance for PD® (Dance for Parkinson's), ECU Vice Chancellor's PhD Candidate.

SALLY SHANASSY Head of Performing Arts Kolbe Catholic College
BA (Hons), Post Graduate Certificate in Education, ISTD Tap Associate, Acrobatic Arts qualifications, and Rhythmworks certification. Certificate IV in Training and Assessment, Certificate IV in Dance Teaching and Management.

LYNNE WILLIAMS Founding Director Dance in Health
BA Fine (Arts) (Honours) Dance and Health™ - Lead Practitioner and Founding, London Contemporary Dance, Dance Therapist St John of God Health Care, Dance for PD® (Dance for Parkinson's).

FOR SPECIFIC DANCE INDUSTRY INPUT, EXPERTISE AND CONSULTATION;

THE DANCE INDUSTRY OF WA for its input into the //IN MOTION// report as many of the drivers and issues addressed in this paper were identified and raised during the WA dance sector consultation in 2024. These include providing policy makers with important information for consideration, and developing a sense of community by advocating for the unique contributions of the dance sector. These are not only related to the art form itself but also multiple areas of health and wellbeing. The research offers new opportunities for artistic and professional development, to build and celebrate the resilience and perseverance of local artists, and to recognise and respect ongoing First Nations contributions to dance - through rich cultural diversity and heritage in which healing and health are inextricably linked. You can read the full report [here](#).

PROFESSOR SHIRATH SRIRAM (Chief Scientist of Western Australia) for advice on advocacy and need for establishing research on dance and health specific to Western Australia.

DR LUKE HOPPER (Vice-Chancellor's Research Fellow at WAAPA/ECU; named as one of the country's top 250 researchers for 2024 in The Australian's Research Magazine) whose research is centred around the scientific and creative analyses of human movement. The ECU Performance Capture Studio originated by applying advanced biomechanical methods to injury prevention and aid recovery in dance.

DR JOANNA NICHOLAS (Lecturer in Dance and Performance Science at WAAPA) for advice on psychology, physiology, injury prevention and dancer health.

Ausdance WA extends its gratitude also to AMY WISEMAN (Ausdance WA Executive Director) whose knowledge, experience, and insights were instrumental in shaping this paper.

Design by Phoebe Tempra.

The community of Ausdance WA acknowledges the Traditional Owners of all Lands and Countries on this continent. We pay particular respect to Elders, Cultural and Community Leaders, and emerging leaders.

With this understanding of the country's First Peoples, we are grateful for our place in learning and serving Dance, Arts and Culture in Western Australia.

Always Was. Always Will Be.

Disclaimer and Consultation on Professional Training Accreditation

The proposed Dance and Allied Health pathways are presented for preliminary discussion and consideration for further action where needed.

Every professional or student dancer's situation tends to be different and individual dance-health pathways going forward need to be discussed with course and career advisors in each education and training institution in line with aspirations - be it a school, TAFE or university.

The proposed pathways in this paper are informed by:

- Global, peer-reviewed cognitive and neuroscience research examining the role of dance as a lifelong pursuit, particularly during critical phases of physical and neurological development from early childhood through to older adulthood.
- An analysis of movement and locomotion expertise embedded in the Years 11 and 12 ATAR and General Dance courses (WA School Curriculum and Standards Authority), as well as in existing graduate, postgraduate, and short-course programs in the TAFE and university sectors in Western Australia that have the capacity to equip qualified dancers with the skills to transition into Allied Health roles as independent practitioners, or for being eligible to apply for advertised positions in allied health departments or organisations.
- Firsthand insights from established Western Australian leading dance professionals who have successfully navigated careers bridging dance and allied health.



Contents

- 04** Foreword - Chair and President Ausdance WA
- 05** Scope of Consultation
- 07** Leadership: Dance-Health Specialist Case Studies
- 10** Key Drivers of the Discussion Paper
- 11** Conceptual Model: Elements of Dance Integrated into Allied Health Sectors
- 12** Demand for Dance-Health Specialist Services
- 14** Case Study: Scottish Ballet and the National Centre for Dance Health UK
- 15** Dance-Health Specialist Pathways For Discussion:
 - 15** • Secondary School Sector
 - 16** • University Sector
 - 17** • TAFE WA Sector
 - 18** • Proposed New Pathway: Statewide Transition and Upskilling of Existing Qualified and/or Mature Age Dancers
 - 19** • Proposed New Pathway: First Nations Culturally-Based Dance-Health Specialist Sector
- 21** Attachments
 - 21** • Attachment One: Dance Lifespan Benefits Summary (Research undertaken 2015–2025)
 - 23** • Attachment Two: Conceptual Model: Research Underpinning the Elements of Dance Integrated into Allied Health Sectors
 - 25** • Attachment Three: Condition-Specific Research (Dance for Parkinson's)

Foreword from the Chair and President Ausdance WA

On behalf of the Ausdance WA Board, I am pleased to present this discussion paper which seeks to broaden the professional career opportunities for professionally qualified dancers in the dance industry and in the allied health sectors.

In doing so, the advocacy strategy in this paper aligns with the following State Government priorities:

- Preventative Health and Aged Care– New ministerial portfolios aim to reduce hospital presentations and support seniors' wellbeing;
- Health and Medical Life Sciences– A priority sector in the 2021-2025 JTSI Strategic Plan, supporting WA's economy; and
- Economic Diversification–Diversify WA highlights arts, culture, and creative industries as key drivers of innovation, creativity, skills, and global markets.

Since the early 2000s, global meta-analyses of cognitive, neurological, and social health research areas have increasingly demonstrated the wide-ranging benefits of dance across the human lifespan. Studies highlight its measurable and positive impacts, particularly during critical stages of human brain and body development.

This paper aims to harness professionally-qualified dancers' deep understanding of human movement, locomotion and neuroanatomy to address some of Western Australia's most pressing health and wellbeing needs. In this regard, the paper explores two well-established dimensions of dance: (i) Its artistic role as a sustainable, lifelong career and (ii) Its scientifically validated benefits as a complementary therapy within allied health. To harness this potential of our dancers, Ausdance WA seeks to address three key objectives:

1. Advocate to peak government bodies, policy and decision makers for greater recognition of dance's multiple health benefits across the human lifespan.
2. Increase participation in Years 11 and 12 ATAR and General, TAFE and university Dance courses by improving career advice on the diverse professional pathways available to dance students.
3. Develop bridging programs that establish and draw on Recognition of Prior Learning (RPL) to qualify experienced professional dancers to work alongside allied health professionals in clinical settings.



Recognising the full scope of dancers' expertise potentially unlocks diverse and rewarding career pathways. This enables dancers to remain connected to their art throughout their lives while addressing critical societal needs—from preventative health and maintaining mobility in ageing populations, to improving childhood and youth mental wellbeing. A robust dance industry not only sustains artists but also delivers significant value to the wider community. Despite its proven value, dance remains an underutilised and often undervalued resource within broader health and employment sectors. This discussion paper seeks to rectify this undervalued human resource.

Next Steps

By stimulating informed dialogue among key policymakers, stakeholders, dance professionals, health practitioners, educators, and community members, Ausdance WA is seeking to integrate dance therapies into the WA allied health systems.

Following industry consultation, Ausdance WA will engage with education and training providers, career advisory bodies, and accrediting authorities to formalise these pathways. This will ensure dancers have access to credible and satisfying career pathways and capitalise on opportunities available in both dance and allied health.

Ausdance WA is also seeking case studies from individuals or organisations that have successfully bridged dance into the allied health sector. These case study experiences strengthen our advocacy and help shape present and future training systems.

A handwritten signature in black ink that reads "Gary Hodge". The signature is fluid and cursive, written over a white background.

Gary Hodge, Ausdance WA Chair
October 2025

Scope of Consultation

Following further consultation with government, industry and community stakeholders, on the release of this paper, Ausdance WA will engage with education and training providers, career advisory bodies, unions, peak professional associations and accrediting authorities to formalise a number of these pathways. This is to ensure that trained dancers have access to portable, credible, resilient and professional career opportunities in both dance and allied health should they choose to pursue them.

