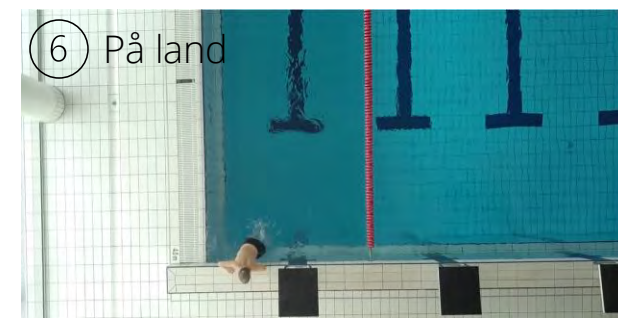
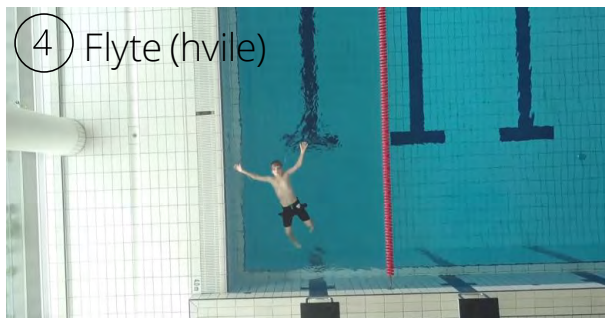
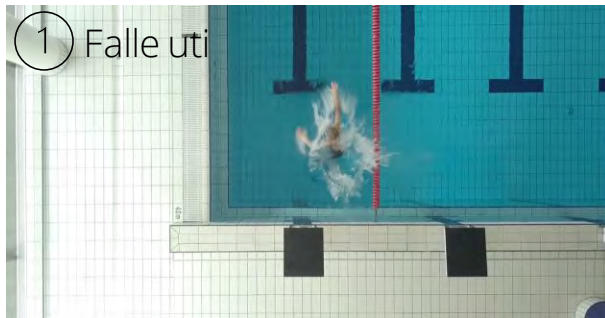


Svømmedyktig inne = svømmedyktig ute?



