

Title	Explain causes and effects of vision impairment on a person's functional vision and possible interventions and training		
Level	6	Credits	8

Purpose	People credited with this standard are able to demonstrate knowledge of the demographics of vision impairment in New Zealand; and explain the following: basic optics, the anatomy of the human eye and the human visual system; the causes and effects of vision impairment on a person's functional vision; and possible interventions and training to enhance a person's functional vision.
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Classification	Health, Disability, and Aged Support > Sensory Support
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Available grade	Achieved
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Guidance Information

1 Definitions

Culture refers to the totality of socially transmitted beliefs, values, customs, behaviour patterns and/or practices, together with all other products of human work and thought that are common to – or characteristic of – a particular group, subgroup, or community. The concept of culture may reflect factors and indicators such as: age, ethnicity, disability, gender, occupation, organisational background, immigrant or refugee status, institutional care, religion or spiritual beliefs, sexual orientation, and socio-economic status.

Demographics of vision impairment means publicly available statistical characteristics (age, sex, socio-economic status, employment status, eye conditions, culture) about the population of people with a vision impairment

Functional vision is the ability to use vision in planning and performing a task. (Corn & Erin, 2010, p. 925).

Life span stages: Early childhood (under 5 years), childhood (from 5 years to 12 years), youth/young adulthood (from 12 years to 25 years), adulthood (from 25 years to 65 years), older adulthood (65 years and older).

2 Recognised reference texts and research include but are not limited to:

Auckland Eye. (2012). *The Auckland Eye manual*. Available at <http://www.aucklandeye.co.nz/about-us/the-auckland-eye-manual/>.

Corn, A.L., & Lusk, K. E. (2010). 'Chapter One: Perspectives on Low Vision'. In Corn, A.L., & Erin, J.N. (Eds), *Foundations of low vision: Clinical and functional perspectives*, 2nd ed.(pp. 3-34). New York: AFB Press.

Keefe, J., & Squire, S. (2016). *Low vision online*. Retrieved May 26, 2016, from <http://www.lowvisiononline.unimelb.edu.au/LVO.htm>. Melbourne: Centre for Eye Research Australia, University of Melbourne.

Root, T. (n.d.). *OphthoBook*. Retrieved May 26, 2016, from <http://www.opthobook.com/>.

Scheiman, M., Scheiman, M., & Whittaker, S. (2006). *Low vision rehabilitation: A practical guide for occupational therapists*. Thorofare, NJ: Slack, Inc.

Online resources are available from the National Eye Institute. Retrieved May 26, 2016, from <https://nei.nih.gov/>.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of demographics of vision impairment in New Zealand.

Performance criteria

- 1.1 The demographics of vision impairment in New Zealand are analysed in terms of life span stages.
- Range stages must include – early childhood, childhood, youth/young adulthood, adulthood, older adulthood.
- 1.2 The demographics of vision impairment in New Zealand are analysed in terms of eye conditions.
- Range eye conditions must include but are not limited to – retinal disorders, glaucoma, cataracts, myopia, keratoconus, cerebral vascular disorder/accident, diabetic retinopathy.
- 1.3 The demographics of vision impairment in New Zealand are analysed in terms of cultural groupings.
- Range cultural groupings must include – Māori, Pākehā, Pacific Peoples; may include other cultural groupings, or sub-groupings.
- 1.4 The demographics of vision impairment in New Zealand are compared to the demographics of another geographical location.
- Range evidence must include – either the demographics of one life span stage and eye condition, or the demographics of one life span stage and cultural grouping, in New Zealand, compared to the demographics of an equivalent grouping in one other location.

Outcome 2

Explain basic optics, the anatomy of the human eye and the human visual system.

Performance criteria

- 2.1 Basic optics are explained in accordance with recognised reference texts and research.

Range basic optics must include – light, refraction, the ocular system, and lenses.

2.2 The anatomy of the human eye is explained in accordance with recognised reference texts and research.

Range evidence must include – fifteen components of the eye and five components of the visual pathways.

2.3 A person's vision system is explained across the human life span in accordance with recognised reference texts and research.

Range evidence must include either early childhood, childhood, and youth/young adulthood, or adulthood and older adulthood.

Outcome 3

Explain the causes and effects of vision impairment on a person's functional vision.

Performance criteria

3.1 The effects of disease and other conditions on a person's vision system are explained in accordance with recognised reference texts and research.

Range diseases and other conditions may include – age-related macular degeneration, glaucoma, diabetic eye disease, inherited retinal dystrophies, keratoconus, neurological vision impairments (e.g. stroke, Cerebral Vision Impairment, etc.), albinism, Retinopathy of Prematurity;
evidence relating to five diseases and other conditions is required.

3.2 The causes and effects of eye conditions on a person's functional vision are explained in accordance with recognised reference texts and research.

Range eye conditions must include – near and distance vision, contrast sensitivity, light-dark adaptation, glare, fields of view, visual perception, visual complexity/crowding, colour.

3.3 Definitions, terms, and other language used in professional reports on a person's vision system and their functional vision are explained in accordance with recognised reference texts and research.

Range ophthalmologist's report, optometrist's report.

Outcome 4

Explain possible interventions and training to enhance a person's functional vision.

Performance criteria

4.1 Possible interventions and training to enhance a person's functional vision are explained and matched to the causes and effects of eye conditions.

Range causes and effects of eye conditions on a person's functional vision must include – refractive errors, loss of central field of vision, loss of peripheral field of vision, loss of contrast sensitivity, and one other cause and its effect; interventions and training must include – eccentric viewing, scanning, tracking, glare management, and one other intervention and related training.

4.2 Possible interventions and training to enhance a person's functional vision are explained in accordance with recognised reference texts and research.

4.3 Explanation includes a description of appropriate cultural responsiveness.

Range tapu of the head, client preference for professional's gender, whanau/family involvement

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	15 September 2016	31 December 2023
Review	2	26 August 2021	31 December 2023

Consent and Moderation Requirements (CMR) reference	0024
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.