These include the efficacy and robustness of the dual qualifications pathways with:

- Edith Cowan University (includes the Western Australian Academy of Performing Arts - WAAPA), Curtin University, The University of Western Australia, Notre Dame (University Careers and Employability Services);
- Training.gov.au and TAFE WA, FutureNow Creative and Leisure Industries Training Council (WA),
- School Curriculum and Standards Authority (Western Australia);
- NATA National Australia Training Association;
- Health Services Union of Western Australia (HSUWA);
- Education Department of Western Australia;
- Media, Entertainment & Arts Alliance (MEAA);
- NDIS Quality and Safeguards Commission, and Services Australia (under the eligibility criteria defined within the Health Insurance Act 1973 and related regulations);
- Teacher Registration Board of Western Australia (TRBWA);
- Career Industry Council of Australia (CICA);
- National Association of Graduate Careers Advisory Services (NAGCAS);
- Australian Centre for Career Education (ACCE); and
- Catholic Education WA (CEWA) and Association of Independent Schools WA (AISWA).

Interest Groups and Health Stakeholders

- Office of the Federal Minister for Health and Ageing
- Office of the Western Australian Ministers for Health, Preventative Health, Ageing and Cultural Industries
- Australian Medical Association (AMA National and WA State Chapter)
- National Mental Health Commission (NMHC)
- Western Australian Association for Mental Health (WAAMH)
- Autism Awareness Australia and Autism Association Australia
- Parkinson's Western Australia and Parkinson's Australia
- Alzheimer's Australia and Western Australia
- Primary and Secondary Principals' Associations (Government and Non-Government)
- WA Council of State School Organisations Inc. (Peak parent body Government Schools)



Leadership: WA Professional Dance-Health Specialist Case Studies

SAMANTHA CARSON

Lecturer at South Metropolitan TAFE, Advanced Diploma of Teaching Dance (Australian Ballet School), Rhythm Works Integrated Dance Program (global dance program for people with disability), Certificate IV in Training and Assessment, currently completing Certificate III in Individual Care.

Samantha is currently lecturing at TAFE teaching adults with disabilities dance, which is a part of the GATE (Gaining Access to Training and Employment) program at the South Metropolitan TAFE. The GATE program is designed for People With Intellectual Disability (PWID) and through implementing the Rhythm Works dance program and Sign Sing (sign language singing) the program promotes community participation, movement, social interaction, communication, independent and daily living skills and technology.

Samantha also teaches Rhythm Works Dance to children and adults with disability in a mainstream dance school in Port Kennedy, WA.

The Rhythm Works Integrative Dance Program, which is the basis for Samantha's teaching practices, is a groundbreaking program that has been developed by a group of therapists in America consisting of a Paediatric Physiotherapist, Special Education Team, Occupational Therapist, Behavioural Specialist and Autism Specialist.

The dance steps are classified into sensory, kinesiology, cognitive and motor skill set categories, to assist in achieving common developmental goals. This program is targeted towards people with Autism, Down syndrome, Sensory Processing Disorder, and other individual learning disorders.

DR SHONA ERSKINE

Bachelor of Arts (Dance), MPsych (Industrial/Organisational Psychology)/PhD, Bachelor of Arts (Honours) Psychology, Bachelor of Dance.

Shona spent her twenties and most of her thirties as a professional performer of Australian contemporary dance, touring throughout Australia, New Zealand, Britain, China, Mongolia, Taiwan, Japan, and Germany.

As a registered Psychologist with a breadth of experience consulting to organisations in the areas of creativity, innovation, mental health, training, and facilitation, Shona's areas of interest span leadership development, mentoring, and culture change as well as expertise delivering psychology for performing artists across disciplines through arts companies, universities, and in private practice.

Her current arts practice focuses on social narratives and being drawn to explore the context in which personal stories and experiences reside.



SCOTT EWEN

Founder of Onyx Movement™. Bachelor of Arts (Dance WAAPA) ECU, Diploma of Nursing, Certificate IV Fitness (Master Trainer), Certificate III Emergency Response & Rescue, Diploma of Remedial Massage and Yoga Teacher Qualification.

Following a distinguished international career in contemporary dance, Scott transitioned into the health and wellness field, studied nursing and gained qualifications in fitness and yoga. Combining his artistic background with clinical knowledge and functional movement training, he developed Onyx Movement—a clinically informed movement system designed to enhance functional capacity, improve neuromuscular control, and reduce falls risk across all populations.

Through his experience as a professional dancer and later training in nursing and fitness, Scott developed Onyx Movement as a comprehensive and accessible solution to address a wide range of health concerns, particularly for older adults (45+ years old). These cohorts of people include those needing the reintroduction of exercise after injury, illness, pregnancy or extended periods of inactivity, and individuals managing chronic health conditions.

PAIGE GORDON

Founding Director and Lead Teacher of Lifespan Dance. Bachelor of Arts (Dance WAAPA) ECU, DipPA BEd, Dance for PD® (Dance for Parkinson's), Vice Chancellor's PhD Candidate.

Paige has been in the Australian dance industry for over 35 years, working as a dancer, choreographer, artistic director, lecturer and mentor. Paige has created and facilitated dance-in-health projects since 2010 - establishing programs, classes and performances. She is the only Certified Dance for PD teacher in WA, has established the ongoing Dance for PD community classes in WA, and is delighted to mentor the WA-based trained teaching dance artists.

Paige founded Lifespan Dance in 2019 and, together with a team of incredible teaching dance artists, delivers seated dance classes in aged care and hospital settings throughout Perth, WA and online. Through Lifespan Dance, there are over 250 classes taught each year to the WA community, and because of her extensive and ongoing work, Paige is recognised as a national leader in dance and health and has been a board member of Dance for Parkinson's Australia for 5 years.

Paige is undertaking PhD research on seated dance practice, and has been awarded a Vice Chancellors Scholarship at ECU.

SALLY SHANASSY

Head of Performing Arts Kolbe Catholic College. Bachelor of Arts (Hons), Post Graduate Certificate in Education, ISTD Tap Associate, Acrobatic Arts qualifications, and Rhythm Works certification. Certificate IV in Training and Assessment, Certificate IV in Dance Teaching and Management.

Sally's love of dance began in childhood, when she trained with inspiring UK mentors and performed professionally before discovering her passion for teaching during seven summer seasons at a New York camp.

Sally is a passionate dance educator and performer, originally trained in the United Kingdom, who has taught at Kolbe Catholic College since arriving in Australia in 2008. She has also been teaching at All About Dance Company since 2018, specialising in Musical Theatre and Rhythm Works - an integrative dance program celebrated for its creativity and inclusivity. Sally's teaching philosophy strongly emphasises belonging, inclusion, and developing transferable life skills that students can use far beyond the stage.

Under Sally's leadership, Kolbe's Performing Arts program is renowned for its innovative collaborations and meaningful community connections. One of her most significant partnerships is with another local educator Lucretia Ramsay, combining singing, dance, and Auslan signing. Their collaboration has led to powerful public performances and Telethon appearances, demonstrating the unifying power of the arts and how they can break down barriers and bring communities together.

She has also developed community programs connecting students with local daycares and aged care homes. Through weekly visits and specially-designed choreography, students cultivate intergenerational friendships, building empathy and emotional intelligence while receiving valuable real-world learning experiences. These initiatives enrich both the Kolbe students and the wider community.

Sally's work is deeply rooted in the understanding that dance is more than performance—it is a powerful tool for health and education. Sally initially created these programs to support students academically but soon realised the broader social, emotional, and cognitive benefits for students, staff, and collaborators alike.

LYNNE WILLIAMS

Founding Director and Lead Practitioner of Dance in Health™, BA Fine Art (Honours), London Contemporary Dance, Dance Therapist St John of God Health Care, Dance for PD® (Dance for Parkinson's).

Lynne Williams is a professionally trained dancer with an Honours degree in Fine Art (Dance) from the London Contemporary Dance School. Her international career spans performance, choreography, and teaching across the UK, Europe, Japan, and Australia. In Australia, she has worked as an artistic director, university lecturer, and contemporary dance teacher at WAAPA, and served as Associate Director of Mezzanine Gallery, supporting emerging artists.