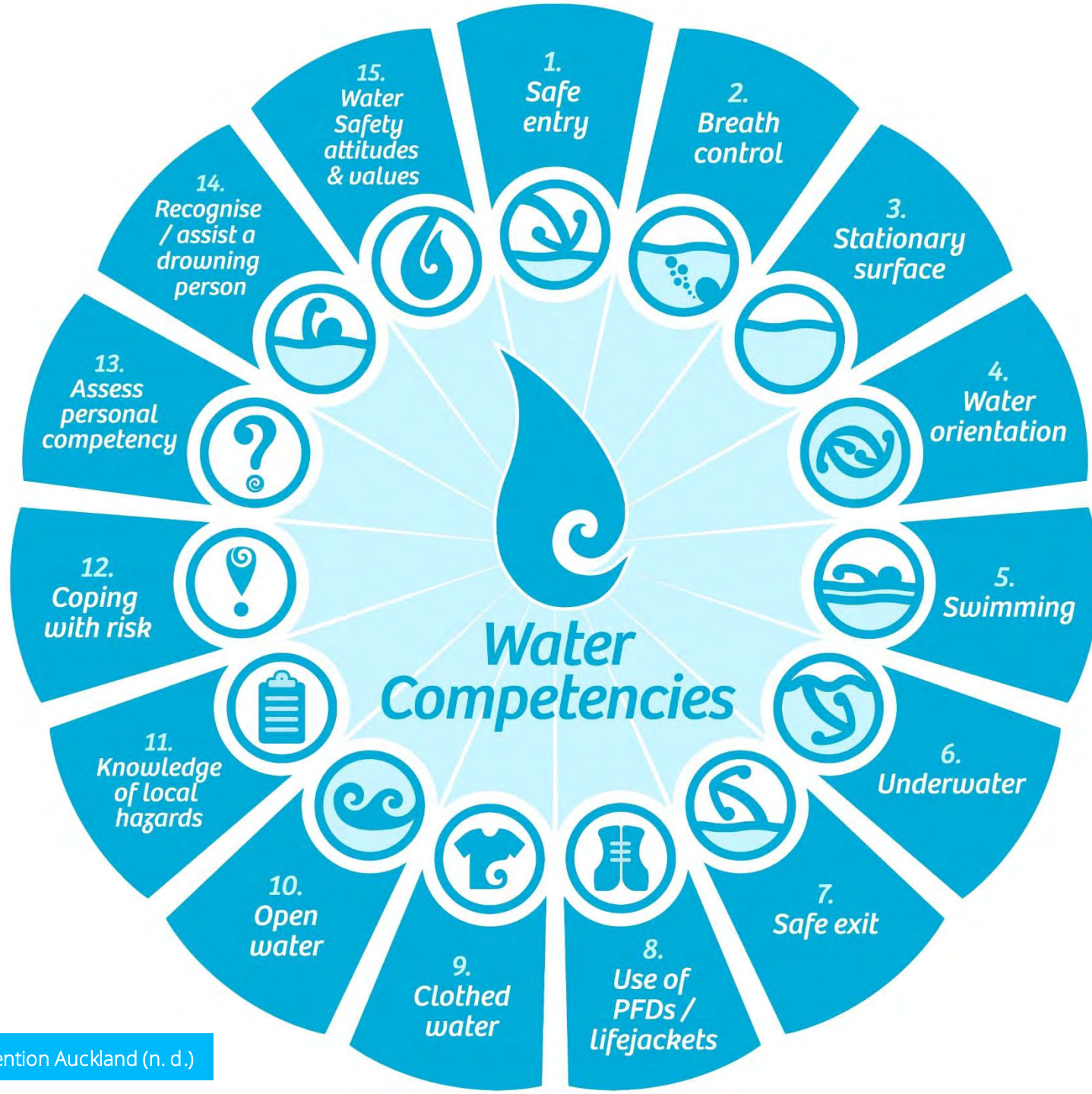
Trinn / Læreplan	L-97 (1997)	KRO1-01 (2006)	KRO1-02 (2009)	KRO1-03 (2012)	KRO1-04 (2015)	KRO01-05 (2020 -)
2. trinn	bli trygge i vatn gjennom leikprega aktivitet	-	-	-	-	leike og utføre grunnleggjande øvingar med tilvenning til vatn, som å dykke, flyte, gli, skape framdrift, hoppe uti og orientere seg i vatn øve på trygg ferdsel ved vatn og på å kunne tilkalle hjelp
4. trinn	øve seg i å bli trygge i vatn og symje slik at dei kan berge seg sjølve	vere trygg i vatn og vere symjedyktig ferdast ved og på vatn og gjere greie for farane	Ingen endring	Ingen endring	leike og utføre grunnleggjande øvingar med vasstilvenning som å dykke, flyte, gli, skape framdrift, hoppe uti og orientere seg i vatn vere svømmedyktig ved å falle uti på djupt vatn, svømme 100 meter på magen, og undervegs dykke ned og hente ein gjenstand med hendene, stoppe og kvile i 3 minutt (imens flyte på magen, orientere seg, rulle over, flyte på rygg); så svømme 100 meter på rygg og ta seg opp på land ferdast trygt i, ved og på vatn og gjere greie for farane, og tilkalle hjelp	vere svømmedyktig ved å falle uti på djupt vatn, svømme 100 meter på magen, og undervegs dykke ned og hente ein gjenstand med hendene, stoppe og kvile i 3 minutt (imens flyte på magen, orientere seg, rulle over, flyte på rygg); så svømme 100 meter på rygg og ta seg opp på land
7. trinn	arbeide med å meistre livbergings teknikkar i vatn trene på ein symjeart på rygg og ein på bryst	utføre grunnleggjande teknikkar i symjing på magen, på ryggen og under vatn	Ingen endring	Ingen endring	utføre grunnleggjande teknikkar i svømming på magen, på ryggen, på sida, under vatn, og kunne berge seg sjølv i vatn praktisere trygg ferdsel og gjere risiko- og sikkerheitsvurderingar i, ved og på vatn under varierte vêrforhold	utføre grunnleggjande teknikkar i symjing på magen, på ryggen og under vatn vurdere sikkerheit i uteaktivitet og naturferdsel og gjennomføre sjølvberging i vatn
10. trinn	lære livberging i vatn øve seg på å nytte klede som flytemiddel, kunne livbergingshopp, ilandføring, løft på land, hjartekompresjon og fullstendig hjarte- og lungeredning	symje på magen og på ryggen og dukke Forklare og utføre livberging i vatn og livbergande førstehjelp	Ingen endring	Symje på magen og på ryggen og dukke Forklare og utføre livberging i vatn Forklare og utføre livbergande førstehjelp	utføre varierte og effektive svømmeteknikkar over og under vatn svømme ein lengre distanse basert på eiga målsetjing forklare og utføre livberging i vatn forklare og utføre livbergande førstehjelp	utføre varierte symjeteknikkar og kunne symje ein lengre distanse basert på eiga målsetjing forstå og gjennomføre livberging i, på og ved vatn ute i naturen