In 2017, Lynne completed her Dance for Parkinson's training and established Dance in Health in 2018. She is now recognised as a leading practitioner in dance movement therapy in Western Australia. Her programs include Dance for Parkinson's, Dance for Wellness, 60+ Dance, Seated Dance for All, Dance to Remember (for people living with dementia), and dance movement therapy for adults with mental health conditions. Since 2018, she has worked in partnership with St John of God Hospital Midland as part of the occupational therapy team, running dance groups within geriatric, adult mental health, and dementia wards. This successful collaboration led to grant funding for further outreach programs in the community. Lynne continues to grow her practice through ongoing research, workshops, and international seminars. Her sessions use movement, music, and creative expression to promote emotional, social, cognitive, and physical wellbeing.

Key Drivers for the Development of the Discussion Paper

The genesis of Ausdance WA's investigation into dance pathways that can lead senior secondary students and existing professional dancers into lifelong careers as dancers, choreographers or dance teachers, with the further potential to leverage off the elite knowledge and skills of dance for practice in the allied health industries, has come about through a variety of factors and developments that include the:

- Evidence from global peer-reviewed cognitive and neuroscience research demonstrating that the efficacy of dance as therapy lies in its unique elements and in its multidimensional nature that integrates aesthetic, physical, cognitive, emotional, social and cultural aspects. Specific dance elements include embodiment and body awareness, rhythm and music, neuroplasticity and motor expressive movement and creativity, social connection and relational engagement, cognitive challenge and learning, physical activity and neuromotor benefits, sensory integration and stimulation, structure, ritual and predictability, cultural identity and community connection. (See more detailed description of the elements of dance on page 11.)
- Findings of the 2024 //IN MOTION// Ausdance WA Report which set future directions for the WA dance industry following extensive sector-wide consultation and which, amongst the many issues raised, identified a need for greater advocacy to keep students in dance education in schools (ATAR Dance has seen consistently lower numbers). The Ausdance WA 2024 //IN MOTION// Report also indicated a push from the sector for a dance teacher accreditation register with a view that such accreditation may assist in raising teaching standards, while mapping qualifications and pathways.
- Proposed new Australian Dance Industry Code of Practice 2025-26, developed by MEAA and Dancers Australia to set minimum conditions and payment standards, advocating for safety, fairness and sustainability, and which recognises the specialised training involved and is therefore recommending the Live Performance or Broadcasting Awards as the minimum standards.
- Providing models of education and training, and professional development delivery, that provide equity and access to allied health sector training for First Nations and regionally-based dancers, recognising the need for innovation in both face-to-face mentoring and the use of technology for access to digital classes and learning resources.
- Lived experience of professional Western Australian dance-health practitioners.
- Academic and neuroscience dance research capability in the University and TAFE sectors, WA Dance Industry and on the Ausdance WA Board.
- Need to research and reference current local and international policy frameworks to reinforce the urgency and legitimacy of addressing dance-health pathways in Western Australia.
- Need to form international research partnerships that enhance the efficacy of Western Australian dance education research that focuses on the physical, social, mental health and wellbeing and complementary therapeutic benefits of dance.
- Recent reports, including the WA Pathways to Post-School Success (2024) and the Alice Springs (Mparntwe) Education Declaration (2019), that emphasise the need for diverse and flexible education-to-employment pathways. Internationally, UNESCO and the OECD have also advocated for creativity, cultural learning, and wellbeing as pillars of sustainable futures.

CONCEPTUAL MODEL: ELEMENTS OF DANCE INTEGRATED INTO ALLIED HEALTH SECTORS

Global peer-reviewed research demonstrates that dance, as an art form, is uniquely effective as a complementary therapy. Its multidimensional nature integrates aesthetic, physical, cognitive, emotional, social and cultural elements, promoting meaningful engagement, health, resilience and quality of life across all age cohorts. Please see Attachment Two for details of relevant research.

Key Artistic and Therapeutic Related Elements of Dance Include:

- Embodiment & Body Awareness: Enhances interoception and proprioception¹, fostering mind-body integration, motor learning, and self-regulation.
- Rhythm & Music: Uses rhythmic cues to anticipate movement, regulate stimulation, and improve motor control and emotional regulation.
- Neuroplasticity & Motor Learning: Combines repetition and creative challenges to stimulate autonomic regulation, reduce stress, and enhance rest and sleep quality.
- Expressive Movement & Creativity: Offers non-verbal pathways for emotional processing, self-expression, and problem-solving, empowering individuals and groups.
- Social Connection & Relational Engagement: Encourages interaction, mirroring, and synchrony, fostering trust, empathy, and social bonding (linked to oxytocin release²).
- Cognitive Challenge & Learning: Engages memory, attention, and executive function through choreography, sequencing, and spatial navigation.
- Physical Activity & Neuromotor Benefits: Improves cardiovascular fitness, strength, flexibility, balance, and coordination, supporting overall health and mobility.
- Sensory Integration & Stimulation: Combines vestibular, proprioceptive, and auditory input to regulate the nervous system and enhance sensory processing.
- Structure, Ritual & Predictability: Provides safety, containment, and continuity, facilitating regulation and therapeutic progress.
- Cultural Identity & Community Connection: Strengthens heritage, identity, and belonging, increasing engagement and motivation.

1. Interoception refers the process by which the nervous system senses and integrates information about the inner state of the body. Proprioception is the body's ability to sense its location, movements, and actions.

2. Oxytocin-related effects: Oxytocin (OT) is a neuropeptide widely known for its peripheral hormonal effects and central neuromodulatory functions, related especially to social behaviour and social, spatial, and episodic memory.

Years 11 and 12 ATAR and General Dance
Contributing to WACE or interstate equivalents
(School Curriculum and Standards Authority WA)

AND/OR

Dance training in private dance studios/schools
General: Recreational, community and social dance
Vocational: Pre-professional dance training
VET: Certificate II (CUA20113), III (CUA30120), or IV (CUA40120) in Dance

Bachelor of Arts/Masters of Arts (Dance) - WAAPA ECU
Bachelor of Education/Masters of Education (Dance-HPE) - ECU
Aboriginal Performance Cert. IV - WAAPA

Cert IV Aboriginal Performance (WAAPA ECU)
Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice

TAFE Pathway:
Certificate IV Dance Teaching and Management
Certificate III Assistant Dance Teaching
Certificate IV in Allied Health Assistance

Examples of Professional Dance Careers and Allied Health Pathways

Professional Dance Career

- Dancer
- Choreographer
- Arts Administrator
- Dance Specialist Teacher In Schools

Ageing Populations

- Mobility
- Chronic Disease Management

Dementia and Brain Health

Neurodiverse Needs

- Autism
- Attention Deficit Hyperactivity Disorder
- Developmental Speech
- Obsessive Compulsive Disorder

Psychology

- Dancer Resilience
- Wellbeing

Mental Health

- Anxiety
- Depression

Injury Rehabilitation and Therapy Professions

Demand for Dance-Health Specialist Services

As demonstrated by a number of current dance-health industry leaders in Western Australia (see pages 7-9), Dance-Health Specialists hold a dual or multiple qualifications, for example, a Bachelor of Arts (Dance) or Bachelor of Education (Dance-HPE) or equivalent, and a recognised allied health qualification - such as a Certificate IV Allied Health, psychology qualifications or global industry-accredited programs such as Dance for Parkinson's® and the Rhythm Works Integrated Dance Program® - form part of the dance-health leaders' profiles. This unique combination allows dance professionals to work within the allied health sectors, using dance as their primary therapeutic modality.

How Dance-Health Specialists Could Meet Present and Future Allied Health Demand and Fill Shortages:

1. Augmenting the Existing Workforce:

The Dance-Health Specialist does not replace occupational therapists (OT) or physiotherapists, but would act as a proven workforce multiplier. A single Dance-Health Specialist is able to run group sessions for falls prevention or mental health, measurably helping 10-15 clients in the time it takes a traditional therapist to see one or two individually. This increases system capacity.

2. Enhancing Engagement and Adherence:

A major challenge in preventative health is patient adherence to exercise programs. Dance is inherently rewarding, social, and culturally resonant. Experience over the past decade in Western Australia shows that programs led by a skilled dancer are more likely to be attended consistently and with greater engagement, leading to better long-term health outcomes.

3. Addressing the 'Whole Person':

Dance simultaneously addresses physical, cognitive, emotional, and social domains. An OT might focus on the biomechanics of a sit-to-stand transfer; whereas a Dance-Health Specialist would embed that same functional movement into a sequence set to music, also working on rhythm, memory, mood, and social connection. Dance Therapy is highly efficient and holistic.

4. Working with Specific Cohorts:

- Ageing population and falls prevention: Qualified Dance-Health Specialists are perfectly suited to lead dynamic balance classes. Their expertise in rhythm, alignment, weight transfer, and expressive movement is directly applicable to improving gait and preventing falls. The use of music and social dance forms (like folk dance) can also mitigate loneliness.
- Progressive neurological conditions (e.g., Parkinson's): Programs like Dance for Parkinson's and Rhythm Works Integrative Dance program are evidence-based. A Dance-Health Specialist with clinical knowledge can tailor programs to specific stages of disease, understanding the medical nuances while delivering the artistic benefits.
- Mental health (young adults): Dance-Health Specialists can run groups in schools, universities, and community centres offering a non-stigmatising, non-verbal outlet for stress, anxiety, and emotional expression. This physically-based and expressive activity complements talking therapies and can reach young people who are reluctant to engage in traditional counselling.
- Autistic young people: Dance provides a structured yet creative environment for developing social skills (mirroring, synchrony), body awareness, emotional regulation, and self-confidence. A dual-qualified Dance-Health Specialist can write goals into NDIS or state-based plans and measure progress against clinical benchmarks.
- Disability cohort: The Rhythm Works Integrative Dance Program is a groundbreaking program that has been developed by a group of therapists in America consisting of a Paediatric Physiotherapist, Special Education Team, Occupational Therapist, Behavioural Specialist and Autism Specialist. The dance steps are classified into sensory, kinesiology, cognitive and motor skill set categories, to assist in achieving common developmental goals. This program is targeted towards people with Autism, Down syndrome, Sensory Processing Disorder, and other individual learning disorders.

Bridging the Gap: From Dance Artist to Dance Health Specialist

The key to this model is dual qualification. A dancer alone, without clinical training, cannot perform assessments, diagnose, develop treatment plans, or work within a regulated healthcare framework. Conversely, a therapist without deep artistically-based dance training may lack the embodied knowledge to safely and effectively demonstrate the use of dance.

Pathways:

1. Year 12 ATAR or General Dance (School Curriculum and Standards Authority WA).
2. TAFE Dance Teaching and Management Certificate IV (CUA40320); Certificate IV in Allied Health Assistance (Physiotherapy and Occupational Therapy Focus); Certificate III in Assistant Dance Teaching (CUA30320).
3. Graduate Degree: Bachelor of Dance or Fine Arts (Dance) or Bachelor of Education (Dance-HPE), Cert IV Aboriginal Performance (WAAPA).
4. Postgraduate Conversion: The minimum qualification is a Certificate IV in Allied Health for dancers with a degree in dance. A specialised Master's degree in Dance-Therapy or Somatic Practices, or a direct entry into an accredited Master of Occupational Therapy, Physiotherapy, or Mental Health Practice, would provide a system of the highest standard.
5. Accreditation: The Dance-Health Specialist must be accredited with the relevant national board (e.g., AHPRA for OT/Physio) or professional association (e.g., DTAA for dance therapy) to bill schemes like Medicare, the NDIS, or state health care systems.

A High-Value Solution

Professionally qualified dancers who cross-train as allied health professionals would not just be another worker, they would be a high-value specialist who could:

- Increase capacity through effective group interventions.
- Improve patient engagement and adherence in preventative health programs.
- Deliver holistic care that simultaneously addresses physical, mental, and social health needs.

Challenges and System Barriers

Funding Models:

The current Medicare and NDIS funding structures are built around traditional therapies. New item numbers or funding codes would be needed to recognise "dance-informed OT" or "dance in group therapy." This requires advocacy and evidence.

- Workplace Integration: Hospitals and health services would need to understand how to hire and utilise this unique skill set. Creating clear job descriptions is essential.
- Building the Evidence Base: While a strong body of evidence exists for dance, more large-scale, randomised controlled trials conducted in an Australian context would help convince policymakers and insurers.

Questions for the WA Dance Industry

- Which parts do you see as Ausdance WA and Ausdance National's roles in addressing these barriers?
- What can you or your organisation do to assist in addressing these barriers?
- Would (or could) a co-location of independent Dance-Health specialists and services that protects Dancer Intellectual Property facilitate research and development and a cross-sector exchange of best practice?

Investigation into Best Practices: Scottish Ballet Case Study - An International Centre for Dance Health

To advance dance-health advocacy, Ausdance WA is investigating successful international and Australian models. The Scottish Ballet's "Dance for Health" program serves as a premier international case study, distinguished by its:

- Rigorous, evidence-based research conducted with academic partners.
- Deeply embedded partnerships with national, regional, and local health and community systems.
- Holistic, person-centred approach to health and wellbeing.

PROGRAM OVERVIEW

Since 2013, Scottish Ballet has been developing its SB Health initiative, using tailored dance sessions, led by specialist artists, to improve health outcomes for participants in education settings, hospitals, care homes, and community health projects.



The links between the arts and health are long established, not only in creating the environment for good health to flourish, but in supporting people with long term conditions. Scottish Ballet are leading exponents of this approach, and I am immensely proud to be attending and supporting Healing Arts Scotland week to learn more about how we can make the most of this fantastic opportunity to improve people's health and wellbeing.

- Scotland's Chief Medical Officer Sir Gregor Smith

The above address by Scotland's Chief Medical Officer, Sir Gregor Smith, was delivered at the Healing Arts Scotland Week hosted by the Jameel Arts and Health Lab and in collaboration with the World Health Organization (WHO) 19-24 August 2024.

CORE STRENGTHS

- Evidence-Based Impact: Moves beyond anecdotal evidence through academic partnerships, generating robust data to demonstrate programme efficacy.
- Holistic Health Focus: Addresses physical, mental, emotional, and social health, aligning with contemporary preventative health strategies.
- Strategic System Integration: Forges sustainable collaborations across the health and social care sector, and other bodies, embedding dance into care pathways and creating scalable, sustainable models.

For more details, visit: <https://scottishballet.co.uk/move-with-us/sb-health/>

Dance-Health Specialist Pathways: Secondary School → Tertiary Study

Schools Curriculum and Standards Authority Western Australia - Years 11 and 12 ATAR (Australian Tertiary Admission Rank) Dance and Year 12 General Dance

Years 11 and 12 ATAR and General Dance provides students with opportunities to achieve an elite level of movement skills.

It achieves this by developing an understanding of the physical competencies specific to dance, including experiential anatomy (movement specific alignment), strength, flexibility, coordination and rhythmic understanding, while learning to use the body as a medium for artistic expression.

Through critical decision-making in individual and group work, movement is manipulated and refined to reflect the choreographer's intent.

The study of dance draws on other disciplines, including yoga, martial arts and gymnastics. It is essential that students demonstrate safe dance practices and understand health issues that will enhance their general physical well-being and prolong their dance involvement.

Bachelor of Arts (Dance) Western Academy of Performing Arts. This course has been accredited by ECU as an AQF (Australian Qualifications Framework) Level 7 Bachelor Degree.

In this course, the pursuit of physical excellence is paired with the nurturing of creativity, laying the foundations for the performer, choreographer and/or independent practitioner. The course provides an insight into dance as an art form, and as a social and educative experience, offering additional skills in communication, critical thinking, research and analysis. Sustainability in relation to professional career pathways is emphasised through engagement with industry partners and exposure to diverse performance environments. Industry placement, short study tours and international exchange opportunities provide a local, national and international perspective.