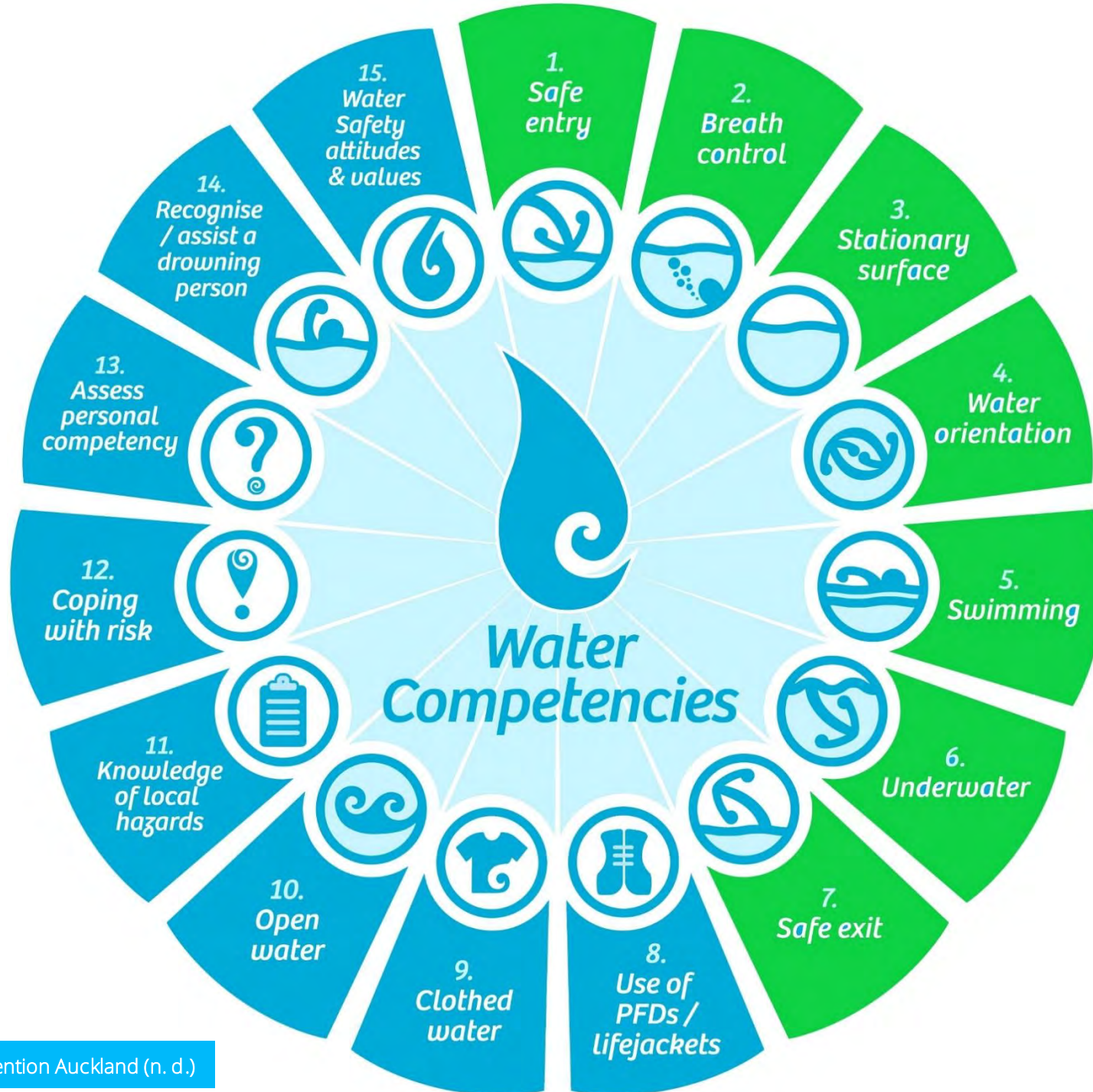
- vere symjedyktig ved å falle uti på djupt vatn, symje 100 meter på magen, og undervegs dykke ned og hente ein gjenstand med hendene, stoppe og kvile i 3 minutt (imens flyte på magen, orientere seg, rulle over, flyte på rygg), så symje 100 meter på rygg og ta seg opp på land