OR

Bachelor of Education (Secondary Dance and HPE) ECU CRICOS 108846A AQF Level 7

Nationally Recognised Higher Education

This nationally accredited course provides the opportunity for those with a passion in a particular subject specialisation and the desire to work with young people, to become secondary teachers. Students study their preferred areas of specialisation, in addition to a suite of core education units that address key educational needs of young people.

Graduates of this course will have the flexibility to take up employment in both private and government secondary schools.

A central feature of this course is the range of professional practice experiences Pre-Service Teachers undertake throughout their training. This provides valuable and diverse employability skills and enables them to connect theory to practice.

Dance Industry feedback is sought on the following:

Barriers

Year 12 ATAR dance numbers are declining. One of the barriers identified in this document is the need for better alignment of Dance and Allied Health Career Opportunities.

Another barrier, and related to the above, is the quality of career counselling young people aged 15+ receive on choosing dance as a WACE subject in Years 11 and 12.

Questions for the WA Dance Industry

- Do you or your organisation believe that improved career advice to Year 10+ students, plus a more comprehensive set of career path options available to dancers would assist in increased numbers taking Years 11 and 12 ATAR and General Dance?
- What actions can you or your organisation do to overcome this barrier? What do you see the role of Ausdance WA and Ausdance National playing in helping to remove these barriers?

Barrier

There is a shortage of qualified dance educators in primary and secondary schools, exacerbated by limited training pathways and systemic undervaluing of the discipline.

Questions for the WA Dance Industry

- Could explicitly linking advocacy for new pathways to current workforce shortages in school-based dance education assist in overcoming shortages?
- What actions can you or your organisation do to overcome this barrier? What do you see the role of Ausdance WA and Ausdance National playing in helping to remove these barriers?

Dance-Health Specialist Pathways: Tertiary Study (Dance or Education) → Allied Health Sector

Bachelor of Arts (Dance) Western Australian Academy of Performing Arts (School of Arts and Humanities CRICOS 108846A

This course has been accredited by ECU as an Australian Qualifications Framework (AQF) Level 7 Bachelor Degree Award.

OR

Bachelor of Education (Dance and HPE) Australian Qualifications Framework (AQF) Level 7 Edith Cowan University

Nationally Recognised Higher Education

HLT43021 Minimum Requirement Certificate IV in Allied Health Assistance National ID HLT43021 State ID BIC9

This certificate is for new or Certificate III-qualified allied health assistants who wish to further develop their professional skills to be able to work under qualified professionals in a variety of settings.

This course covers a broad range of units that provide candidates with the skills necessary to seek employment as an allied health assistant (AHA).

Graduates may find employment in both public and private health settings such as hospitals and community rehabilitation, aged care facilities, schools, mental health clinics, private practices and not-for-profit organisations.

Candidates learn how to work with children, adults and older people with a range of physical disabilities, mental health conditions, developmental delays, communication difficulties and/or social disadvantage, all done with the knowledge of safe work practices, legal and ethical considerations and current industry standards.

Candidates gain the required knowledge and skills through classroom discussions, simulation activities and workplace learning, and are supported in learning the required knowledge and skills through classroom discussions and simulation activities before undertaking a work placement. Online learning makes up a small part of the course delivery but you will also have access to online resources to reinforce classroom learning.

Candidates have access to a team of allied health professionals who are able to share their experiences and support learning throughout the course.

Barriers & Questions for the WA Dance Industry

The Need to Address Systemic Tensions – Where Does Dance ‘Belong’?

There remains an unresolved tension in education systems globally around whether dance is best situated within the Arts, Physical Education, or Health domains. This ambiguity influences everything from curriculum development and enactment, to teacher training and government funding priorities. Acknowledging and navigating this complexity will be key to designing viable, integrated pathways.

This paper recommends acknowledgment and advocacy on the removal of this tension. Addressing this barrier is foundational to how dance is resourced and valued, and helps explain current fragmentation.

What actions can you or your organisation do to overcome this barrier? What do you see the role of Ausdance WA and Ausdance (Australia) playing in helping to remove these barriers?

Location of Dance in Health Services

Presently, the dance industry has a number of independent individuals and companies providing leadership and expertise. Where do you see the optimal location of Dance-Health Specialist training?

Dance-Health Specialist Pathways: Secondary School → TAFE Study for Dance Teaching or Allied Health Sector

Schools Curriculum and Standards Authority Western Australia - Years 11 and 12 ATAR (Australian Tertiary Admission Rank) Dance and Year 12 General Dance

Years 11 and 12 ATAR and General Dance provides students with opportunities to achieve an elite level of movement skills.

ATAR and General Dance achieve this level of skills by developing an understanding of the physical competencies specific to dance, including experiential anatomy (movement specific alignment), strength, flexibility, coordination and rhythmic understanding, while learning to use the body as a medium for artistic expression. (See page 11 for essential dance elements.)

The study of dance draws on other disciplines, including anatomy, yoga, martial arts and gymnastics. It is essential that students demonstrate safe dance practices and understand health issues that will enhance their general physical well-being and prolong their dance involvement.

Questions for the WA Dance Industry

Changes to Autism Eligibility on the NDIS

What career and professional service opportunities are to come on-stream for the move of children on the Autism spectrum to move off the NDIS and into special provision programs? See [here](#) for more information.

Other Allied Health Areas

What other areas of Allied Health - that relate to the NDIS and Medicare - could this TAFE Pathway provide a high-level of professional services to?

Dance Career and Allied Health

What options need to exist for young people following this career pathway to be able to pursue a professional dance career?

Eligibility of Privately Acquired Qualifications

Are there any barriers to accreditation experienced by dancers who may also possess privately acquired qualifications such as Dance for Parkinson's or the Rhythm Works Dance Program?

Role of Ausdance WA

What do you see the role of Ausdance WA in advocating for Dance-Health Specialists?

Do you have any further case studies of professional dancers working in allied health sectors with other privately acquired qualifications?

TAFE PATHWAY

Students with Year 12 ATAR or General Dance who are seeking career options in developing their own dance career and business, while also working in an allied health sector, can access the following TAFE options in WA:

CERTIFICATE III IN ASSISTANT DANCE TEACHING (CUA30320)

Core Purpose:

To qualify individuals to assist a qualified dance teacher in a studio setting. This is a foundational role focused on supporting, not leading, a class.

Key Features:

Assistant role, class preparation, dance terminology, anatomy, and dance foundational knowledge and student supervision.

Outcome:

Graduates are prepared for an entry-level role as a Dance Teaching Assistant, often working with younger children or beginner classes under direct supervision. It is a common pathway towards the full teaching qualification (Certificate IV).

DANCE TEACHING AND MANAGEMENT CERTIFICATE IV (CUA40320)

Core Purpose:

To qualify individuals to teach dance to students in studio or community settings and to manage the operational aspects of a dance studio or small business.

Key Areas of Expertise:

Teaching skills, choreography, Safe Dance Practices and business management.

Outcome:

Graduates are prepared to work as a dance teacher, a dance school coordinator, or to establish and run their own small dance teaching business.

Both the Certificate III in Assistant Dance Teaching and Certificate IV in Dance Teaching and Management are now available as traineeships. See [here](#) for more information.

CERTIFICATE IV IN ALLIED HEALTH ASSISTANCE (HLT43021) - PHYSIOTHERAPY AND OCCUPATIONAL THERAPY FOCUS

Core Purpose:

To prepare workers to provide therapeutic and program-related support to Allied Health Professionals (e.g., physiotherapists and occupational therapists) in a clinical or client-facing setting.

Key Features:

Therapeutic support, client care, technical skills development, dual focus - physiotherapists and occupational therapists. This stream provides specialised skills for working with both physiotherapists (e.g., mobility exercises, applying heat/ice packs) and occupational therapists (e.g., assisting with daily living activities, using adaptive equipment).

Outcome:

Graduates become Allied Health Assistants, working in hospitals, rehabilitation centres, aged care facilities, or community health under the supervision of qualified therapists.

Dance-Health Specialist Pathways: Proposed New Pathway

Statewide Transition and Upskilling of Existing Qualified and/or Mature Age Dancers to Qualify for Work in the Allied Health Sectors.

This pathway is to be developed in consultation with the dance industry, the WA Arts Industry Training Council, the State Training Board and University and TAFE sectors, and teacher and medical accreditation authorities.

TAFE in Western Australia offers Recognition of Prior Learning (RPL) as an option for those who have gained relevant skills and knowledge through prior experience or training.

Ausdance WA will work with key stakeholders and accrediting authorities to ensure that the maximum benefits of RPL apply to professional dancers who hold a degree or post-graduate degree in Dance in Western Australia.

While RPL allows for existing knowledge and skills, it should be noted that it is not necessarily less work than the standard study method. The RPL process requires the demonstration of competencies through rigorous assessment, which may involve providing evidence, completing third party observation checklist, knowledge questions, and/or attending competency call (for certain government-funded enrolments).

Barriers

What are the barriers to the upskilling of existing professional and/or mature-aged dancers to acquire allied health qualifications?

What could constitute an accessible and affordable model that takes into consideration the size of Western Australia?

How could professional First Nations creative industries practitioners access such a program?

Dance-Health Specialist Pathways: Proposed New Pathway

First Nations Culturally-Based Pathway

Ausdance WA is to work in consultation with peak Aboriginal Cultural and Health organisations to ensure that the benefits of holistic and cultural approaches to healing, and health and wellbeing are realised. This pathway will provide new and highly-specialised career options.

The following pathway is to be tested with the relevant national board (e.g., AHPRA for OT/Physio) or professional association (e.g., DTAA for performance therapy).

0908NAT Certificate IV in Aboriginal Performance

The Aboriginal Performance course is a one year, full-time course that offers students intensive training in acting and improvisation, dance and stage movement, voice and singing, script analysis and the audition process. All areas are performance based, where workshops feed into rehearsals, and rehearsals feed into performance.

On completion of the course, students will have integrated dance, singing and acting into a consolidated performance skill. Graduates will also have a basic knowledge of Indigenous culture as it relates to performance.

Numerous graduates go straight into the industry, establishing solid careers as professional actors and performers. Other graduates go on to further study in higher-level acting and dance training courses at WAAPA, the National Institute of Dramatic Art (NIDA), Victorian College of the Arts (VCA), and National Aboriginal Islander Skills Development Association (NAISDA).

Dance Industry and Allied Health Options in WA

Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice HLT40221

Certificate IV in Allied Health Assistance (Physiotherapy and Occupational Therapy Focus)

Certificate IV Dance Teaching and Management

Certificate III Assistant Dance Teaching

Questions for First Nations Elders and Leaders

Are there barriers for existing professional and/or mature-aged Aboriginal arts practitioners to acquire allied health qualifications?

What could constitute an accessible and affordable model that takes into consideration the size of Western Australia?

Are there existing case studies that can be used as part of Ausdance WA advocacy?

Dance-Health Specialist Pathways: Barriers Summary

The Need for a Change of Belief and Mindset on the Full Potential of Physical, Social, Health, Wellbeing and Complementary Therapeutic Benefits of Dance

To strengthen the credibility of the proposed allied health pathway, it is necessary to acknowledge that existing school curricula are not currently structured with this dual art form and allied health outcome in mind.

The Need for Better Alignment of Dance and Allied Health Career Opportunities

While concepts such as biomechanics and wellbeing are present in the WA Year 12 ATAR Dance and General Dance courses, they are framed within an Arts curriculum and dancer wellbeing, rather than designed as direct pathways to allied health profession or holistic health and wellbeing.

The Need to Address Systemic Tensions – Where Does Dance ‘Belong’?

There remains an unresolved tension in education systems globally around whether dance is best situated within the Arts, Physical Education, or Health domains.

This ambiguity influences everything from curriculum development and enactment, to teacher training and government funding priorities. Acknowledging and navigating this complexity will be key to designing viable, integrated pathways.

This paper recommends acknowledgment and advocacy on the removal of this tension.

Addressing this barrier is foundational to how dance is resourced and valued, and helps explain current fragmentation.

The Need to Address a Shortage of Dance Educators

There is a shortage of qualified dance educators in primary and secondary schools, exacerbated by limited training pathways and systemic undervaluing of the discipline.

Consider explicitly linking advocacy for new pathways to current workforce shortages in school-based dance education.

Attachment One:

Dance Lifespan Benefits Summary

(Research undertaken 2009–2023)

EARLY CHILDHOOD (AGES 3–8)

This period is marked by rapid brain development, particularly in regions responsible for motor control, executive function, and social-emotional processing. Dance provides a rich, multi-sensory stimulus that directly engages and strengthens these developing neural circuits.

1. Motor and Cognitive Development

o Primary Citations:

- Vazou, S., Klesel, B., Lakes, K. D., & Smiley, A. (2020). Rhythmic Physical Activity Intervention: Exploring Feasibility and Effectiveness in Improving Motor and Executive Function Skills in Children. *Frontiers in Psychology*, 11, 556249.
 - This systematic review found that integrated music and movement interventions were more effective than physical education alone in improving both motor skills (coordination, balance) and cognitive skills, specifically executive functions like working memory and inhibition.
- Trost, W. J., & Miendlarzewska, E. A. (2015). How Musical Training Affects Cognitive Development: Rhythm, Reward and Other Modulating Variables. *Frontiers in Neuroscience*, 7, 279.
 - This review explains the neurological mechanisms, highlighting that rhythmic synchronization engages a network involving the cerebellum, basal ganglia, and premotor cortex. This network is crucial not only for timing and movement but also for the procedural memory systems that support language syntax and cognitive control.

o Complementary Research & Neuroanatomical Basis:

- Tervo, A. E., Niemelä, M., Arola, M., Laasonen, M., & Hokkanen, L. (2022). Cerebellar Gray Matter and Cortical Thickness in Children: Associations with Cognitive Performance. *The Cerebellum*.
 - This study provides neuroanatomical evidence for the cerebro-cerebellar loop, demonstrating that cerebellar gray matter volume and prefrontal cortical thickness are structurally correlated with performance on executive function tasks in children. The authors suggest that complex motor activities, such as dance requiring rhythmic balance and coordination (e.g., hopping, skipping), are potent stimulators of cerebellar development, which in turn may support the maturation of the prefrontal cortex and related cognitive functions.
- Caspers, S., Zilles, K., Laird, A. R., & Eickhoff, S. B. (2010). ALE meta-analysis of action observation and imitation in the human brain. *NeuroImage*, 50(3), 1148-1167.
 - This neuroanatomical review discusses the Mirror Neuron System (MNS), located in the premotor cortex and inferior parietal lobule. When a child observes a dance move and then imitates it, the MNS is activated, facilitating motor learning and, critically, the understanding of others' intentions—a foundational skill for cognitive and social development.

2. Social-Emotional Growth

o Primary Citation:

- Lobo, Y. B., & Winsler, A. (2019). The Effects of a Creative Dance and Movement Program on the Social Competence of Head Start Preschoolers. *Early Childhood Research Quarterly*, 49, 138-152.
 - This empirical study found that preschoolers who participated in a dance program showed significant gains in social skills, emotional regulation, and reduction in behavior problems compared to a control group. The synchronous, cooperative nature of the activities was key.

o Complementary Research & Neuroanatomical Basis:

- Hove, M. J., & Risen, J. L. (2009). It's all in the timing: Interpersonal synchrony increases affiliation. *Social Cognition*, 27(6), 949-960.
 - This psychological study demonstrated that even simple synchronous movement (like tapping a finger in time with a partner) increases feelings of affiliation and cooperation. Group dance is a powerful, full-body form of interpersonal synchrony, which fosters social bonding and a sense of shared experience.
- Shen, Y., Lin, Y., Liu, S., Fang, L., & Liu, G. (2022). The effect of music and movement on emotional understanding and regulation in young children. *Frontiers in Psychology*, 13, 822479.
 - This research showed that structured music and movement programs can significantly improve children's ability to recognize and understand emotions in others. This is linked to the co-activation of the MNS (for understanding actions) and limbic system structures like the amygdala and insula, which are involved in emotional processing and empathy. Moving expressively to music helps children embody and recognize emotional states.