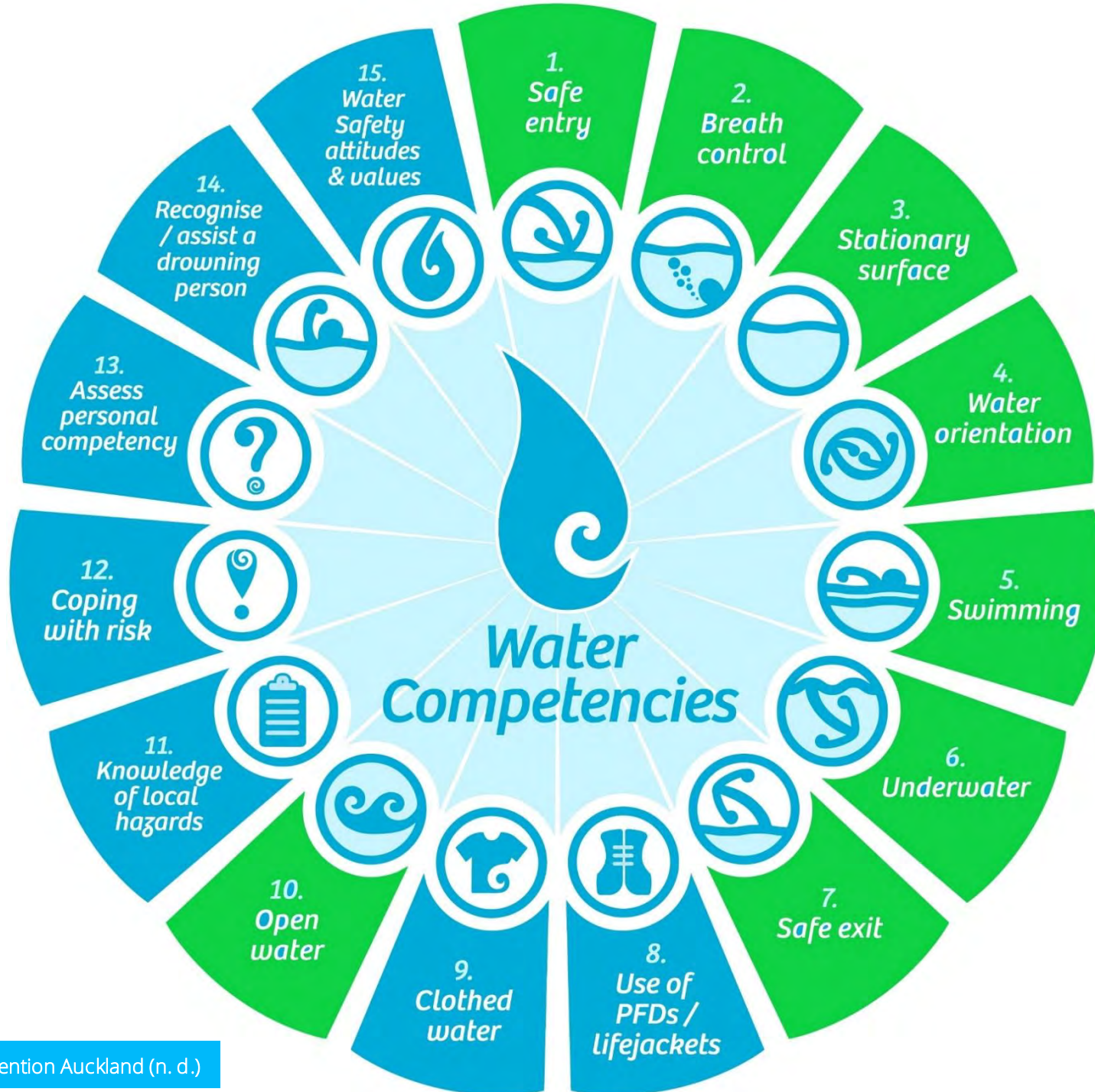


Esvom, (n. d.)

Utføres kontinuerlig = **svømmedyktig** (*innendørs?*)

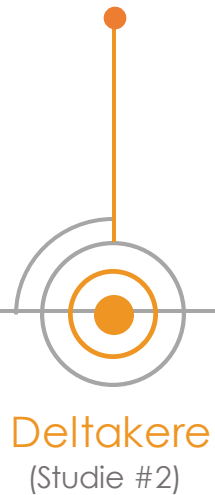




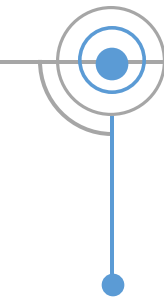


Design studie #3

3 grunnskoler (n=217*)



4. klasse
Test svømmebasseng



Juni 2022

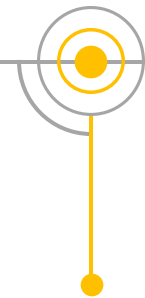


Skoleferie



Juni – August

5. klasse
Test innsjø



September 2022



* Bruttoutvalg

Karakteristikk vannmiljø

Svømmebasseng



Lengde	25m
Dybde	90-220cm
Kant	ca. 30cm høy
Luft °C	Varmt
Vann °C	27-28°C
Sikt	God

Innsjø



Lengde	50m
Dybde	75-210cm
Kant	ca. 30cm høy
Luft °C	Kjølig
Vann °C	16.3 – 14.9°C
Sikt	Dårlig

Oppgave: Svømmebasseng / Innsjø

Kompetansemål etter 4. trinn

- vere symjedyktig ved å falle uti på djupt vatn, symje ~~100~~ 50 meter på magen, og undervegs dykke ned og hente ein gjenstand med hendene, stoppe og kvile i ~~3 minutt~~ 1,5 (imens flyte på magen, orientere seg, rulle over, flyte på rygg), så symje ~~100~~ 50 meter på rygg og ta seg opp på land

Swimming Competence Assessment Scale (SCAS)