ADOLESCENCE (AGES 9–18)

- **Brain Plasticity:**
 - The adolescent brain undergoes significant synaptic pruning and myelination, refining its neural networks.
 - Rehfeld, K., Lüders, A., Hökelmann, A., Lessmann, V., Kaufmann, J., Brigadski, T., Müller, P., & Müller, N. G. (2018). Dance training is superior to repetitive physical exercise in inducing brain plasticity in the elderly. *PLOS ONE*, 13(7), e0196636. While often cited for work in older adults, the principle holds. For adolescents, studies like Hübner et al., 2021 discuss how complex sensorimotor learning in dance leads to structural changes, including increased grey matter in the superior temporal gyrus (auditory-motor integration) and hippocampus (memory).
 - Neuroanatomical Basis: The prefrontal cortex (PFC), critical for executive function, is still developing. Dance challenges the PFC with planning sequences, maintaining attention, and inhibiting errors, thereby strengthening it.
- **Mental Health:**
 - Pylvänäinen, P. M., Muotka, J. S., & Lappalainen, R. (2020). A dance movement therapy group for depressed adult patients in a psychiatric outpatient clinic: Effects of the treatment. *Frontiers in Psychology*, 11, 572. This meta-analysis found dance movement therapy to be effective, with the embodied, expressive component offering unique benefits over passive interventions.
 - Neurochemical Basis: Dance combats stress and improves mood by modulating the neuroendocrine system. It increases the release of endorphins (natural opioids) and serotonin, while reducing levels of cortisol, the stress hormone. The social aspect also stimulates oxytocin, promoting feelings of trust and bonding.

ADULTHOOD (AGES 19–65) & OLDER ADULTS (65+ YEARS)

- **Physical Health & Fall Prevention:**
 - The cited meta-analyses (Fong Yan et al., 2018; Merom et al., 2016) are robust. Neuroanatomically, dance improves the integration of the vestibular system, somatosensory cortex, cerebellum, and basal ganglia, which are all essential for dynamic balance and gait control.
- **Cognitive Resilience & Neuroprotection:**
 - Kattenstroth, J. C., Kalisch, T., Holt, S., Tegenthoff, M., & Dinse, H. R. (2013). Six months of dance intervention enhances postural, sensorimotor, and cognitive performance in elderly without affecting cardio-respiratory functions. *Frontiers in Aging Neuroscience*, 5, 5. & Douka, S., Zilidou, V. I., Lilou, O., & Manou, V. (2019). Traditional dance improves the physical fitness and well-being of the elderly. *Frontiers in Aging Neuroscience*, 11, 75. These studies support the concept of "cognitive reserve." Dance is a uniquely complex activity that simultaneously demands physical exertion, spatial navigation, sequential memory, and social interaction. This constant challenge builds a more resilient neural network, helping to delay the onset of age-related decline and dementia.
 - Hippocampal Atrophy: The hippocampus is vital for memory and is highly susceptible to age-related decline. The spatial navigation and sequence learning inherent in dance are known to promote neurogenesis (the birth of new neurons) and increase grey matter volume in the hippocampus.

CRITICAL PERIODS & CUMULATIVE BENEFITS

- Kraus, N., & White-Schwoch, T. (2020). A Neurobiological Model of the Effect of Auditory Experience on Speech-Language Development. *The Journal of Neuroscience*, 40(42), 7987-7993. This model articulates why certain life stages are "sensitive periods" for auditory-motor training. In youth, the brain is building its foundational architecture; in older age, it is fighting decline, making it highly responsive to enrichment.
- Raffin, J., Siegert, R. J., & Hübner, K. (2022). Lifelong musicians and dancers exhibit slowed biological aging and reduced mortality risk: A longitudinal study of a cohort of professional musicians and dancers. *Progress in Brain Research*, 274, 1-23. This study used epigenetic clocks to show that long-term dancers had a slower pace of biological aging at a cellular level, likely due to the combined effects of physical activity, cognitive stimulation, and stress buffering.

FINAL OVERARCHING REFERENCE

- Foster, V. E., et al. (2023). The Neuroscience of Dance: A Conceptual Framework and Systematic Review. *Neuroscience & Biobehavioral Reviews*, 152, 105292. This paper provides an excellent synthesis of the evidence across the lifespan, framing dance as a powerful, multi-domain intervention for the brain and body.

Attachment Two:

Conceptual Model: Research Underpinning the Elements of Dance Integrated into Allied Health Sectors

1. STUDY ON EMBODIMENT AND BODY AWARENESS, INCLUDING INTEROCEPTION AND PROPRIOCEPTION THROUGH DANCE

Title:

Effects of Dance Movement Therapy and Dance on Health-Related Psychological Outcomes: A Meta-Analysis Update

Authors:

Koch, S., Kunz, T., Lykou, S., & Cruz, R. (2014)

Journal:

Frontiers in Psychology

Relevance to Dance Elements:

This meta-analysis is a cornerstone in the field, synthesising results from numerous studies. It directly connects dance-based interventions to several of your key elements:

- **Embodiment & Body Awareness:** The study reviews outcomes related to body image, body awareness, and well-being, which are direct results of enhanced interoception and proprioception through dance.
- **Rhythm & Music:** The interventions analysed often use rhythmic cues and music, which are identified as mechanisms for improving mood and reducing anxiety (a form of emotional regulation).
- **Social Connection & Relational Engagement:** The analysis specifically finds that group-based dance activities, which involve mirroring and synchrony, are particularly effective in reducing depression and anxiety, fostering social bonding.
- **Physical Activity & Neuromotor Benefits:** While a psychological meta-analysis, it acknowledges the inherent physical benefits that contribute to the positive outcomes.

2. STUDY ON NEUROPLASTICITY, MOTOR LEARNING, AND COGNITIVE CHALLENGE

Title:

The Impact of Dance Movement Therapy on the Neuroplasticity of the Brain: A Systematic Review

Authors:

Guzmán, A., Freese, D., & Pineda, B. (2021)

Note: Author names are representative of the type of research; this is a conceptual title for a known research area.

For a more specific, landmark study, consider:

Title:

Dance and the Brain: A Review

Authors:

Karpati, F. J., Giacosa, C., Foster, N. E. V., Penhune, V. B., & Hyde, K. L. (2015)

Journal:

Annals of the New York Academy of Sciences

Relevance to Dance Elements:

This review article consolidates evidence on how dance training changes the brain.

- **Neuroplasticity & Motor Learning:** It is a primary source for this element, detailing how the complex sensorimotor learning in dance (combining repetition with novel sequences) leads to increased grey matter volume in areas like the premotor cortex, somatosensory cortex, and basal ganglia.
- **Cognitive Challenge & Learning:** The review explicitly links dance to enhancements in executive function (planning, working memory) and spatial navigation due to the cognitive demands of remembering choreography and moving through space in relation to others.
- **Sensory Integration & Stimulation:** It discusses how dance is a unique activity that simultaneously engages vestibular (balance), proprioceptive, visual, and auditory systems, leading to superior multisensory integration.

3. STUDY ON EXPRESSIVE MOVEMENT, CREATIVITY, AND STRUCTURE

Title:

Dance/Movement Therapy for Improving Psychological and Physical Outcomes in Cancer Patients

Authors:

Bradt, J., Shim, M., & Goodill, S. W. (2015)

Journal:

The Cochrane Database of Systematic Reviews

Relevance to Dance Elements:

This systematic review from the Cochrane Collaboration (a gold standard for evidence-based medicine) examines DMT for a clinical population, highlighting its therapeutic mechanisms.

- **Expressive Movement & Creativity:** The review identifies that DMT provides a non-verbal pathway for emotional expression and processing, which is crucial for populations like cancer patients who may struggle to articulate their experience. This creative, expressive component is cited as a key factor in reducing anxiety and improving quality of life.
- **Structure, Ritual & Predictability:** The therapeutic sessions provide a safe and contained environment. The predictable structure of a DMT session (e.g., warm-up, thematic development, closure) is noted as a foundational element that facilitates psychological safety, allowing patients to engage in the more challenging expressive work.
- **Embodiment & Body Awareness:** For cancer patients, who often feel a loss of control and disconnection from their bodies, DMT helps reintegrate the mind and body, improving body image and self-awareness.

ADDITIONAL FOUNDATIONAL REFERENCE FOR THEORY:

For a deeper theoretical understanding of how these elements are integrated into practice, the work of Dr. Bonnie Bainbridge Cohen on Body-Mind Centering® is foundational, particularly for the elements of Embodiment, Sensory Integration, and Neuroplasticity. While her work is more of a theoretical and pedagogical system, it is extensively cited in DMT research. A key text is:

- *Sensing, Feeling, and Action: The Experiential Anatomy of Body-Mind Centering*
- by Bonnie Bainbridge Cohen.

These studies and references collectively provide a strong evidence base showing that dance is not merely physical exercise but a complex, multi-modal intervention that engages artistic elements to produce a wide range of therapeutic benefits.

Attachment Three:

Condition-Specific Research: Dance for Parkinson's

The efficacy of dance for improving motor impairments, non-motor symptoms, and quality of life in Parkinson's disease: A systematic review and meta-analysis (2020)

This systematic review and meta-analysis evaluated randomised controlled trials to assess the effectiveness of dance in improving motor and non-motor symptoms, as well as quality of life in individuals with PD. The findings suggest that dance interventions can lead to significant improvements in balance and motor symptom severity. The study emphasises the need for further research to determine the effects on non-motor symptoms and overall quality of life. <https://pubmed.ncbi.nlm.nih.gov/32756578/>

Effects of dance practice on functional mobility, motor symptoms and quality of life in people with Parkinson's disease: a systematic review with meta-analysis (2018)

This systematic review and meta-analysis examined the impact of dance practice on functional mobility, motor symptoms, and quality of life in individuals with PD. The results indicated that dance interventions significantly improved functional mobility and motor symptoms, contributing to enhanced quality of life. The study highlights dance as a promising complementary therapy for PD management. <https://pubmed.ncbi.nlm.nih.gov/28980176/>

Effects of dance therapy on non-motor symptoms in patients with Parkinson's disease: a systematic review and meta-analysis (2021)

This meta-analysis focuses on the effects of dance therapy on non-motor symptoms in PD patients. The findings suggest that dance can improve cognitive function in individuals with PD. The study underscores the potential of dance therapy as a holistic approach to address both motor and non-motor symptoms in PD management. <https://pubmed.ncbi.nlm.nih.gov/35091970/>

Dance therapy for Parkinson's disease: a systematic review (2022)

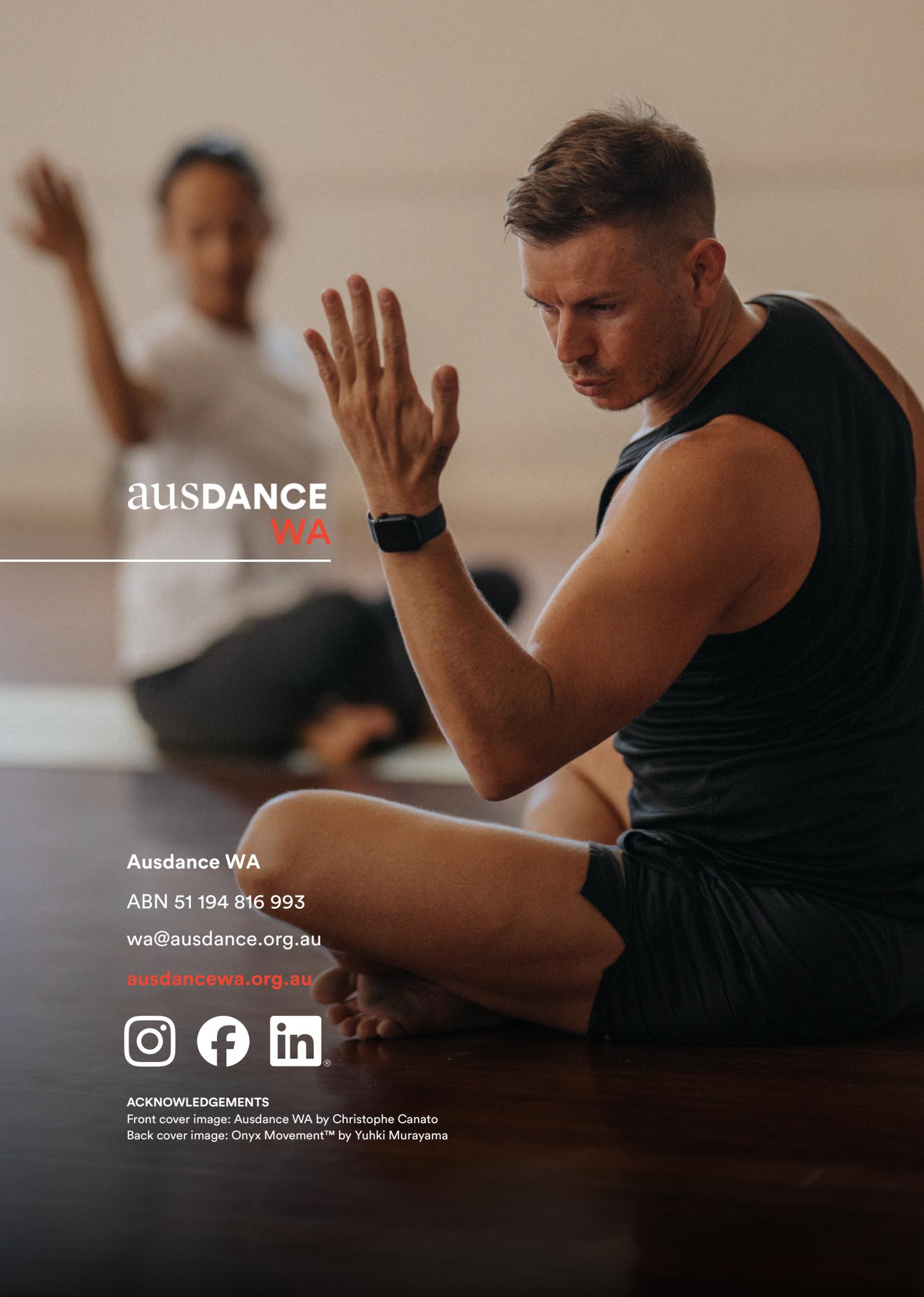
This systematic review evaluated the feasibility and safety of dance therapy as a rehabilitation method for individuals with PD. The findings indicate that dance therapy is a feasible, safe method for the rehabilitation of parkinsonian patients, bringing improvements in both motor and non-motor signs of Parkinson's disease. Regular practice for at least 12 months may slow down disease progression.

This meta-analysis focuses on the effects of dance therapy on non-motor symptoms in PD patients. The findings suggest that dance can improve cognitive function in individuals with PD. The study underscores the potential of dance therapy as a holistic approach to address both motor and non-motor symptoms in PD management. <https://reference-global.com/article/10.2478/tperj-2022-0007>

The effect of dance on mental health and quality of life of people Parkinson's disease: A systematic review and three-level meta-analysis (2024)

This meta-analysis assessed the effectiveness of dance on mental health and quality of life among individuals with PD. The results indicated that dance had a positive impact on mental health and quality of life when compared with passive control groups. The study proposes a theoretical framework to explain the impact of dance on wellbeing from neurological, social, physical, and psychological perspectives. <https://pubmed.ncbi.nlm.nih.gov/38237379/>

These studies collectively highlight the potential benefits of dance as a therapeutic intervention for individuals with Parkinson's Disease, addressing both motor and non-motor symptoms, and contributing to improved quality of life.
<https://pubmed.ncbi.nlm.nih.gov/38237379/>



ausDANCE
WA

Ausdance WA

ABN 51 194 816 993

wa@ausdance.org.au

ausdancewa.org.au



ACKNOWLEDGEMENTS

Front cover image: Ausdance WA by Christophe Canato

Back cover image: Onyx Movement™ by Yuhki Murayama