Explanation of the competence elements described in the observation form

Element of competence	Remarks
1 Entry	- To fall out in the water is not the same as jumping into the water. - The student falls sideways (as a scull). - Falling into deep water should be conducted where the students can't reach the bottom. - The whole body of the student shall be submerged in the water. - No matter what, captured by the arms to fall into the water. - The highest score (4) demands that the student shall not touch the bottom, the wall, or the swimming lane lines to rest. - Touching the bottom/swimming lane lines by accident or unintentionally does not count. - If the student fails to swim 50 meters continuously, encourage him/her to rest or float (instead of resting at the bottom edge/swimming lane lines) and then continue. - The task is to retrieve a diving ring (or another object).
2 Frontstroke	- The student may choose the preferable diving technique. Both with head first (horizontal) or vertical (feet first) will be approved. - Drive for a diving depth of 1.3 meters. Minimum depth is where the student cannot stand at the bottom. - The student may use different resting positions, hence the observer should use their discretion in the assessment. - The resting position should be as energy effective as possible, in about 1 meter (1 m) up and deeper into the water as long as the position is executed in an energy-effective way. - Start with resting on the front as long as they are capable, and then turn over to the back. - The student should be able to turn several times from back to front and front to back, as long as the total time is 90 seconds. - Do not focus on time or technical execution. - The highest score demands that the student shall not touch the bottom, the wall, or the swimming lane lines to rest. - Touching the bottom/swimming lane lines by accident or unintentionally does not count. - If the student fails to swim 50 meters continuously, encourage him/her to rest or float in the water (instead of resting at the bottom edge/swimming lane lines) and then continue.
3 Diving	- Drive for a diving depth of 1.3 meters. Minimum depth is where the student cannot stand at the bottom. - The student may use different resting positions, hence the observer should use their discretion in the assessment. - The resting position should be as energy effective as possible, in about 1 meter (1 m) up and deeper into the water as long as the position is executed in an energy-effective way. - Start with resting on the front as long as they are capable, and then turn over to the back. - The student should be able to turn several times from back to front and front to back, as long as the total time is 90 seconds. - Do not focus on time or technical execution. - The highest score demands that the student shall not touch the bottom, the wall, or the swimming lane lines to rest. - Touching the bottom/swimming lane lines by accident or unintentionally does not count. - If the student fails to swim 50 meters continuously, encourage him/her to rest or float in the water (instead of resting at the bottom edge/swimming lane lines) and then continue.
4 Buoyancy/ Floating	- Drive for a diving depth of 1.3 meters. Minimum depth is where the student cannot stand at the bottom. - The student may use different resting positions, hence the observer should use their discretion in the assessment. - The resting position should be as energy effective as possible, in about 1 meter (1 m) up and deeper into the water as long as the position is executed in an energy-effective way. - Start with resting on the front as long as they are capable, and then turn over to the back. - The student should be able to turn several times from back to front and front to back, as long as the total time is 90 seconds. - Do not focus on time or technical execution. - The highest score demands that the student shall not touch the bottom, the wall, or the swimming lane lines to rest. - Touching the bottom/swimming lane lines by accident or unintentionally does not count. - If the student fails to swim 50 meters continuously, encourage him/her to rest or float in the water (instead of resting at the bottom edge/swimming lane lines) and then continue.
5 Backstroke	- Drive for a diving depth of 1.3 meters. Minimum depth is where the student cannot stand at the bottom. - The student may use different resting positions, hence the observer should use their discretion in the assessment. - The resting position should be as energy effective as possible, in about 1 meter (1 m) up and deeper into the water as long as the position is executed in an energy-effective way. - Start with resting on the front as long as they are capable, and then turn over to the back. - The student should be able to turn several times from back to front and front to back, as long as the total time is 90 seconds. - Do not focus on time or technical execution. - The highest score demands that the student shall not touch the bottom, the wall, or the swimming lane lines to rest. - Touching the bottom/swimming lane lines by accident or unintentionally does not count. - If the student fails to swim 50 meters continuously, encourage him/her to rest or float in the water (instead of resting at the bottom edge/swimming lane lines) and then continue.
6 Exit	- Drive for a diving depth of 1.3 meters. Minimum depth is where the student cannot stand at the bottom. - The student may use different resting positions, hence the observer should use their discretion in the assessment. - The resting position should be as energy effective as possible, in about 1 meter (1 m) up and deeper into the water as long as the position is executed in an energy-effective way. - Start with resting on the front as long as they are capable, and then turn over to the back. - The student should be able to turn several times from back to front and front to back, as long as the total time is 90 seconds. - Do not focus on time or technical execution. - The highest score demands that the student shall not touch the bottom, the wall, or the swimming lane lines to rest. - Touching the bottom/swimming lane lines by accident or unintentionally does not count. - If the student fails to swim 50 meters continuously, encourage him/her to rest or float in the water (instead of resting at the bottom edge/swimming lane lines) and then continue.
Transitions	There is no need to run the transitions between the different elements; the students may use time and think about how to make the most efficient transition between the next element.

Testprosedyrer

SWIMMING COMPETENCE ASSESSMENT SCALE (SCAS)

Level	Score	Description
Entry	4 Excellent	Has reached water without any hesitation.
	3 High	Has not used arms from head position. Has fallen sideways (as a scull).
	2 Low	Has not used arms. Has fallen sideways (as a scull). Has not used arms. Has fallen sideways (as a scull).
Frontstroke	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
Diving	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
Buoyancy/ Floating	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
Backstroke	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
Exit	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.

NTNU

Observasjonsskjema

REGISTRERINGSSKJEMA (SWIMMING COMPETENCE ASSESSMENT SCALE (SCAS))

Student: _____ Class: _____ Date: _____

Level	Score	Description
Entry	4 Excellent	Has reached water without any hesitation.
	3 High	Has not used arms from head position. Has fallen sideways (as a scull).
	2 Low	Has not used arms. Has fallen sideways (as a scull). Has not used arms. Has fallen sideways (as a scull).
Frontstroke	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
Diving	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
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Buoyancy/ Floating	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
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	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
Exit	4 Excellent	Swimming continuously 100 meters without touching the bottom, the wall, or the swimming lane lines.
	3 High	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.
	2 Low	Swimming 100 meters continuously. Has not touched the bottom, the wall, or the swimming lane lines.

NTNU

Registreringsskjema



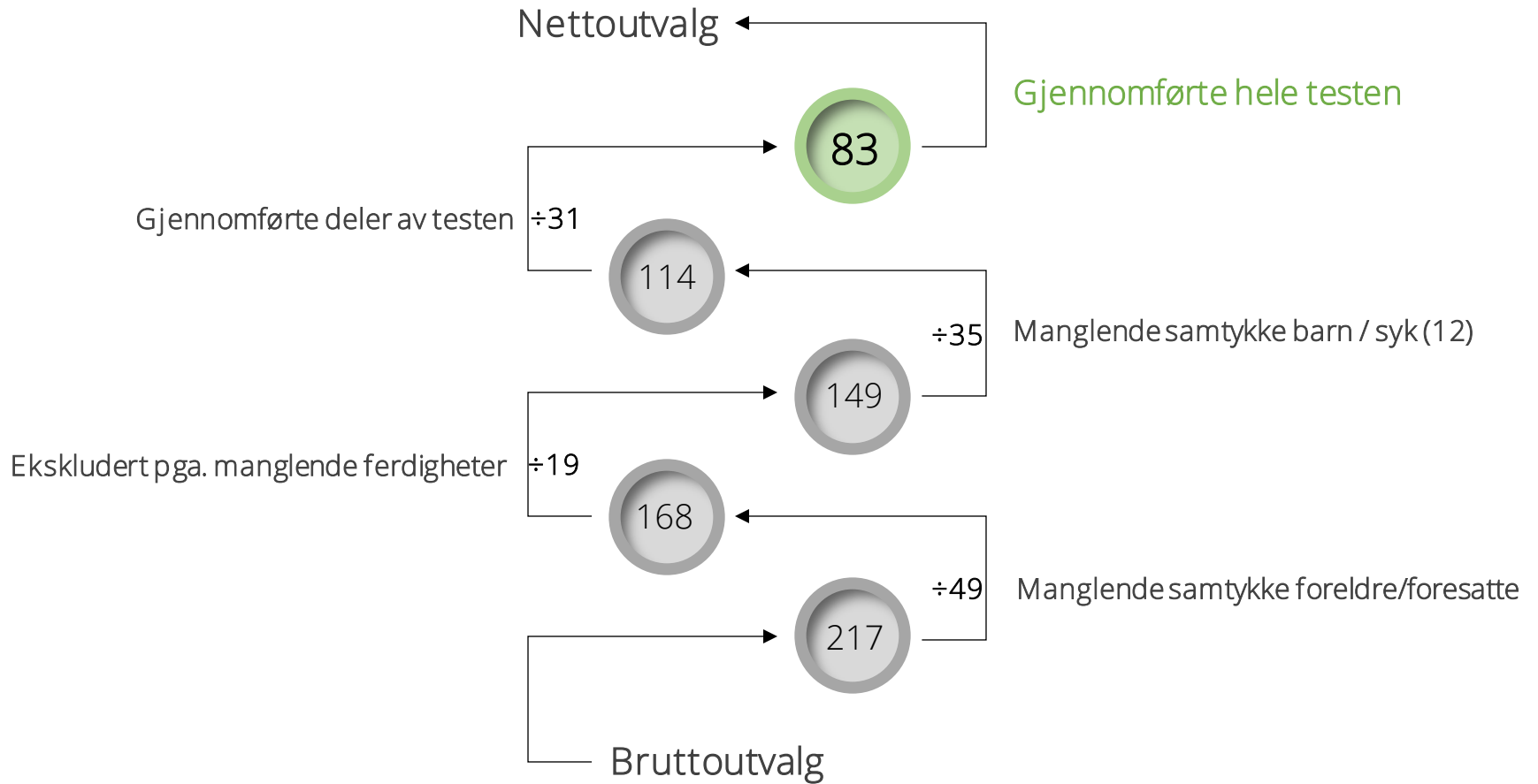


Hvile / Flyte	Score		Kompetansebeskrivelse
	4	Høy	Eleven hviler/flyter uanstrengt i 3 minutter uten å korrigere hvileposisjon nevneverdig
	3	Nokså høy	Eleven hviler/flyter forholdsvis uanstrengt i 3 minutter, men korrigerer hvileposisjon gjentatte ganger med aktive bevegelser
	2	Nokså lav	Eleven hviler/flyter anstrengt i 3 minutter, og må arbeide hardt for å kunne holde hvileposisjon
	1	Lav	Eleven er ikke i stand til å hvile/flyte i 3 minutter

Lengde basseng		Dybde basseng		Høyde opphøyd kant	
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[illegible]

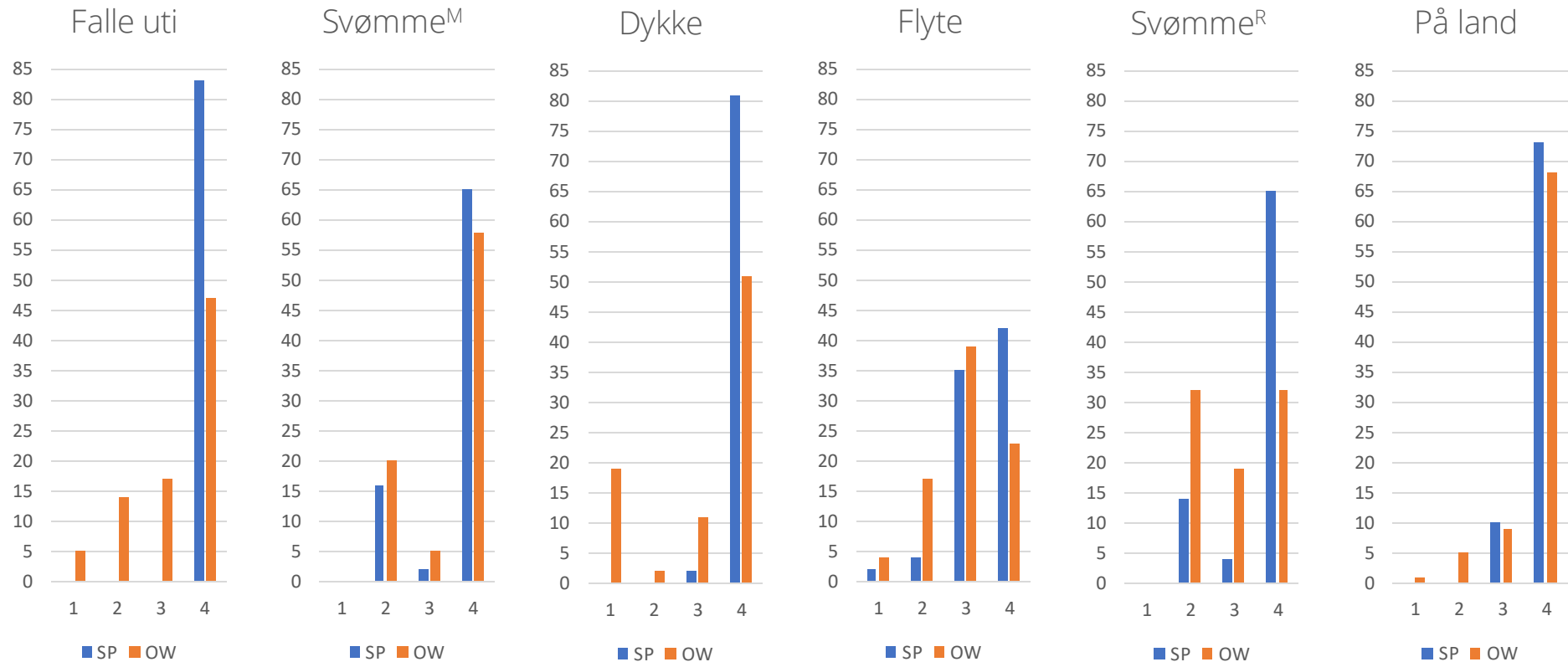
Deltakere



Resultater (n=83)

	Svømmebasseng		Innsjø	
	Gjennomsnitt	Standardavvik	Gjennomsnitt	Standardavvik
Falle uti	4.00	0.000	3.28	0.954
Svømme ^{Mage}	3.59	0.797	3.46	0.860
Dykke	3.98	0.154	3.13	1.247
Flyte	3.41	0.699	2.98	0.826
Svømme ^{Rygg}	3.61	0.762	3.00	0.883
På land	3.88	0.328	3.73	0.626

Fordeling

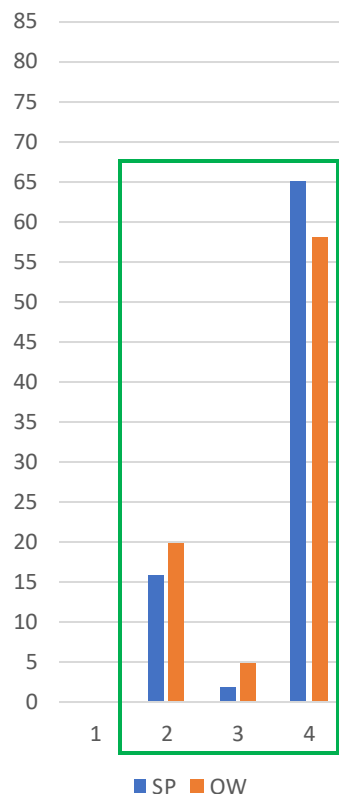


Svømmebasseng (SW: swimming pool)

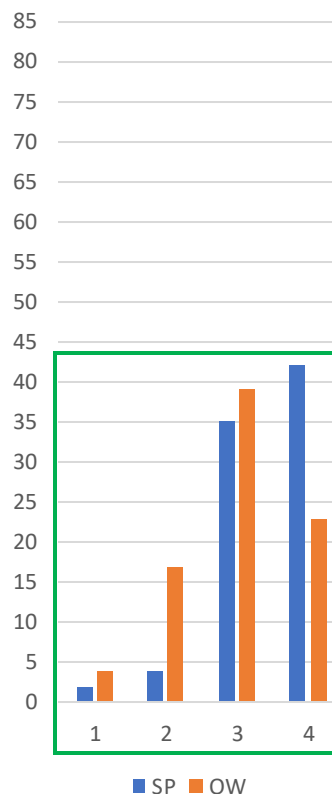
Innsjø (OW: open water)

Positiv sammenheng

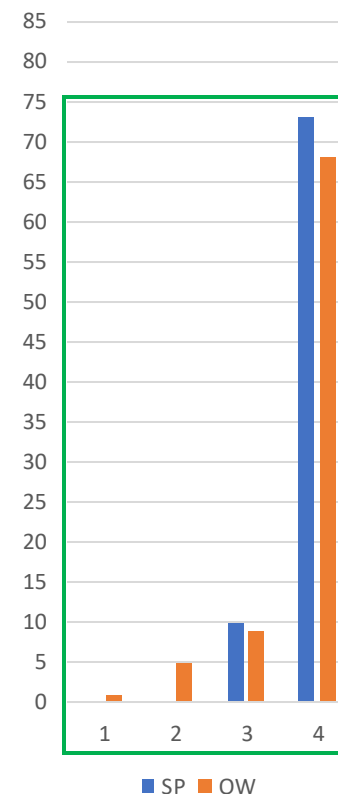
Svømme^{M*}



Flyte^{**}



På land^{**}

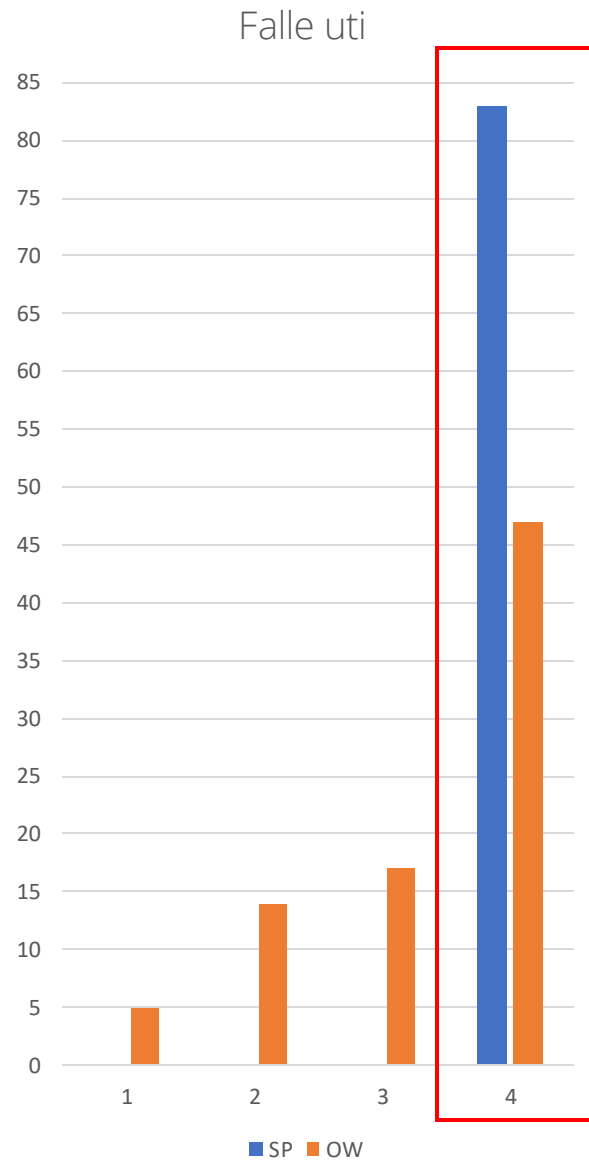


		SWIMMING POOL					
		Entry	Frontstroke	Dive	Float	Backstroke	Exit
OPEN WATER	Entry	-	-	-	-	-	-
	Frontstroke	-	.245 (.020) *	-	-	-	-
	Dive	-	-	-.004 (.973)	-	-	-
	Float	-	-	-	.416 (<.001) **	-	-
	Backstroke	-	-	-	-	.058 (.572)	-
	Exit	-	-	-	-	-	.281 (.009) **

* Kendall`s tau-b $p < .05$

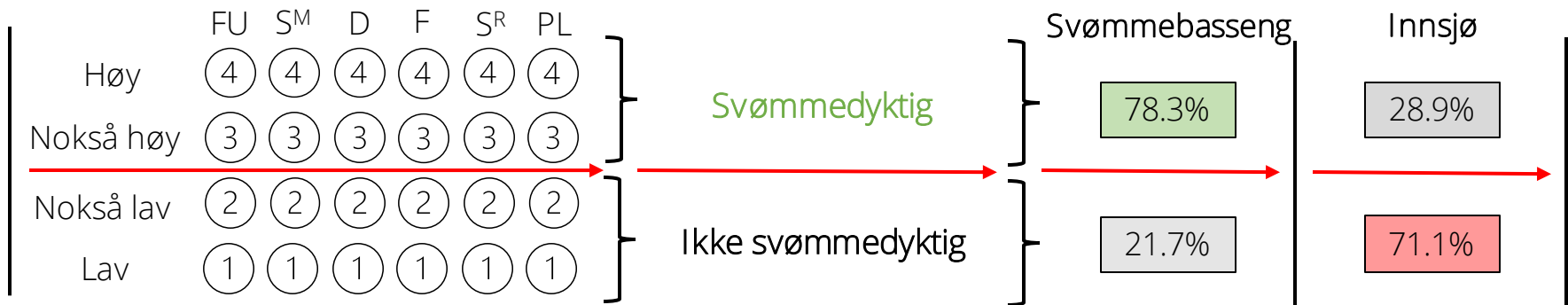
** Kendall`s tau-b $p < .01$

Negativ sammenheng?



- vere symjedyktig ved å falle uti på djupt vatn, symje 100 meter på magen, og undervegs dykke ned og hente ein gjenstand med hendene, stoppe og kvile i 3 minutt (imens flyte på magen, orientere seg, rulle over, flyte på rygg), så symje 100 meter på rygg og ta seg opp på land

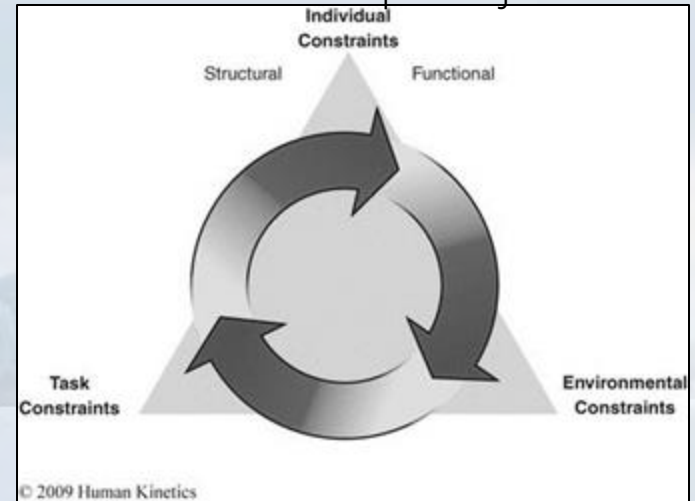
Sammenhengende = kompetent



		Innsjø		
		Nei	Ja	Total
Svømmebasseng	Nei	17	1	18
	Ja	42	23	65
	Total	59	24	83

Kort oppsummering

- Overføringsverdi inne-ute
- Constraints
 - + / -
- Drukningforebygging
- Didaktiske implikasjoner



«Context is everything»



Institutt for lærerutdanning

Forum for friluftslivsfag i høyere utdanning
Trondheim, Januar 2023

jon.sundan@ntnu.no

Doktorgradsstipendiat i kroppsøving